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LONGFORDPASS, LITTLETON, LANESPARK AND DERRYVELLA BOGS, CO TIPPERARY: APPLICATION FOR SUBSTITUTE CONSENT

Remedial Natura Impact Statement

Prepared for:

Bord na Móna Energy Ltd

BnM

Date: **June 2026**

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Remedial Natura Impact Statement

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Abstract: Fehily Timoney and Company is pleased to submit this remedial Natura Impact Statement for selected Bord na Móna bogs of the Littleton Bog Group.

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1. INTRODUCTION

1.1 Background

Fehily Timoney and Company (FT) have been appointed to prepare a remedial Screening for Appropriate Assessment (rAASR) (Appendix 1) and this remedial Natura Impact Statement (rNIS) on behalf of Bord na Móna Energy Ltd (hereafter referred to as Bord na Móna and the Applicant) as part of an application for substitute consent for the peat extraction and ancillary activities carried out by the Applicant at Longfordpass Bog, Littleton Bog, Lanespark Bog and Derryvella Bog (referred to as the Project and the Application Site in this rNIS). The Application Site is shown in Figure 1-1.

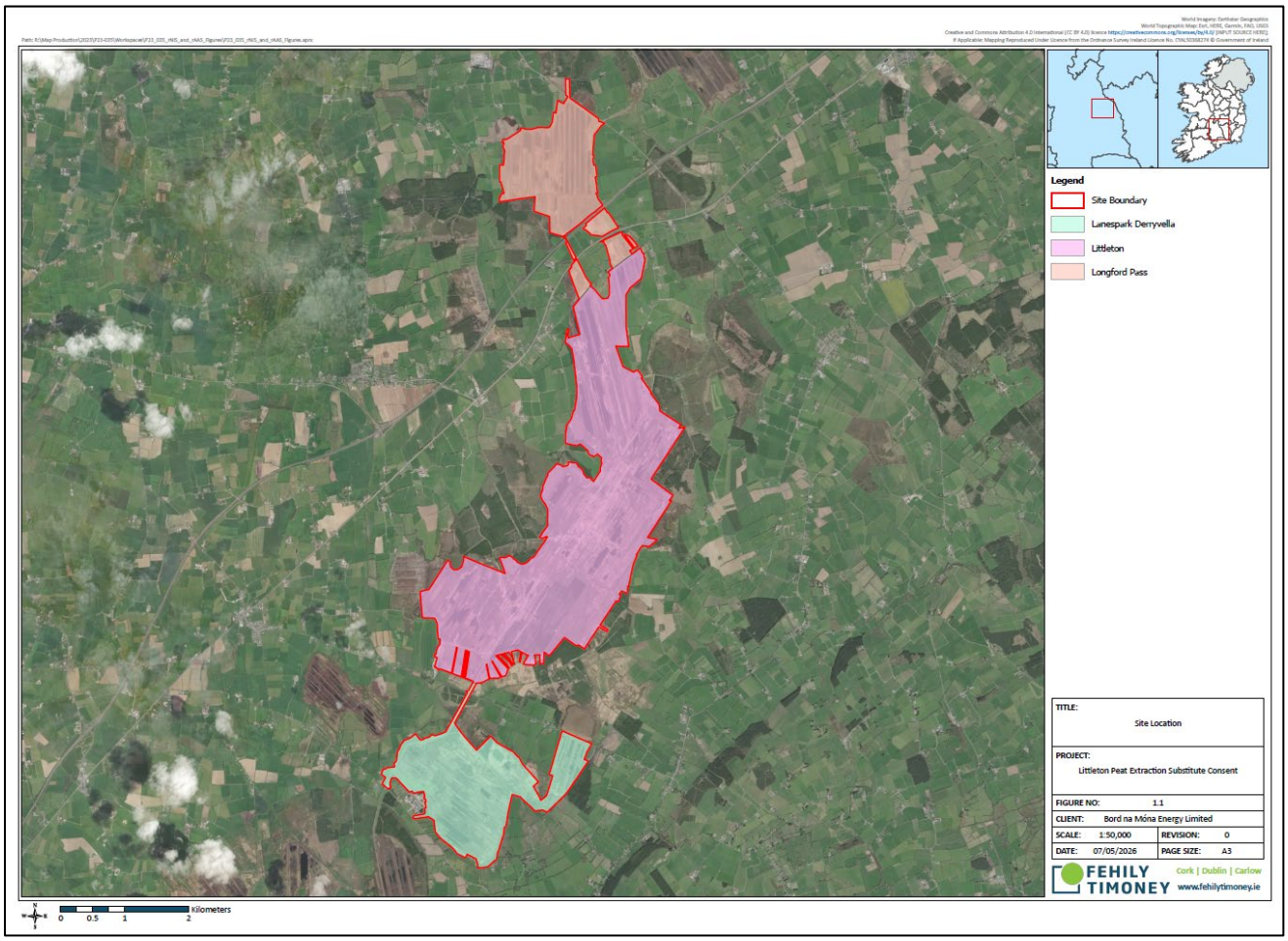


Figure 1-1: Red line Boundary (RLB) of the Application Site and location indicating the four bogs making up the Application Site

Section 177E of the Planning and Development Act 2000, permits an application to be made for substitute consent in respect of development which has been carried out where an Appropriate Assessment (AA) was or is required. The Habitats (Directive 92/43/EC) cannot be applied retrospectively and therefore there was no legal requirement for Appropriate Assessment in respect of any project prior to the dates for transposition, which was 10 June 1994 for the Habitats Directive. The rAASR and this rNIS has considered likely significant effects on European sites from the Project since 1994 and considered the following phases:

- 'Peat Extraction Phase': peat extraction and ancillary activities at the Application Site from 1994 to the cessation of peat extraction in 2017 (July 1994 – 2017).
- 'Current Phase': the management of the Application Site from 2017 to present day, including decommissioning works and Rehabilitation Phase 1 works.
- 'Remedial Phase': the activities intended to be carried out at the Application Site into the future (Rehabilitation Phase 2 works), including future activities required under Conditions of the Integrated Pollution Control Licence (IPC).

This rNIS addresses the requirements of Section 177G of the Planning and Development Act 2000 (as amended) which requires that a remedial rNIS contain:

"(a) A statement of the significant effects, if any, on the relevant European site which have occurred or which are occurring or which can reasonably be expected to occur because the development the subject of the application for substitute consent was carried out;
(b) details of—:
(i) any appropriate remedial or mitigation measures undertaken or proposed to be undertaken by the applicant for substitute consent to remedy or mitigate any significant effects on the environment or on the European site;
(ii) the period of time within which any such proposed remedial or mitigation measures shall be carried out by or on behalf of the applicant;
(c) such information as may be prescribed under section 177N;
(d) and may have appended to it, where relevant, and where the applicant may wish to rely upon same:
(i) a statement of imperative reasons of overriding public interest;
(ii) any compensatory measures being proposed by the applicant."

This rNIS report presents a focused and detailed examination, analysis and evaluation of the implications of the Project, alone and in-combination with other plans and projects, on the integrity of European sites in view of the European sites' conservation objectives. This report has been prepared to inform the competent authority in completing their statutory obligations in relation to Appropriate Assessment, as required by Article 6(3) under Council Directive 92/43/EEC (as amended) (Habitats Directive) and under planning law.

The purpose of appropriate assessment is to assess the implications of a plan or project on a European site, in view of that European site's conservation objectives, individually and in combination with other plans or projects. This rNIS was prepared in accordance with the following guidance:

- Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Commission Notice (2021) Brussels, 28.9.2021 C(2021) 6913 final (European Commission, 2021).
- Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission (2019). Brussels, (2019/C 33/01). OJ C 33, 25.1.2019.

- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin (2009, updated 2010) (Environment Heritage and Local Government, 2009).
- OPR Practice Note PN01 Appropriate Assessment Screening for Development Management, (Office of the Planning Regulator, 2021).
- Guidance on Assessment and Construction Management in *Margaritifera* Catchments in Ireland (Atkinson *et al*., 2024).

1.2 Statement of Authority

This remedial Natura Impact Statement (rNIS) was prepared by Barbara Kasl. Barbara holds a B.SC.Hons in Zoology and a PhD in Animal, Plant and Environmental Sciences from University of the Witwatersrand (Johannesburg, South Africa). She has 20 years' experience in the environmental and consulting sectors, predominantly as a terrestrial fauna specialist and behavioural ecologist, with experience in impact assessment and associated technical reporting across various projects, including mining and processing, renewable energy, servitudes (roads, pipelines, powerlines), supporting infrastructure and town-related development (housing and industrial).

This Natura Impact Statement has been reviewed by Fehily Timoney Principal Ecologist and Associate Director Rita Mansfield. Rita holds a BSc. (Hons) in Applied Ecology and a H. Dip Environmental Protection and Pollution Control. Rita is experienced as a technical ecology lead within the environmental and planning services sector. She is a qualified ecologist of 22 years' experience with responsibility for environmental impact assessment, planning applications (conventional and strategic infrastructure development), Appropriate Assessment, foreshore licensing, and stakeholder engagement for large scale plans and projects in Ireland, including for industrial peat extraction.

Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR was completed by Hydro-Environmental Services (HES). HES are a specialist geological, hydrological, hydrogeological and environmental practice which delivers a range of water and environmental management consultancy services to the private and public sectors across Ireland and Northern Ireland. HES was established in 2005. Their core areas of expertise and experience include upland hydrology and drainage design. They routinely complete impact assessment reports for hydrological and hydrogeological aspects for a variety of project types.

2. APPROPRIATE ASSESSMENT PROCESS

AA screening is necessary to determine whether an AA is required for a particular plan or project regarding its potential adverse effects on European sites. AA screening must be carried out by the Competent Authority, who requires the necessary objective information to inform their decision. AA screening is carried out in accordance with the following steps:

1. Establish whether the Project is directly connected with or necessary for the management of a European site, in accordance with Article 6(3) of the Habitats Directive.
2. Describe the Project and based on the nature of the Project, establish zones of influence for potential impacts arising from the Project.
3. Identify which European sites may be affected by determining connectivity / overlap between the Project's established zones of influence and each of the European sites, and the ecology and distribution of the relevant QIs.
4. Identify the impacts of the Project that may result in significant effects (from the Project in isolation) on relevant European site(s).
5. Assess whether significant effects may arise from the Project in combination with other plans/projects,
6. Determine the requirement of AA, based on whether significant effects are deemed likely, or possible (in accordance with the precautionary principle).

Having regard to the European Commission Communication on the Precautionary Principle (European Commission, 2021) the:

> *"absence of scientific evidence on the significant negative effect of an action cannot be used as justification for approval of this action. When applied to Article 6(3) procedure, the precautionary principle implies that the absence of a negative effect on Natura 2000 sites has to be demonstrated before a plan or project can be authorised. In other words, if there is a lack of certainty as to whether there will be any negative effects, then the plan or project cannot be approved."*

Where significant effects are determined to be likely, or where there is uncertainty regarding the likelihood of significant effects, the Project will be required to undergo Appropriate Assessment, which will require the preparation of a Natura Impact Statement (NIS), or in this case a remedial NIS (rNIS).

The process of determining the likelihood of significant effects from a Project on European sites is an iterative process centered around a Source-Pathway-Receptor (S-P-R) model. In order for an effect to be established, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism is sufficient to conclude that a potential effect is not of any significance.

- Source(s) – source of effect e.g., pollutant run-off, noise, removal of vegetation, etc.
- Pathway(s) – functional link, or ecological pathway e.g., groundwater connecting to nearby qualifying wetland habitats.
- Receptor(s) – the qualifying habitats and species of European sites and ecological resources supporting those habitats/species.

Where significant effects are determined to be likely, or where there is uncertainty regarding the likelihood of significant effects, the project will be required under law to be subjected to Appropriate Assessment.

This rNIS has been prepared to address these requirements to present sufficient and up to date information to allow the Competent Authority to give full consideration of all elements contributing to the site integrity and allowing identification of potential adverse effects, mitigation measures and residual effects.

The EC notice (European Commission, 2019) prescribes the content of the Appropriate Assessment and notes the following:

- It must be ensured that the Appropriate Assessment addresses all elements contributing to the site's integrity as specified in the site's conservation objectives and Standard Data Form and is based on the best available scientific knowledge in the field.
- The information required should be up to date.
- The Appropriate Assessment should also include a comprehensive identification of all the potential effects of the plan or project likely to be significant on the site, taking into account in-combination and other effects likely to arise as a result of the combined action of the plan or project under assessment with other plans or projects.
- It should apply the best available techniques and methods to assess the extent of the effects of the plan or project (in this case the scheme) on the integrity of the site(s).

This rNIS was prepared in accordance with the following guideline documents:

- Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Commission Notice (2021) Brussels, 28.9.2021 C(2021) 6913 final (European Commission, 2021).
- Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission (2019). Brussels, (2019/C 33/01). OJ C 33, 25.1.2019.
- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin (2009, updated 2010) (Environment Heritage and Local Government, 2009).
- OPR Practice Note PN01 Appropriate Assessment Screening for Development Management, (Office of the Planning Regulator, 2021).
- Guidance on Assessment and Construction Management in *Margaritifera* Catchments in Ireland (Atkinson *et al*., 2024).
- Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine (CIEEM, 2018, updated September 2024).
- Best Practice Guidance for Habitat Survey and Mapping (Smith *et al*., 2011).
- Guidelines for Assessment of Ecological Impacts of National Road Schemes (NRA, 2009a).
- Guidelines for the Crossing of Watercourses during the Construction of National Road Schemes (NRA, 2008).
- Guidelines on protection of fisheries during construction works in and adjacent to waters (IFI, 2016).
- Ecological surveying techniques for protected flora and fauna during the planning of National Road Schemes (NRA, 2009b).

3. SUMMARY OF REMEDIAL AASR AND ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS

3.1 Overview

The rAASR has considered the baseline status in 1994, at which time the initial bog drainage works and vegetation clearance had been completed at the Application Site. Milled peat extraction (sod peat extraction ceased in 1984) and ancillary activities (deepening of drains, use of heavy machinery and supporting services) were ongoing at the Application Site, and control measures were in place by 1994. By 1994/1995, areas under active peat extraction were at a decline across the Application Site.

Historic activities at the Application Site from the 1940s (surveys and commencement of drainage and vegetation clearance) to 2017 (cessation of peat extraction at the Application Site) led to changes in the hydrological nature of the Application Site, altering natural water retention, drainage and flow at the bogs and the surrounding landscape, and loss of active raised bog habitat through peat extraction. The activities contributed to increased sedimentation, nutrient runoff, and potential contamination of runoff (from fuel storage and handling, and use of heavy machinery and equipment), impacting receiving watercourses at the Application Site. Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR indicates that impacts on groundwater quality and quantity are negligible and very localised due to the peat and silt/clay layers at the Application Site (which have low permeability and act as a barrier to infiltration); any surface contaminants at the Application Site will report to streams. The activities also relied on various heavy machinery which contributed to noise, emissions and dust generation.

The implementation of control measures and later the formalisation of mitigation, monitoring and environmental reporting under the IPC Licence (Reg. P0499-01) post-2001, across the Application Site, during the life of operations has served to mitigate environmental impact, particularly fuel storage and handling procedures, dust control measures, the installation of silt ponds, maintenance of railway and water management features (drains, pumps and silt ponds), waste management, emissions to water and atmosphere, and archaeological finds.

The cessation of peat extraction in 2017 was followed by ongoing decommissioning and rehabilitation activities, routine maintenance of water management features and the implementation of the Cutaway Bog Decommissioning and Rehabilitation Plans[1]. The post-extraction activities have allowed, and continue to allow, for a gradual ecological transition from bare peat to pioneer habitats, and is reducing the associated risks to the hydrological and hydrogeological environment, air and noise and the habitats and species supported by the local and downstream water bodies.

[1] This includes the 'Cutaway Bog Decommissioning and Rehabilitation Plan - Littleton' (Appendix 7), the 'Cutaway Bog Decommissioning and Rehabilitation Plan - Longfordpass (Appendix 8), and the 'Ballybeg/Lanespark/Derryvella Bog Cutaway Bog Decommissioning and Rehabilitation Plan' (Appendix 9)

Application of the Cutaway Bog Decommissioning and Rehabilitation Plans, as conditioned under the IPC Licence, makes provision for the proper closure of the activity ensuring protection of the environment. Over time, the removal of potential contaminants associated with peat extraction and ancillary activities on the Application Site (part of the decommissioning activities), accompanied by the restoration of water flow dynamics (part of the rehabilitation activities) will minimise water-related impacts (quantity, flow and quality) on the Application Site and downstream. Decreased activity over the Application Site will reduce disturbance, emissions and dust, and promote the establishment and succession of vegetation on the Application Site. The combination of these on-site measures will promote the recovery of local and downstream ecosystems, succession of vegetation and establishment of stable habitats and resilient ecosystems, and improve both floristic and faunal species biodiversity, including sensitive species.

The rAASR (Appendix 1) considered activities undertaken to date and activities still to be undertaken at the Application Site as potential sources for adverse effects and has considered the European sites listed in Table 3-1 and represented in Figure 3-1.

The section following Table 3-1 (Section 3.2) examines in greater detail the S-P-R connectivity to these sites and the rAASR concluded that there was potential for the following European site to have been significantly affected by the Project:

- Lower River Suir SAC (002137) has a hydrological pathway with the Application Site, occurring within the same WFD Catchment 16.

Table 3-1: European sites in the vicinity of the Application Site considered during AA screening

European site	Distance (km)*	Qualifying Interests (* denotes a priority habitat)
SAC (code) [year proposed / designated]		
The Loughans SAC (000407) [1997 / 2016[2]] (NPWS, 2020)	c. 7.8km east of Application Site	3180 Turloughs*
Lower River Suir SAC (002137) [1998 / no data[3]] (NPWS, 2017)	c. 9.3km west & c. 15.4km south of Application Site	1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1410 Mediterranean salt meadows (*Juncetalia maritimi*) 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and Callitricho-Batrachion vegetation 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels 91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles 91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)* 91J0 *Taxus baccata* woods of the British Isles* 1029 Freshwater Pearl Mussel (*Margaritifera margaritifera*) 1092 White-clawed Crayfish (*Austropotamobius pallipes*) 1095 Sea Lamprey (*Petromyzon marinus*) 1096 Brook Lamprey (*Lampetra planeri*)

[2] Natura 2000 - Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF000407.pdf
[3] Natura 2000 - Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF002137.pdf

European site	Distance (km)*	Qualifying Interests (* denotes a priority habitat)
		1099 River Lamprey (*Lampetra fluviatilis*) 1103 Twaite Shad (*Alosa fallax fallax*) 1106 Salmon (*Salmo salar*) 1355 Otter (*Lutra lutra*)
River Barrow and River Nore SAC (002162) [2002 / no data[4]] (NPWS, 2025a)	c. 8.9km southeast & 9km east of Application Site	1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1170 Reefs 1310 Salicornia and other annuals colonising mud and sand 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1410 Mediterranean salt meadows (*Juncetalia maritimi*) 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and Callitricho-Batrachion vegetation 4030 European dry heaths 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels 7220 Petrifying springs with tufa formation (Cratoneurion)* 91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles 91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)* 1016 Desmoulin's Whorl Snail (*Vertigo moulinsiana*) 1029 Freshwater Pearl Mussel (*Margaritifera margaritifera*) 1092 White-clawed Crayfish (*Austropotamobius pallipes*) 1095 Sea Lamprey (*Petromyzon marinus*) 1096 Brook Lamprey (*Lampetra planeri*) 1099 River Lamprey (*Lampetra fluviatilis*) 1103 Twaite Shad (*Alosa fallax fallax*) 1106 Salmon (*Salmo salar*) 1355 Otter (*Lutra lutra*) 1421 Killarney Fern (*Trichomanes speciosum*)
Spahill and Clomantagh Hill SAC (000849) [1997 / 2021[5]] (NPWS, 2021a)	c. 9.8km northeast of Application Site	6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)
Galmoy Fen SAC (001858) [2003 / 2016[6]] (NPWS, 2019b)	c. 11.8km northeast of Application Site	7230 Alkaline fens
Cullahill Mountain SAC (000831) [1997 / 2016[7]] (NPWS, 2021b)	c. 13.8km northeast of Application Site	6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)

[4] Natura 2000 - Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF002162.pdf
[5] Natura 2000 - Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF000849.pdf
[6] Natura 2000 - Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF001858.pdf
[7] Natura 2000 - Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF000831.pdf

European site	Distance (km)*	Qualifying Interests (* denotes a priority habitat)
SPA (code) [Year classified]		
River Nore SPA (004233) [2010[8]] (NPWS, 2024a)	c. 21.6km southeast of Application Site	A229 Kingfisher (*Alcedo atthis*)
Slievefelim to Silvermines Mountains SPA (004165) [2007[9]] (NPWS, 2022b)	c. 26.9km west of Application Site	A082 Hen Harrier (*Circus cyaneus*)
Slieve Bloom Mountains SPA (004160) [2007[10]] (NPWS, 2022a)	c. 27.7km north of Application Site	A082 Hen Harrier (*Circus cyaneus*)

* Distance is expressed from Application Site boundary to European site boundary as-the-crow-flies

[8] Natura 2000 - Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF004233.pdf
[9] Natura 2000 - Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF004165.pdf
[10] Natura 2000 - Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF004160.pdf

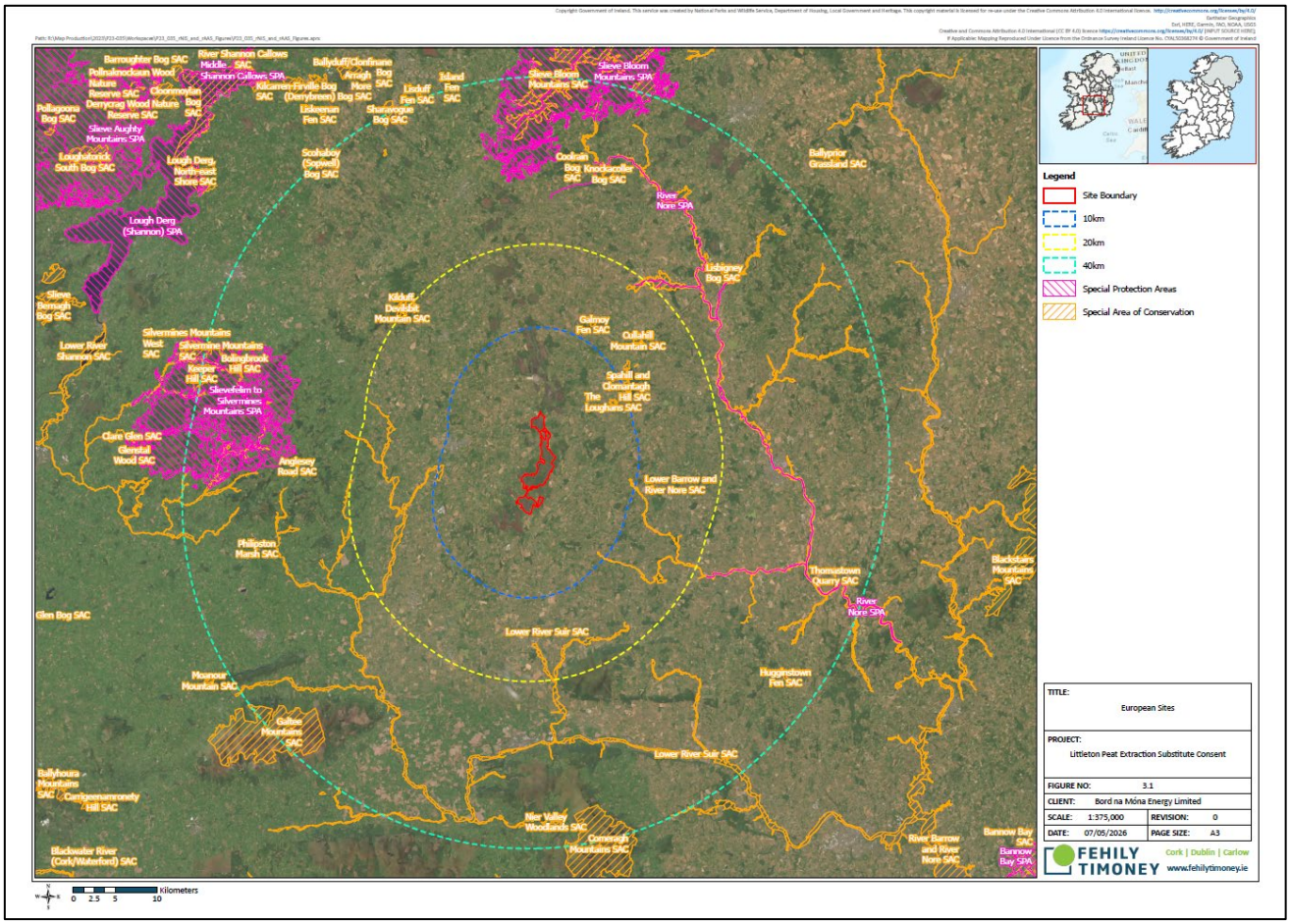


Figure 3-1: Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) in the vicinity and downstream of the Application Site

3.2 Impact Sources and Pathways

3.2.1 Peat Extraction Phase

The main activities that are relevant between 1994 to 2017 at cessation of peat extraction include:

- Continued milled peat extraction and ancillary activities including deepening of drains, use of heavy machinery, and supporting activities and services.

Given the extent of area under peat extraction over the Application Site in 1988 (Appendix 2), most impacts related to the Project (impacts on habitat, hydrology, water quality and natural drainage patters) would have taken place by 1994.

The impacts (under an unmitigated scenario) could have been associated with accidental habitat loss, alteration (contamination / nutrification / sedimentation) of water quality, continued alteration of local downstream drainage/flow regime and effects, dust and emissions to atmosphere, and noise on the Application Site. Impacts to downstream water resources could also affect the aquatic and riverine ecosystems and other habitats dependent on these water bodies /ecosystems. These impacts would have subsequently reduced in likelihood, magnitude and extent, with the extent of areas subject to peat extraction significantly reduced by 1995.

No European sites overlap with or are located adjacent to the Application Site, and there is no pathway for direct habitat loss. Furthermore, the nearest European sites designated for Raised bog (active) [7110] and Degraded raised bog still capable of natural regeneration [7120] (the dominant pre-development and post extraction habitat on the Application Site) as Qualifying Interests (QI) are Knockacoller Bog SAC [002333] and Coolrain Bog SAC [002332][11]. Both sites are located more than 31km north of the Application Site and within different Water Framework Directive (WFD) Catchments and Groundwater Bodies[12]. Therefore, any remnant raised bogs on the Application Site would not have functioned as supporting habitats for the QI habitats of any European sites. There is no S-P-R connectivity to Knockacoller Bog SAC [002333] and Coolrain Bog SAC [002332] and these are not considered further in this assessment.

The Lower River Suir Special Area of Conservation (SAC) (002137) (located c. 9.3km west & c. 15.4km south of Application Site) is the only European site identified with direct hydrological connectivity with the Application Site. The River Suir is the main receiving river for the Suir WFD Catchment (WFD Catchment 16). The Application Site lies within this catchment and eventually drains to the River Suir via drainage lines, streams and rivers surrounding the Application Site. Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR states that even in the absence of control measures there would not have been a significant effect on downstream designated sites due to their distant location from the Application Site and the large volumes of water within the River Suir. The remedial AA screening has taken a precautionary approach that the Project would have had the potential to adversely affect the QI habitats and QI species within this European site through downstream water quality effects (potential altered flow, contamination / nutrification / sedimentation) which could have adversely affected the local water bodies supporting potential QI populations. The Project has been screened in for potential adverse effects to this European site, which is further considered in this rNIS on a precautionary basis.

[11] Assessed on https://natura2000.eea.europa.eu/?views=Habitats_View accessed on 19 November 2025
[12] Environmental Protection Agency (EPA) Water Map available at https://gis.epa.ie/EPAMaps/Water accessed on 19 November 2025

No European sites share the same groundwater body (GWB) with the Application Site, and no direct hydrogeological pathway exists that could have adversely affected any European site or their groundwater dependent terrestrial ecosystems (GWDTEs).

The International Air Quality Management (IAQM) "*Guidance on the assessment of dust from demolition and construction*" (IAQM, 2014) (updated in 2024) includes for earthmoving activities and dust dispersion during construction. This rNIS assesses peat extraction and drain deepening under these types of activities. The IAQM adopts a conservative approach in determining if an activity will require a detailed air quality assessment, which is required if an 'ecological receptor' is within "*50 m of the boundary of the site; and/or 50 m of the route(s) used by construction vehicles on the public highway, up to 250 m from the site entrance(s)*". No European sites occur within 50m-250m of the Application Site and any dust generated on the Application Site would not have directly affected any European sites or their QI habitats.

Transport Infrastructure Ireland's (TII, 2022) guidance document Air Quality Assessment of Specified Infrastructure Projects (PE-ENV-01106, TII, 2022) provides specific scoping criteria for whether a detailed air quality assessment is required for vehicle emissions associated with infrastructure projects. According to the guidance, a detailed air quality assessment is necessary when sensitive receptors are located within a 200m Zone of Influence of affected road links. Road links are not expected to influence pollutant concentrations at receptor locations beyond 200m. The heavy machinery and equipment used at the Application Site would have contributed to air emissions, but do not constitute the triggers (increased traffic flow) associated with the TII guidelines. Therefore, the 200m ZoI can be considered as a very conservative ZoI for air emissions associated with traffic and machinery from the Application Site. No European sites occur within 200m of the Application Site and any air emissions from the Application Site would not have directly affected any European sites or their QI habitats/species.

Disturbance from noise is likely to affect fauna using the Application Site, which could be part of the QI populations of surrounding European sites. For otter the ZoI for disturbance, including noise, is 150m for active breeding or natal holts (NRA National Roads Authority, 2006)[13] and NIEA (2011)[14] (Northern Ireland Environmental Agency). NRA guidelines go on to stipulate that no wheeled or tracked vehicles (of any kind) should be used within 20m (NIEA recommends 30m protection zone) of active, non-breeding, otter holts and light work, such as digging by hand or scrub clearance should also not take place within 15m of such holts.

Otters are associated with rivers, lakes and coasts which provide their main food source (fish and crustaceans) (NPWS, 2019a and 2025c), which will be affected by deteriorating water quality. Otters are also known to occasionally travel across more terrestrial landscapes, as evidenced by occasional terrestrial based meals such as small mammals and waterfowl (Reid *et al.*, 2013). In moderately productive rivers, female otters will hold ranges averaging a 7.5km (up to 9.0km) length of river; for male otters this increases to 13.2 (up to 18.5km) (Reid *et al*., 2013). The otter is designated as a QI for the Lower River Suir SAC which is c. 7.8km west and c. 13.3km south of Application Site and within the ranges kept by otters.

[13] National Roads Authority (2006). *Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes*. Dublin: National Roads Authority. Accessed at https://www.tii.ie/media/wsmlbxmv/guidelines-for-the-treatment-of-otters-prior-to-the-construction-of-national-road-schemes.pdf

[14] Northern Ireland Environmental (2011). Agency Otters and Development. Belfast. Accessed at https://cieem.net/wp-content/uploads/2019/07/natural-information-otters-and-development-2011.pdf

Marsh fritillary butterfly, an Annex II species, have been recorded on the Application Site during surveys in preparation of the Cutaway Bog Decommissioning and Rehabilitation Plan for Littleton Bog (Appendix 7) and Derryvella (Appendix 9), but no further details are provided. In 2025, five (5) to six (6) larval cases were recorded within Devil's bit scabious (*Succisa pratensis*) in a c. 2m stretch along the railway route in the centre of the Littleton Bog. The populations of marsh fritillary observed at the Littleton Bog will not form part of, nor be a supporting population to, any QI population for any European site, as the nearest European site designated for the species is Ballynafagh Lake SAC [001387] more than 85km northeast of the Application Site, and well beyond the maximum 20km dispersal range for the species (NPWS, 2019a and 2025c).

In terms of direct effects on Species of Conservation Interest (SCIs) that may have utilised the Application Site, no SPAs overlap with or are located adjacent to the Application Site. Considering connectivity or ecological continuity for SCI bird species from nearby SPAs to have utilised the Application Site, Scottish Natural Heritage (SNH, 2016) guidance on *'Assessing Connectivity with Special Protection Areas (SPAs)'* (28km recorded as the furthest distance) and a review of foraging flight distances of wintering birds (Johnson *et al*., 2014) (32.5km recorded as the furthest distance) were considered. An initial extended area of 40km was scoped (rounding up 32.5km) to determine whether the Application Site would have been likely to support any of the SCI bird species associated with any SPA. SCIs listed for SPAs within this 40km area (Table 3-1) include:

- Kingfisher (*Alcedo atthis*) [A229] is a QI for the River Nore SPA [004233], c. 21.6km southeast of the Application Site. The kingfisher remains within its riverine range, and its conservation objectives (NPWS, 2024a) indicate limited movement within the riverine range (<9km). There are no shared rivers from the Application Site to the River Nore and therefore no direct riverine connectivity; furthermore, the River Nore SPA is upstream of the hydrological pathway from the Application Site. Therefore, any kingfisher that could have utilised the Application Site and surrounding areas would not have been part of the SCI populations and there would have been no pathway for any potential disturbance to SCI populations of any European site.
- Hen harrier (*Circus cyaneus*) [A082] is a QI for the Slievefelim to Silvermines Mountains SPA [004165] and Slieve Bloom Mountains SPA [004160], c. 26.9km west and c. 27.7km north of the Application Site respectively. Hen harrier individuals have been observed in the Littleton Bog and Derryvella Bog by Bord na Móna and by Fehily Timoney ecologists (recorded years include 2012, 2014 and 2025) and the Application Site and surrounding areas provide winter roosts suitable for hen harrier. Although the Application Site is outside the typical breeding forage range for the QI species (a maximum range of 10km (SNH, 2016)), wintering ranges can be more extensive as hen harrier are considered partial migrants. The non-breeding individual hen harriers observed at the Application Site, cannot be excluded as part of the breeding populations of the SPAs and, on a precautionary basis, are considered to be part of the QI populations.
    - Considering the conservation objectives for the two relevant SPAs (Slievefelim to Silvermines Mountains SPA and Slieve Bloom Mountains SPA), the targets associated with breeding pairs and fledgelings would not have been / will not be directly impacted by the activities at the Application Site post 1994, as the Application Site is a wintering roost and no breeding or nesting has been recorded on the Application Site. Furthermore, peat extraction and ancillary activities dominated in the spring to summer months (April to August), with only maintenance (drains, silt ponds, machinery and pumps), stockpile removal and peat transportation activities scheduled and undertaken at the bogs over autumn to winter (September to March). The latter activities would have occurred in specific locations (at the ponds or pump stations) for limited time frames (a few days to undertake the tasks). As a worst case, these brief activities may have caused local hen harrier individuals to fly off to quieter nearby areas but would not pose any mortality risk to the birds. Therefore, wintering populations would not be at any adverse risk from peat extraction and ancillary activities and there would be no indirect effect on breeding pairs.

- Conservation objectives for the two relevant SPAs related to non-breeding targets for hen harrier include the extent and condition of heath, bog and associated habitats, extent and condition of low intensity managed grasslands and associated habitats, extent and condition of hedgerows, and age and structure of the forest estate. None of these habitats would have been degraded post 1994 and would be recovering in areas where peat extraction had ceased before 1994.
- Even though the hen harrier species are considered part of the QI populations for the relevant SPAs, there is no impact pathway that would significantly affect the targets and attributes of the QI populations to compromise the conservation objectives of any European site.

After evaluation of the relevant available data concerning the Application Site and its surrounding area, the rAASR concluded that, based on the current best available scientific knowledge and the conservation objectives for the European sites considered, there is the potential, under the precautionary approach, for the Project to have adversely affected the QI habitats and QI species within the Lower River Suir SAC through downstream water quality effects (potential altered flow, contamination / nutrification / sedimentation) during the Peat Extraction Phase (1994 to 2017) which may have had adverse effects on the integrity of the Lower River Suir SAC.

It was therefore concluded that the Lower River Suir SAC be taken forward for further consideration in this rNIS to assess whether activities from 1994 to 2017 at the Application Site have had likely adverse effects on the integrity of the Lower River Suir SAC.

3.2.2 Current Phase (Including Rehabilitation Phase 1): 2017 to Present Day

Peat extraction and ancillary activities ceased at the Application Site in 2017. The Application Site still operates under the requirements of IPC Licence P0499-01 (waste handling and disposal, the decommissioning and rehabilitation of cutaway bogs and monitoring and maintenance, particularly around water management).

As required by the IPC Licence, waste items are and will continue to be removed for recycling or disposal, using external contractors with the required waste collection permits, and waste records are and will continue to be maintained.

Rehabilitation Phase 1 works commenced in Littleton, Longfordpass, Lanespark and Derryvella in 2018 with drain-blocking and hydrological management. Drains have been blocked at the Application Site using a number of methods depending on the size and type of drain in accordance with the Best Practice in Raised Bog Restoration in Ireland (Mackin *et al*., 2017). These methods included the following:

- Peat dams within small drainage channels on the cutover bog; and
- Removal or blocking of drainage pipes, or modification of drainage levels, where required.

Decommissioning at the Application Site included removal of remaining peat stockpiles from the bogs (completed by mid-2019) and removal of rail infrastructure at Lanespark Bog (completed in 2024). Remaining decommissioning at the Application Site will be completed in line with all conditions of the IPC Licence.

Bord na Móna rehabilitates the bogs in a phased approach under the requirements of the IPC Licence (Condition 10.3) through Cutaway Bog Decommissioning and Rehabilitation Plans for the Longfordpass, Littleton, and Lanespark and Derryvella bogs (Appendix 7, Appendix 8 and Appendix 9), with the key objective being environmental stabilisation. The rehabilitation of the bogs supports biodiversity including plants, insects, bird and mammals, and the formation of wetland peatland and woodland habitats. In addition, peatland rehabilitation will bring a range of benefits to the local community via improvements in the local landscape, and it is also complying with national policies and strategies regarding the reduction of carbon emissions, supporting biodiversity and enhancing water quality. It is anticipated it will take up to 30 years for naturally functioning wetland and peatland ecosystems to fully re-establish.

The cessation of peat extraction at the Application Site in 2017 has resulted in no further habitat loss and has allowed the colonisation of vegetation into the area, and the gradual succession of vegetation communities in historically decommissioned areas. It has also resulted in reduced dust and emissions to atmosphere and lowered local ambient noise levels.

The blocking of drains and cessation of pumping has allowed water levels to recover at the Application Site, reduced water outflow from the Application Site and has resulted in a reduced risk of adverse effects (contamination / nutrification / sedimentation) on water quality.

The containment of water at the Application Site and the associated reduced risk of adverse effects on water quality in neighbouring areas means that there will be no further adverse effects to the downstream and hydrologically connected Lower River Suir SAC and its QIs. Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR supports this statement and indicates the pre-mitigation potential effect of decommissioning and rehabilitation of the Application Site on downstream European sites is considered to be positive.

The decommissioning and rehabilitation activities at the Application Site have resulted in areas developing into wetland habitats, facilitated by the cessation of pumping coupled with the lowered topography through historic peat extraction. The natural succession at the Application Site is supporting growing colonisation by floral and faunal species.

Due to the overall reduction of adverse effects due to decommissioning and rehabilitation activities at the Application Site, impact sources have ceased and therefore there are no impact pathways to adversely affect receptors; consequently, there were / are no likely significant adverse effects on any European sites during the Current Phase. Although the development is screened in, there are no impact sources from the Current Phase that can adversely affect any European site.

3.2.3 Remedial Phase

For Rehabilitation Phase 2 works, Bord na Móna are proposing to carry out additional rehabilitation in Derryvella Bog in 2026. No additional rehabilitation works are proposed at Littleton, Longfordpass and Lanespark, other than the measures described under Rehabilitation Phase 1 (Section 4.2.3), including revegetation and monitoring. The rehabilitation, monitoring and maintenance will proceed as per the requirements of IPC Licence P0499-01, (waste handling and disposal, the decommissioning and rehabilitation of cutaway bogs and monitoring and maintenance, particularly around water management).

As with the Current Phase, the active ongoing remediation / rehabilitation of the Application Site during the Remedial Phase and the continued natural recolonisation of the Application Site with flora, habitats and fauna, coupled with continued monitoring and aftercare will result in the continued removal of potential sources for detrimental effects, and the improvement of the area for ecological gain through colonisation by native and indigenous species. With the rehabilitation at the Application Site, the local area, neighbouring areas and downstream areas (which includes the Lower River Suir SAC) will stabilise and improve.

Given that there are no impacting activities identified at the Application Site during the remedial phase, there are no likely significant adverse effects on any European sites during the Remedial Phase. Therefore, the Remedial Phase is not further considered for assessment in this rNIS.

4. PROJECT DESCRIPTION

4.1 Site Location

The Application Site occupies approximately 1,616 hectares (ha) and comprises Longfordpass Bog, Littleton Bog, Lanespark Bog, and Derryvella Bog. The Application Site is in Co Tipperary, within the townlands of Littleton, Gorthnahoe and New Birmingham. The Application Site lies largely south of the M8 motorway, with Longfordpass Bog lying north of the M8 motorway (Figure 1-1).

The Application Site overlaps with the S25 (south of M8), S26 (north of M8) and S15 10km^2 national grids (specifically the 2km grids: S25A, S25B, S25C, S25F, S25G, S25H, S25I, S25J, S25M, S25P, S25N, S26A, S26F, S26G and S15V[15]). The Application Site lies within WFD Sub-Catchment Suir_SC_040, which drains into the upper reaches of the River Suir via the WFD River Sub Basins and associated streams (Drish River and its tributaries, the Clover River, Breagagh River and the Black (Twomileborris) River with its tributary, the North Glengoole River). Most of the Application Site overlaps the karstic Thurles GWB (IE_SE_G_158) and also the Templemore GWB (IE_SE_G_131)[16].

4.2 Project Description Details

Peat extraction maps for the years 1973, 1988, 1995, 2004 and 2017 are presented in Figure 4-1 to Figure 4-5 and illustrate the extent of peat extraction at the Application Site over time. These should be read together with the chronological summaries in this section. Aerial images for the years 1973, 1995, 2004 and 2018 are included in Appendix 1. A full project description is included as Appendix 2.

4.2.1 Commencement of Peat Extraction

The primary and greatest land-use change associated with peat extraction and ancillary activities on the Application Site occurred during the initial drainage and vegetation removal in advance of the commencement of peat extraction. Clearance and drainage of the Application Site commenced in 1941, with the Application Site experiencing a relatively abrupt change in land cover with the commencement of peat extraction in 1952. Peat extraction consisted of a combination of sod peat and milled peat extraction up to 1984, with milled peat the only form of peat extraction after 1984.

As part of the development of the Application Site for peat extraction, parallel surface water drains were created. The strips of bog between these drains were retained to form peat extraction 'fields'. By 1988 drainage channels, silt ponds, outfalls and pumps were extant at the Application Site as follows:

- Longfordpass Bog: Drainage works first commenced in Longfordpass Bog by 1947. The earliest available aerial imagery dating from 1973 shows sod peat drainage inserted at Longfordpass Bog. By 1988, there was 1 no. pump, and 3 no. silt ponds installed on Longfordpass Bog.

[15] National Biodiversity Data Centre's Biodiversity Maps available at https://maps.biodiversityireland.ie/Map and accessed on the 14 November 2025
[16] Information obtained from the Geological Survey of Ireland's Spatial Resources online viewers accessed via https://www.gov.ie/en/department-of-climate-energy-and-the-environment/policy-information/geological-survey-ireland/#data-and-maps

- Littleton Bog: Drainage works first commenced in Littleton Bog by 1941 according to Bord na Móna Annual Reports. The earliest available aerial imagery dating from 1973 shows sod peat drainage inserted at Littleton Bog. By 1988, there were 12 no. pumps installed on Littleton Bog.
- Lanespark Bog: Drainage works first commenced in Lanespark Bog by 1968. The earliest available aerial imagery dating from 1973 shows drainage inserted at the periphery of Lanespark Bog. By 1988 the bog was fully drained for industrial scale peat extraction, and there were no pumps, and 4 no. silt ponds installed on Lanespark Bog.
- Drainage works first commenced in Derryvella Bog by 1968. The earliest available aerial imagery dating from 1973 shows drainage inserted at the periphery of Derryvella Bog. By 1988 the bog was fully drained for industrial scale peat extraction, and there were no pumps, and 1 no. silt ponds installed on Derryvella Bog.

The main access point to the Application Site was via the local road the L2201 running from southeast to northwest adjacent to Lanespark Bog, into Briquette Factory, which was built in 1981 and opened in 1982. Ancillary services and supporting infrastructure were also largely established by 1988 and maintained and upgraded as required.

It is estimated that in 1973, 1,052ha across the Application Site were cleared and subjected to peat extraction. In 1988 this increased to approximately 1,353ha across the Application Site being cleared, drained, and subject to peat extraction, and a total of approximately 110ha were drained but not subject to peat extraction. Approximately 144ha were out of peat extraction in 1988.

Some drain maintenance was carried out during the full year, but it was mainly restricted to outside the peat extraction season (i.e. from October to March). General activities within the Application Site over a calendar year from 1952 when peat extraction commenced to July 1988, included:

- January to March: Drain/machinery/pump/silt pond maintenance, stockpile removal, peat transportation
- April to June: Peat extraction, stockpile development/removal, peat transportation
- July to September: Peat extraction, stockpile development/protection/removal, peat transportation
- October to December: Drain/machinery/pump/silt pond maintenance, stockpile removal, peat transportation

An estimate of the volumes produced during the period July 1988—2017 was determined based on peat extraction volumes taken from the Bord na Móna Annual Reports, production records at the Application Site and an average of peat extraction tonnages over the period from 1978 – 1987 when annual quantities were unavailable.

The volumes of peat removed from the Application Site varied from year to year with a general and gradual increase with time as more of the Application Site was developed and became available for peat extraction. Fluctuations in peat extraction volumes are generally attributable to weather conditions in any given year, with wetter weather resulting in lower volumes of peat extraction due to poorer ground conditions for operating machinery, and poorer peat drying conditions; conversely, drier weather usually resulted in higher volumes of peat extraction due to better ground and drying conditions.

Between 1952 and 1988, approximately 3,534,355 tonnes of sod and milled peat were extracted at the Application Site. From 1952 to 1978, the volume of peat extracted was an average of 50,000 – 60,000 tonnes per year. Preparation for the extraction of milled peat began in 1975 and extraction of milled peat commenced in 1978. From 1978 to 1984, both sod and milled peat extraction were being carried out at the Application Site where an average of 179,543 tonnes of peat was extracted per year. The extraction of milled peat increased from approximately 5,317 tonnes in 1979 to approximately 246,833 tonnes in 1988.

4.2.2 Peat Extraction Phase: 1988 to 2017 (Drainage, Peat Extraction & Associated Activities)

Sod peat extraction ceased by 1984. From 1988 onwards, milled peat extraction and ancillary activities were fully underway. The deepening and maintenance of the drains continued beyond 1988, up until the cessation of peat extraction in 2017. As the areas subject to peat extraction from 1988 to 2017 reduced in their extent and the depth of peat available was reduced after each harvest, the extent and number of drains requiring deepening and maintenance reduced accordingly. This also resulted in a reduction of the intensity of supporting activities such as stockpiling, use of heavy machinery, fuel use and rail movements.

Although control measures were implemented on Application Site before 1988, other than the silt ponds, the formal records of such activities were minimal. With the IPC Licence taking effect in 2001, the control measures, monitoring and environmental reporting became more formalised, particularly fuel storage and handling procedures, dust control measures, the installation of silt ponds, maintenance of railway and water management features (drains, pumps and silt ponds), waste management, emissions to water and atmosphere, and archaeological finds.

Drain maintenance and the general activities as described leading up to 1988 would have continued through to cessation of peat extraction and would have also reduced with reduction of peat extraction areas. Temporary rail tracks would have been added and removed alongside peat stockpiles as required.

The status at the Application Site (Figure 4-1 to Figure 4-5) is as follows:

- Longfordpass Bog:
  - In 1988, peat extraction was at its peak across the Longfordpass Bog. Investigation of satellite imagery and annual reports indicate that by 1988, approximately 226ha of Longfordpass Bog was subject to peat extraction. Thus, the main landcover type at this time was cutover peat. Drainage was already installed, predominantly in a north-south orientation.
  - Railway infrastructure was laid in the bog.
  - In 1988, there was 1 no. pump, and 3 no. silt ponds installed on Longfordpass Bog.
  - Between 1988 and 2017, the extent of peat extraction gradually decreased. In 1995, approximately 173ha were subject to peat extraction.
  - Cessation of peat extraction had occurred by 2017.
  - There is now 1 no. pump, and 3 no. silt ponds installed on Longfordpass Bog.
  - The status in 1994 was as described for 1988, with all infrastructure in place and activities ongoing, but peat extraction would have just surpassed its peak extraction period, and most extraction-related activities would have started to decrease by 1994.
- Littleton Bog:
  - In 1988, peat extraction was being carried out across the majority of Littleton Bog. Investigation of satellite imagery and annual reports indicate that by 1988, approximately 795ha of Littleton Bog was subject to peat extraction, while approximately 99ha were drained (but not subject to peat extraction). Thus, the main landcover type at this time was cutover peat.

- Railway infrastructure was laid at Littleton Bog.
- In 1988, there were 12 no. pumps installed on Littleton Bog.
- In 1995, there was a significant reduction in peat extraction at Littleton Bog and approximately 134ha were subject to peat extraction, approximately 760ha were drained (but not subject to peat extraction). A gradual and consistent reduction in peat extraction activity can be seen in both Littleton North and Littleton South from 2004 onwards.
- Cessation of all peat extraction activity had occurred by 2017.
- There is now 1 no. silt pond on the western boundary of Littleton Bog. There are 4 no. pump stations at Littleton Bog. None of the 4 no. pumps are active today.
- The status in 1994 was as described for 1988, with all infrastructure in place (other than one additional silt pond added to the bog after 1994) and activities ongoing. Peat extraction would have been near its peak with extraction-related activities starting to decrease in 1994/1995.

- Lanespark Bog:
  - In 1988, peat extraction was at its peak across Lanespark Bog. Investigation of satellite imagery and annual reports indicate that by 1988, approximately 239ha of Lanespark Bog were subject to peat extraction, occupying the majority of the central portion with some undeveloped land along the northeastern and southwestern boundaries. Thus, the main landcover type at this time was cutover peat. Drainage was already installed, predominantly in a north-south orientation.
  - Railway infrastructure was laid in the bog.
  - In 1988, there were no pumps, and 4 no. silt ponds installed on Lanespark Bog.
  - Between 1988 and 2017, the extent of peat extraction reduced. In 1995, approximately 201ha were subject to peat extraction. In 2004, approximately 65ha were subject to peat extraction.
  - Cessation of all peat extraction occurred by 2017.
  - There are now no pumps in Lanespark Bog. There are 4 no. silt ponds i.e. 2 no. along the northern boundary of Lanespark Bog and 2 no. along the southern boundary.
  - The status in 1994 was as described for 1988, with all infrastructure in place and activities ongoing, but peat extraction would have just surpassed its peak extraction period, and most extraction-related activities would have started to decrease by 1994.
- Derryvella Bog:
  - In 1988, peat extraction was at its peak across Derryvella Bog. Investigation of satellite imagery and annual reports indicate that by 1988, approximately 92ha of Derryvella Bog were subject to peat extraction. Thus, the main landcover type at this time was cutover peat. Drainage was already installed, predominantly in a north-south orientation.
  - Railway infrastructure was laid in the bog.
  - In 1988, there were no pumps, and 1 no. silt ponds installed on Derryvella Bog.
  - Between 1988 and 2017, the extent of peat extraction reduced. In 1995, approximately 44ha were subject to peat extraction. In 2004, approximately 30ha were subject to peat extraction.
  - Cessation of all peat extraction occurred by 2017.
  - There are now no pumps in Derryvella Bog. There are 1 no. silt ponds. along the western boundary.
  - The status in 1994 was as described for 1988, with all infrastructure in place and activities ongoing, but peat extraction would have just surpassed its peak extraction period, and most extraction-related activities would have started to decrease by 1994.

Improvements and modernisation of machinery occurred between 1988 and 2017 which increased the efficiency and speed of operations over this time period. There were significant developments in diesel-powered engines which would have resulted in the use of more fuel-efficient tractors on the bogs with significantly cleaner exhaust emissions compared to earlier counterparts.

An estimate of the volumes produced during the period July 1988—2017 was determined based on peat extraction volumes taken from the Bord na Móna Annual Reports, production records at the Application Site and an average of peat extraction tonnages over the period from 1978 – 1987 when annual quantities were unavailable.

Between July 1988 and 2017, an average of 170,593 tonnes of peat were extracted each year, with a total of approximately 5,117,798 tonnes extracted between July 1988 and the cessation of peat extraction in 2017.

The volumes of peat removed from the Application Site varied from year to year with a general and gradual decrease with time as more of the Application Site became exhausted thus reducing the area available for peat extraction. Fluctuations in peat extraction volumes are generally attributable to weather conditions in any given year, with wetter weather resulting in lower volumes of peat extraction due to poorer ground conditions for operating machinery, and poorer peat drying conditions; conversely, drier weather usually resulted in higher volumes of peat extraction due to better ground and drying conditions.

By July 1988, the extraction of sod peat had ceased and milled peat production had increased significantly e.g. from approximately 5,317 tonnes in 1978 to approximately 246,833 tonnes in 1987. The average volume of milled peat extracted per year during the period July 1988—2017 was approximately 170,593 tonnes. The milled peat was supplied to Littleton Briquette Factory from the year it opened (1982) to the year in which the factory closed (2018).

Peat extraction ceased at the Application Site in 2017. Following the cessation of peat extraction, any remaining peat stockpiles were delivered to Littleton Briquette Factory, Shannonbridge Power Station and Derrinlough Briquette Factory, with the last stockpile being sent here in mid-2019.

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Tailte Éireann

Tailte Éireann

Tailte Éireann

Tailte Éireann

Tailte Éireann

Tailte Éireann

Legend

Application Boundary

1973 Peat Production

Drained - Not Subject to Peat Extraction

Neither Drained nor Subject to Peat Extraction

Subject to Peat Extraction

0 0.5 1 2 Kilometres

BnM

Littleton Substitute Consent
1973 Peat Extraction Activities

DRWG No:	Scale:	Drawn by:	Date:
BNM-PG-24-21-37_v6	1:35,000	JG	23/01/2026

Tailte Éireann CYAL50510154

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N

Castletown
Black River
Abhainn
Bootabeha Br.
Mound
Carrowna
Shanballyduff
Ballyduff Br.
Church
Grave Yd
Manselstown
Kilmakill
North
An Abhainn Dubh
River
R639
Fennor
Graiguepadeen
Longfordpass Br.
Boat-shaped Fort
Church
Longfordpass East
Abhainn Na Drise
Drish River
135
Mound
Piercetown
Noard
Athlummon
Piercetown
Clooncleagh
Clooncleagh
River Dysse
Black River
Moated Site
Coldfields
Garraun
Longfordpass South
Garryclogh
Twomileborris
Buiríos Léith
Borris
Clover River
Borris
Leigh
Gortnahoo
Gort na hUamha
Castle
Motte
Church
N75
Blackcastle
Skehane
Tumpike
Churches
Derrycoogh
Lahardan Lower
Moated Site
Moated Site
M8
Monaraheen
Castle
Rathcunikeen
Ballyerk
Ag Abhainn Dubh
R639
Mound
Coolcroo
Derrynaveagh
Buolick
Noard
Derheen River
Newhill Br.
Newhill
Ballyvinane
Lackendarragh Cross
Nowhill
Ballynamona
Castle
Ballydavid
Moated Site
Coole
Knockboy
Littleton
An Baile Beag
Castle
Clonoura
Ballysloe
Gorteen
Castle
Ballybeg
Ballymurreen Br.
Black River Br.
Poyntstown
Melisson
Old Deer Park
Castle
Ballyley River
Derryvella
New Birmingham
Gleann an Ghuail
Liskeveen
Glengoole North
Glengoole South
Holy Well
Church
Lanespark
17
18
19
22
23
24
25
26
Earlshill
Moated Site
Mound
Waterloo Hill
Castle
Church

Legend

- Application Boundary

1988 Peat Production

- Drained - Not Subject to Peat Extraction
- Neither Drained nor Subject to Peat Extraction
- Subject to Peat Extraction

Kilometres
0 0.5 1 2

BnM

Littleton Substitute Consent
1988 Peat Extraction Activities

DRWG No:	Scale:	Drawn by:	Date:
BNM-PG-24-21-36_v5	1:35,000	JG	23/01/2026

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N

Castletown
Black River
Abhainn
Bootabeha Br.
Manselstown
Shanballyduff
Ballyduff Br.
Church
Grave Yd
Kilmakill
Mound
Black An Abhainn Dubh River
Fennor
R639
Graiguepadeen
Longfordpass Br.
Star shaped Fort
Church
Longfordpass East
Piercetown
Mound
Abhainn Na Drise
Drish River
135
Noard
Athlummon
Clooncleagh
River Dysse
Coldfields
Garraun
Black River
Twomileborris
Buiríos Léith
Borris
Clover River
Leigh
Moated Site
Longfordpass South
Garryclogh
Gortnahoo
Gort na hUamha
N75
Blackcastle
Lahardan Lower
Skehane
Tumpike
Churches
Derrycoogh
M8
Monaraheen
Castle
Rathcunikeen
Ballyerk
Ag Abhainn Dubh
Coolcroo
Mound
Derryveen River
Newhill Br.
Newhill
Ballyvinane
Lackendonnell Cross
Ballynamona
Ballydavid
Littleton
An Baile Beag
Black River
Ballybeg
Ballyhea River
Derryhogan
Derryvella
Old Deer Park
New Birmingham
Gleann an Ghuail
Glengoole North
Glengoole South
Holy Well
Church
Lanespark
Mound
Waterloo Hill
Castle
Church
Poyntstown
Melissan
Buolick
Motte
Coole
Knockboy
Cloonoura
Ballysloe
Gorteen
Earlshill
17
18
19
22
23
24
25
26
27

Legend

Application Boundary

1995 Peat Production

Drained - Not Subject to Peat Extraction

Neither Drained nor Subject to Peat Extraction

Subject to Peat Extraction

0 0.5 1 2 Kilometres

BnM

Littleton Substitute Consent
1995 Peat Extraction Activities

DRWG No:	Scale:	Drawn by:	Date:
BNM-PG-24-21-35_v5	1:35,000	JG	23/01/2026

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N

Castletown

Black River

Abhainn

Bootabeha Br.

Mound

Black

An Abhainn Dubh

River

Fennor

Carrowna

Manselstown

Shanballyduff

Ballyduff Br.

Church

Grave Yd

135

Kilmakill

North

R639

Graiguepadeen

Abhainn Na Drise

Drish River

Mound

Piercetown

Noard

Star shaped Fort

Church

Longfordpass East

Athlummon

Piercetown

Clooncleagh

Clooncleagh

River Dyrse

Moated Site

Coldfields

Garraun

Black River

Longfordpass South

Garryclogh

Twomileborris

Buiríos Léith

Borris

Clover River

Borris

Leigh

Gortnahoo

Gort na hUamha

Blackcastle

N75

Castle

Motte

Church

Skehane

Tumpike

Churches

Derrycoogh

Lahardan Lower

Moated Site

Moated Site

M8

Monaraheen

Castle

Rathcunikeen

Ballyerk

Ag Abhainn Dubh

R639

Brownreagh

Church

Motte

Castle

Coolcroo

Mound

Noard

Derrygeen River

Buolick

Newhill Br.

Newhill

Ballyvinane

Lackendarragh Cross

Ballynamona

Nowhill

Motte

Castle

Moated Site

Ballydavid

Coole

Knockboy

Littleton

An Baile Beag

Clonoura

Ballysloe

Derryhogan

Black River

Gorteen

Castle

Ballybeg

Black River Br.

Poyntstown

Melisson

Old Deer Park

Castle

Ballyley River

Derryvella

New Birmingham

Gleann an Ghuail

Ballynast

Liskeveen

Glengoole North

Glengoole South

Holy Well

Church

Lanespark

17

18

19

21

22

23

24

25

26

Earlshill

27

Moated Site

Mound

Waterloo Hill

Castle

Church

Legend

Application Boundary

2004 Peat Production

Drained - Not Subject to Peat Extraction

Neither Drained nor Subject to Peat Extraction

Subject to Peat Extraction

0 0.5 1 2 Kilometres

BnM

Littleton Substitute Consent 2004 Peat Extraction Activities

DRWG No:	Scale:	Drawn by:	Date:
BNM-PG-24-21-34_v5	1:35,000	JG	23/01/2026

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N

Kilimakill

Longfordpass North

Longfordpass East

Longfordpass South

Graiguepadeen

Fennor

Carrowna

Manselstown

Shanballyduff

Piercetown

Noard

Athlummon

Clooncleagh

Coldfields

Garraun

Twomileborris
Buiríos Léith

Borris

Leigh

Garryclogh

Gortnahoo
Gort na hUamha

Derrycoogh

Tumpike

Blackcastle

Lahardan Lower

Monaraheen

Skehane

Rathcunikeen Upper

Coolcroo

Ballyerk

Newhill

Ballynamona

Ballyvinane

Ballydavid

Littleton
An Baile Beag

Ballybeg

Derryhogan

Derryvella

Lanespark

Noard

Buolick

Coole

Clonoura

Knockboy

Ballysloe

Gorteen

Poyntstown

Melisson

New Birmingham
Gleann an Ghuail

Glengoole North

Glengoole South

Earlshill

Liskeveen

Castletown

Black River
Abhainn Dubh
An Abhainn Dubh
Abhainn Na Drise
Drish River
River Drise
Clover River
Derheen River
Ballyerk River
Black River

R639
N75
M8

Mound
Church
Castle
Moated Site
Motte
Churches
Holy Well
Star-shaped Fort

Tailte Éireann

Legend

- Application Boundary

2017 Peat Production

- Drained - Not Subject to Peat Extraction
- Neither Drained nor Subject to Peat Extraction
- Subject to Peat Extraction

0 0.5 1 2 Kilometres

BnM

Littleton Substitute Consent
2017 Peat Extraction Activities

DRWG No:	Scale:	Drawn by:	Date:
BNM-PG-24-21-33_v5	1:35,000	JG	23/01/2026

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4.2.3 Current Phase (Including Rehabilitation Phase 1): 2017 to Present Day

Peat extraction ceased at the Application Site in 2017. The Application Site still operates under the conditions of IPC Licence P0499-01 (waste handling and disposal, the decommissioning and rehabilitation of cutaway bogs and monitoring and maintenance, particularly around water management).

As required by the IPC Licence, waste items are and will continue to be removed for recycling or disposal, using external contractors with the required waste collection permits, and waste records are and will continue to be maintained. Rehabilitation Phase 1 works commenced in Littleton, Longfordpass, Lanespark and Derryvella in 2018 with extensive drain-blocking and hydrological management.

The only decommissioning underway at the Application Site was the removal of remaining peat stockpiles from the bogs (delivered to Littleton Briquette Factory, Shannonbridge Power Station and Derrinlough Briquette Factory), completed by mid-2019 and the removal of rail infrastructure in Lanespark was completed in 2024. Infrastructure to be decommissioned at the Application Site will be completed in line with all conditions of the IPC Licence.

Bord na Móna rehabilitates the bogs in a programmed approach under the requirements of the IPC Licence (Condition 10.3) through Cutaway Bog Decommissioning and Rehabilitation Plans for the Longfordpass, Littleton, Lanespark and Derryvella bogs (Appendix 7, Appendix 8 and Appendix 9). Following from the cessation of the licenced activity (i.e. peat extraction), the key objective of the Cutaway Bog Decommissioning and Rehabilitation Plans is environmental stabilisation. The rehabilitation of the bogs supports biodiversity e.g., plants, insects, bird and mammals, and the formation of wetland peatland and woodland habitats. In addition, peatland rehabilitation will bring a range of benefits to the local community via improvements in the local landscape, and it is also complying with national policies and strategies regarding the reduction of carbon emissions, supporting biodiversity and enhancing water quality. It is anticipated it will take up to 30 years for naturally functioning wetland and peatland ecosystems to fully re-establish.

The cessation of peat extraction has allowed the colonisation of vegetation into the area, gradual succession of vegetation communities in the older decommissioned areas, reduced dust and emissions to atmosphere, and lowered local ambient noise levels.

4.2.4 Remedial Phase

For Rehabilitation Phase 2 works, Bord na Móna are proposing to carry out additional rehabilitation in Derryvella Bog in 2026. No additional Rehabilitation works are proposed at Littleton, Longfordpass and Lanespark bogs, other than the measures described under Rehabilitation Phase 1 (Section 4.2.3), including revegetation and monitoring. The rehabilitation, monitoring and maintenance will proceed as per the requirements of IPC Licence P0499-01, (waste handling and disposal, the decommissioning and rehabilitation of cutaway bogs and monitoring and maintenance, particularly around water management).

As with the Current Phase, the active ongoing remediation / rehabilitation of the Application Site during the remedial phase and the continued natural recolonisation and succession with flora, habitats and fauna, coupled with continued monitoring and aftercare means the continued removal of potential sources for detrimental effects, and the improvement of the area for ecological gain through colonisation by native and indigenous species. With the rehabilitation at the Application Site, the local area, neighbouring areas and downstream areas (which includes the Lower River Suir SAC) will stabilise and improve and may also benefit from biodiversity improvements at the Application Site.

It is expected that more of the Application Site will develop into the wetland habitats and contribute to the biodiversity improvements described under the Current Phase.

5. CHARACTERISTICS OF THE RECEIVING ENVIRONMENT

5.1 Desk Study and Consultations

5.1.1 Desk Studies

The desk study undertaken for this assessment included a review of available data pertaining to the Application Site and surrounding area, as well as information pertaining to the relevant European site identified in Section 3. The purpose of the desk study was to obtain information on the baseline ecological conditions for the following time periods:

- 1994 - when the Habitats Directive was required to be transposed into Irish Law as referenced in Section 1.
- 1998 - when the Lower River Suir SAC was first designated[3].
- Present day, considering the current status of these designations.

Sources of information included the following:

- Bord na Móna 2018 Habitat Maps for the Application Site as obtained from ecological surveys completed to inform the Cutaway Bog Decommissioning and Rehabilitation Plans for each of the four bogs.
- Bord na Móna Cutaway Bog Decommissioning and Rehabilitation Plans and/or reviews for the four bogs:
  - Cutaway Bog Decommissioning and Rehabilitation Plan - Littleton, 2026 (Appendix 7).
  - Cutaway Bog Decommissioning and Rehabilitation Plan - Longfordpass, 2026 (Appendix 8).
  - Ballybeg/Lanespark/Derryvella Bog Cutaway Bog Decommissioning and Rehabilitation Plan, 2025 (Appendix 9).
- Bord na Móna Biodiversity Action Plan 2016-2021 (2016) Brosna Press, Ferbane.
- Review of the publicly available National Biodiversity Data Centre (NBDC) information pertaining to 10km grid S25[17], accessed on the 20 November 2025.
- Review of records of otter and otter signs in and around the Application Site from the National Otter Survey - National Biodiversity Data Centre accessed on the 20 November 2025.
- Selected aerial Maps 1973, 1995, 2001 and 2018 (included in Appendix 3) provided by Bord na Móna.
- NPWS Site Synopsis Reports and Site-Specific Conservation Objectives (SSCO) for the European sites considered in the rAASR and this rNIS.
- Review of NPWS Article 17 reporting (NPWS, 2017) and mapping for 2019, 2013 and 2007 accessed via https://www.npws.ie/maps-and-data/habitat-and-species-data/article-17-gis-and-metadata-downloads.
- Hydrology and hydrogeological attributes of the Application Site, especially in relation to the European sites, as obtained from the EPA Maps accessed at https://gis.epa.ie/EPAMaps/.

[17] Biodiversity reports generated from the NBDC Biodiversity Maps website: https://maps.biodiversityireland.ie/Map

- Water Framework Directive (WFD), Geological Survey of Ireland (GSI) and Inland Fisheries Ireland (IFI).
- Review of species records from the NPWS Flora (Protection) Order, 2015 (S.I. No. 356 of 2015) Map Viewer - Vascular Plants, Charophytes and Lichens[18].
- No bryophytes are listed for the Application Site[19].
- No vascular plants are listed for the Application Site[18.]
- Review of relevant available historic and current plans (detailed in Table 9-1).
- Fehily Timoney ecological data from recent (2025) field assessments in support of future land use applications where applicable to the QIs and this rNIS.
- Integrated Pollution Control (IPC) Licence, P0499-01, and the Annual Environmental Reports compiled as part of the IPC reporting requirements.

5.1.2 Scoping and Consultation

Fehily Timoney have undertaken a scoping and consultation exercise in December 2023 and again in January 2026 during the preparation of the application for Substitute Consent.

A scoping letter was issued on the 1 December 2023 to various stakeholders including the Department of Housing, Local Government and Heritage and Inland Fisheries Ireland (IFI).

Response was received from Department of Housing, Local Government and Heritage on the 4 December 2023 (reference no issued: G Pre00317/2023), acknowledging receipt with instruction to continue further correspondence with the Development Application Unit (DAU), the relevant stakeholder representative in terms of the AA for the Project. The correspondence was forwarded to the relevant stakeholder representative on the 6 December 2023. No further response or comment was received related to the initial scoping letter.

Response was received from IFI on 1 December 2023 acknowledging receipt of the scoping letter and that the e-mail and letter was forwarded to the relevant staff member. No further response or comment was received related to the initial scoping letter.

A scoping letter was again issued on the 20 January 2026 to various stakeholders including the Department of Housing, Local Government and Heritage and Inland Fisheries Ireland (IRI). No responses have been received to date.

[18] https://heritagedata.maps.arcgis.com/apps/webappviewer/index.html?id=a41ef4e10227499d8de17a8abe42bd1e accessed on the 24 November 2025
[19] https://dahg.maps.arcgis.com/apps/webappviewer/index.html?id=71f8df33693f48edbb70369d7fb26b7e accessed on the 24 November 2025

5.1.3 Water Framework Directive Water Body Status

5.1.3.1 Regulatory Context

This section provides a baseline of the hydrological and geohydrological baseline of the Application Site and surrounds, based on desk study, largely obtained from information links to the EPA Maps[12] and field data where available. The Water Framework Directive (WFD, EU Directive 2000/60/EC) is the overarching European directive setting out rules to prevent deterioration and achieve good status of EU water bodies. The WFD is implemented in Ireland via the European Communities (Water Policy) Regulations 2003 (S.I. No. 722/2003). Where available, WFD data is used to infer the 1994 and current baseline conditions. EPA naming is used for rivers and groundwater bodies. The information is supplemented by findings in Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR.

5.1.3.2 Hydrology and Hydrological Pathways

The Application Site lies within WFD Catchment 16 of the South Eastern River Basin District.

The Application Site lies within WFD Sub-Catchment Suir_SC_040, which drains into the upper reaches of the River Suir via the WFD River Sub Basins and streams indicated in Table 5-1 and associated streams. The main streams draining the northern extent of the Application Site are the Drish River and its tributaries, the Clover River, Breagagh River and the Black (Twomileborris) River with its tributary, the North Glengoole River. The Drish River drains north and then southwest wrapping around the Application Site boundary before joining the River Suir downstream of Thurles. Further downstream the River Suir enters the Lower River Suir SAC. The Drish River suffered significant pollution from a zinc and lead mine at Lisheen until recently (AECOM, 2020 in Triturus, 2024).

The River Suir (SUIR_070) (IE_SE_16S020900) is the main receiving waterbody from the Application Site. The River Suir eventually flows into the Upper Suir Estuary (Transitional Waterbody IE_SE_100_0600), the Middle Suir Estuary (Transitional Waterbody IE_SE_100_0550), the Lower Suir Estuary (Transitional Waterbody IE_SE_100_0500) and the Barrow Suir Nore Estuary (Transitional Waterbody IE_SE_100_0100) before draining into the Waterford Harbour (Coastal Waterbody IE_SE_100_0000) and Eastern Celtic Sea.

The EPA Cycle 3 Catchment 16 River Suir Catchment Report[20] (May 2024) provides the following information on the relevant catchment:

- There were 43% river and lake water bodies at Good or High status in the 2010-2015 monitoring period. A total of 32% of surface waterbodies were at Good or High Ecological Status in the 2016-2021 monitoring period.
- There are nine waterbodies with a High Ecological Status Objective, with four and seven not meeting their environmental objectives at the end of the 2015 / 2021 monitoring period respectively. None of these are within the ZoI of the Application Site but indicates a deterioration across the catchment over said monitoring periods.
- Nationally, the ecological status in monitored surface waterbodies show improvements in some waterbodies, offset by declines elsewhere.

[20] EPA Cycle reports for Catchment 16 accessed through https://www.catchments.ie/wfd-cycle-3-catchment-assessments-published-by-the-epa/

- The most significant pressure on the catchment is agriculture, with the main issue related to phosphorous loading in surface waterbodies, followed by sedimentation from drainage works, erosion and animal access to waterbodies. This is followed by forestry, hydromorphology and then extraction (peat and mining).
- Peat drainage and extraction (listed as 'River Extractive Industry Pressures' under 'Pressures and Activities' in the EPA Water Maps[12]) have been identified as significant pressures in 10 rivers, with elevated nutrient concentrations (principally elevated ammonia concentrations) and increased sedimentation the significant issues at the end of the 2015 monitoring cycle. Most of these rivers are retained as at risk at the end of the 2021 monitoring cycle. All these rivers are restricted to the northeastern extent of Catchment 16 in the immediate vicinity of the peat extraction areas, including those in and around the Application Site.
- The Cycle 2 report (2010 to 2015 monitoring period) also indicates the pressure of Lisheen mine on the Drish River (Drish_040) specifically. The Drish River is the main local receiving water body for the Application Site and shows the greatest deterioration exacerbated by the contributions from the mine.

5.1.3.3 Water flow

Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR used EPA's Hydrotool[21] for baseline flow volumes in the local streams. The flow duration curves (replicated in Figure 5-1) are generated from water flows (m^3/s) recorded at a node in the river over time and show the variability of flow in the river (the extent of the y-axis covered by the curve) and the flow rate that is exceeded, for example, 10%, 50% (median flow in the river at that node), and 95% of the time. The tributaries close to the Application Site show lower variability and more consistent flow rates, with flow rates (including range of low rates) increasing progressively downstream to the River Suir just downstream of the Drish River before confluence with River Suir.

Considering the 95 percentile flows (flow rate exceeded 95% of the time in the rivers), the local watercourses immediately downstream have flow volumes less than $0.08m^3/s$ (80l/s) (a range of $0.035\text{-}0.76m^3/s$). The flow volumes in the Drish River increase to $0.397m^3/s$ upstream of its confluence with the River Suir, more than doubling in the River Suir downstream of the Drish River confluence.

As per the Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR, flow volumes at the outfalls from the Application Site range from $0.01 – 0.1m^3/s$ (during Peat Extraction Phase). The waterbodies in the vicinity of the Application Site, with smaller flow volumes, would have had the greatest potential to be impacted by the peat extraction activities (recalling the 95-percentile flow range of $0.035\text{-}0.76m^3/s$). The potential for effects decreased progressively downstream due to the increasing flow volumes from larger upstream catchment areas (contribution of flow from the Application Site is a progressively smaller contribution to the 95-percentile flow at downstream nodes) and associated greater variability of flow.

[21] Available on www.catchments.ie

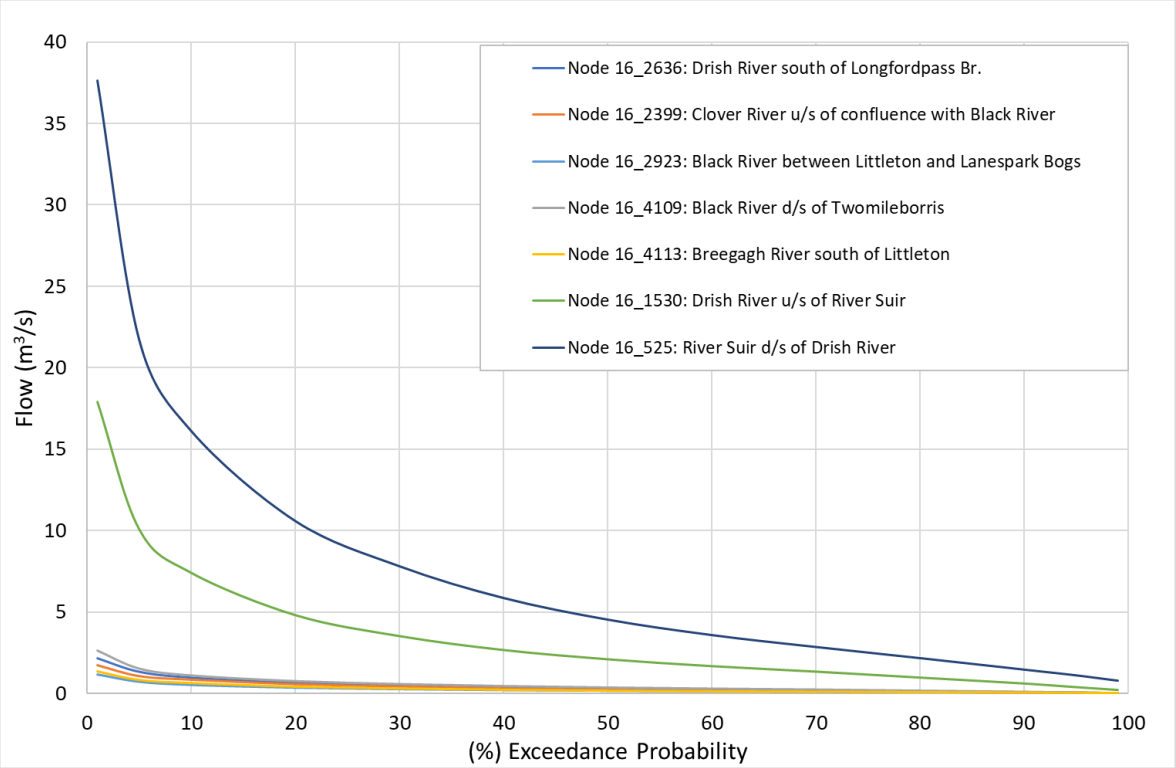


Figure 5-1: Flow Duration Curves (extracted from Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR)

5.1.3.4 Baseline Surface Water Quality

The historical and current EPA Q-values are summarised in Table 5-1. The rivers and the monitoring stations for each river are ordered upstream to downstream for each WFD Catchment / Sub-catchment as far as possible in Table 5-1. In addition, the critical periods are indicated where data is available, which includes 1994 for the required transposition of the Habitats Directive into Irish law, 2002 as the first year after the IPC Licence was issued and 2017 when peat extraction ceased.

The historical and current EPA Q-values of the surrounding water bodies show great variability across the spatial and temporal scale with no clear or consistent trends that could be linked to activities at the Application Site.

Where Q-values of the local streams are available, values just before 1994 and just after 1994 were consistent at most monitoring stations across those years, with no improvement at any of the monitoring stations and deterioration in Q-value in one monitoring station in the Clover River, one monitoring station in the Drish River, and three monitoring stations in the River Suir (Table 5-1).

Between 1994 and 2017, the Q-values for the rivers in the immediate area of the Application Site again show fluctuation with no consistent trends. The Black (Twomileborris) River showed a very minor decline at its upstream monitoring station. The Drish River's monitoring stations showed the most severe declines in Q-value, except at the downstream monitoring station, which ended on a Good Q-value in 2017. This indicates that any effects in the rivers remain local and attenuate downstream, not adversely affecting the River Suir or the Lower River Suir SAC.

Q-values of the local streams pre- and post-2002 (pre- and post-implementation of IPC Licence requirements) also fluctuate with no clear trends. From 1999 to 2008 the Drish River shows some deterioration in Q-value, with the downstream monitoring station recording a Poor Q-value in 2008. The receiving section of the River Suir also shows decline in Q-value in 2008 but is marginally worse than the receiving Drish River, indicating that deterioration in this section of the River Suir is affected by tributaries in sub-catchments adjacent to and upstream of the Application Site.

Table 5-1: Biological quality rating (Q-values) for selected streams/rivers in downstream catchments (blank-cells indicated no data) [22 & 23]

Station code	1971	1974	1976	1978	1980	1981	1982	1983	1985	1986	1988	1989	1990	1992	1994	1996	1999	2002	2005	2008	2011	2014	2017	2020	2023
Clover River																									
RS16C040100											2	2	1-2	2	2	1	2-3	3	3		3	3	3	3	3
RS16C040300											3-4			3-4		2-3	4	4	4	4	4	4	3-4	3-4	3-4
Breagagh (Tipperary) River																									
RS16B030040											4			4											
RS16B030080														3											
RS16B030100						3-4			3		3-4			3-4											
RS16B030200											3-4			3-4											
RS16B030300						3-4			4		4-5			4											
RS16B030400						4			4		4			4											
Black (Twomileborris) River																									
RS16B010030																3-4	3-4	3	3	3-4	4	3-4	3-4	3-4	3
RS16B010090											4			4		4	3-4	3	3-4						
RS16B010100					3		3-4		3		4			4		4	4	4	4	3-4	4	4	3-4	3-4	3
RS16B010200											4			4											
Drish River																									
RS16D020040																3-4	3-4	3-4	3	3	3-4	3	3	3*	3
RS16D020050											3-4														
RS16D020070											4			4-5		3-4	2/0	2-3/0	3/0	3/0	3/0	3	3	3	3
RS16D020100			4-5		4			4			4-5			4		4	3-4	3	3	3	3	3	3	3	3-4
RS16D020200					3			4			4			4		4	4	3-4	3-4	3	3-4	3-4	3	3	4
RS16D020300			4-5		4			4			4			4											
RS16D020400 (post-confluence with Breagagh River)					4			4			4			4		4	4	4	3-4	3	4	4	4	3-4	3-4

[22] EPA RIVER QUALITY SURVEYS: BIOLOGICAL for the16-Suir Catchment: https://epawebapp.epa.ie/qvalue/webusers/ Accessed on the 18 December 2025
[23] For the location of monitoring station see EPA Maps 'Q Values' under the 'MONITORING & FLOW' TAB

Station code	1971	1974	1976	1978	1980	1981	1982	1983	1985	1986	1988	1989	1990	1992	1994	1996	1999	2002	2005	2008	2011	2014	2017	2020	2023
River Suir																									
RS16S020600 (pre-confluence with Drish River)	2	2		3	3		3		3	3	3			3		3	3	3	3	3	3	3-4	3-4	3	3
RS16S020800 (post-confluence with Drish River)				3	3		3-4		3-4	3-4	4			4											
RS16S020810 (post-confluence with Drish River)	2-3	2		2	3		2-3		3-4	3-4															
RS16S020900 (before entering SAC)	2	2-3		2-3	2-3		3		3	3	3			3-4		3-4	3-4	4	3	3	3-4	4	3-4	3-4	3-4
RS16S021000 (inside SAC)				3-4	3		3		3	3	3			3-4											
RS16S021100 (inside SAC)		4		3-4	3-4		3				3			3-4		3	3-4	3-4	3	3	3-4	4	3-4	3-4	3
RS16S021200 (inside SAC)	4	4		4	4		3-4		3-4	3-4	3			4		3-4	3-4	4	3	4	4	4	3-4	3-4	3

Monitoring station for each river ordered up stream to downstream; no monitoring stations for North Glengoole River
*Q-Value: 5 & 4-5 is unpolluted. Satisfactory river condition (High WFD Status); 4 is unpolluted. Satisfactory river condition (Good WFD Status); 3-4 is slightly polluted. Unsatisfactory river condition (Moderate WFD Status); 3 & 2-3 is moderately polluted. Unsatisfactory river condition (Poor WFD Status); 1, 1-2 and 2 is seriously polluted. Unsatisfactory river condition (Bad WFD Status).

Although an impact from the Project on local streams and rivers cannot be excluded, there is no evidence to support that these local impacts are adversely affecting the downstream River Suir or the Lower River Suir SAC. With the rehabilitation of the Application Site, a gradual improvement in water quality in local streams is expected in the absence of other impacts in the catchment, but the quality of the rivers will still be subjected to the existing pressures in the catchment.

EPA monitoring of selected local watercourses commenced in 2007, post-implementation of the IPC Licence measures, during the later part of the Peat Extraction Phase. A summary of the water quality monitoring within the Clover_010, Breagagh (Tipperary)_010, Black (Twomileborris)_010, Drish_020 and Drish_050 rivers with respect to mean concentrations of BOD (biochemical oxygen demand), ortho-phosphate and ammonia is provided against the relevant Environmental Quality Standards (EQS) as set out in S.I. 272/2009 (Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR) as follows:

- With respect to ortho-phosphate:
  - The mean concentration from 2007-2017 (Peat Extraction Phase) was of Good status (≤0.035mg/l) in the Breagagh (Tipperary)_010, the Drish_020 and Drish_050. Meanwhile, the Black (Twomileborris)_010 was of High status (≤0.025).
  - During the Current Phase, the Black (Twomileborris)_010 and the Drish_0202 recorded High status and the Clover_010 and Drish_050 exceeded the Good status threshold.
- With respect to BOD:
  - The mean concentrations exceeded the Good status threshold of ≤1.5mg/l during the Peat Extraction Phase at all local water bodies, with the exception of the Black (Twomileborris)_010 which achieved Good status.
  - The mean concentrations exceeded the Good status threshold of ≤1.5mg/l during the Current Phase at all local water bodies.
- With respect to ammonia:
  - The mean concentrations exceeded the Good status threshold of ≤0.065mg/l during the Peat Extraction Phase at all local water bodies.
  - During the Current Phase, the mean concentrations were found to be of Good status in the Breagagh (Tipperary)_010, and Black (Twomileborris)_010 the Drish_020.
- Suspended solid concentrations have not been monitored continuously in the vicinity and downstream of the Application Site, but available data indicates that concentrations of suspended solids are well below the 35mg/l Emission Limit Value (ELV) stipulated in the IPC Licence.

The Littleton Bog Group, which comprises of 14 bogs including the Application Site, has been monitoring water quality from 2001 in line with the requirements of the IPC Licence, which included monitoring of outfalls (both at the Application Site and at bogs outside the Application Site which are part of Littleton Bog Group). From the review of the Annual Environmental Reports (AERs) between 2002 and 2024 with no data available for 2019, 2020 or 2021 presented in Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR, 253 no. grab samples have been taken across the Littleton Bog Group. From these samples, 98% were compliant with respect to suspended solids (ELV of 35mg/l), 92% were compliant with respect to COD (ELV of 100mg/l) and all were compliant with respect to ammonia (ELV of 4mg/l). The exceedances for suspended solids were noted to have occurred in the early years of the IPC licence, with only one exceedance recorded since 2010.

Discharges (from roof and non-process areas such as carparks) have been inspected and sampled on a monthly basis and results were generally well below the COD ELVs (Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR).

5.1.3.5 Geology, Groundwater Bodies (GWBs) and Hydrogeological Pathways

The Application Site is underlain by a sequence of Carboniferous Period limestone formations, with the bulk of the Application Site on Waulsortian limestone (unbedded lime-mudstone), intersecting formations of the Tournaisian and Visean limestone.

Most of the Application Site overlaps the karstic Thurles GWB (IE_SE_G_158), a Regionally Important Aquifer, and the Templemore GWB (IE_SE_G_131), an overall poorly productive bedrock rated as a Locally Important Aquifer that may be moderately productive in very local zones[24]. There are geological faults along the western and southeastern boundaries of the Application Site. There are no karst features mapped within the Application Site due to the coverage of peat and glacial subsoils.

The groundwater vulnerability to contamination has been rated as moderate to low across most of the Application Site, with limited areas around the outskirts rated as highly / extremely vulnerable to contamination as a result of human activities. The historical and current WFD status for all GWBs across the Application Site is Good and indicates that the on-site activities have not detrimentally impaired local GWBs. This is supported in the WFD assessment completed for the Application Site (Appendix 9-2 of Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR).

Groundwater bodies relevant to the Application Site and surrounds have retained good WFD status over the entire recording period (Table 5-2) and there is no evidence to suggest that the Project had any significant detrimental effect on the WFD status of groundwater bodies. As per Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR: "groundwater quality impacts would not be anticipated given the shallow nature of the peat extraction works, the presence of low permeability soils and subsoils which restrict groundwater recharge, and the low potential for groundwater dispersion and movement within the aquifer" and the 'good' WFD status is expected to continue into the future in absence of other catchment pressures.

Table 5-2: Groundwater bodies description and quality and risk status

GWB	Description	WFD Status 2007-2012	WFD Status 2010-2015	WFD Status 2013-2018	WFD Status 2016-2021	WFD Status 2019-2024
		Peat Extraction Phase			Time of overlap	Current Phase
Templemore GWB (IE_SE_G_131)	Poorly productive bedrock	Good	Good	Good	Good	Good
Thurles GWB (IE_SE_G_158)	Karstic	Good	Good	Good	Good	Good
Clonmel GWB (IE_SE_G_040)	Karstic	Good	Good	Good	Good	Good

[24] Information obtained from the Geological Survey of Ireland's Spatial Resources online viewers accessed via https://www.gov.ie/en/department-of-climate-energy-and-the-environment/policy-information/geological-survey-ireland/#data-and-maps

5.1.4 European Sites: Lower River Suir SAC (002137)

The Lower River Suir SAC was proposed in July 1998 (Natura 2000 - Standard Data Form[3]). The SAC consists of the freshwater stretches of the River Suir south of Thurles, the tidal stretches as far as the confluence with the Barrow/Nore, and many tributaries. The SAC traverses the counties of Tipperary, Kilkenny and Waterford[25]. The SAC overlies Carboniferous limestone for most of its extent, with a change in geology as it approaches Waterford[25]. The QIs for which the Lower River Suir SAC is designated, and their conservation objectives (NPWS, 2017) are presented in Table 5-3.

Table 5-3: Qualifying Interests, their Conservation Objectives and description within the Lower River Suir SAC

Qualifying Interests (* denotes a priority habitat)	Conservation Objective
1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	To restore the favourable conservation condition
1410 Mediterranean salt meadows (*Juncetalia maritimi*)#	To restore the favourable conservation condition
3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and Callitricho-Batrachion vegetation	To maintain the favourable conservation condition
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	To maintain the favourable conservation condition
91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles	To restore the favourable conservation condition
91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)*	To restore the favourable conservation condition
91J0 *Taxus baccata* woods of the British Isles*	To restore the favourable conservation condition
1029 Freshwater Pearl Mussel (*Margaritifera margaritifera*)	To restore the favourable conservation condition
1092 White-clawed Crayfish (*Austropotamobius pallipes*)	To maintain the favourable conservation condition
1095 Sea Lamprey (*Petromyzon marinus*)	To restore the favourable conservation condition
1096 Brook Lamprey (*Lampetra planeri*)	To restore the favourable conservation condition
1099 River Lamprey (*Lampetra fluviatilis*)	To restore the favourable conservation condition
1103 Twaite Shad (*Alosa fallax fallax*)	To restore the favourable conservation condition
1106 Salmon (*Salmo salar*)	To restore the favourable conservation condition
1355 Otter (*Lutra lutra*)	To maintain the favourable conservation condition

QI is only included in the conservation objectives (NPWS, 2017) and not in the Statutory Instrument[26] or the Site Synopsis report[25] for the Lower River Suir SAC

[25] Site Synopsis for Lower River Suir SAC (002137), https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY002137.pdf dated 19.07.2023
[26] S.I. No. 650 of 2024. European Union Habitats (Lower River Suir Special Area of Conservation 002137), Regulations 2024

5.1.4.1 Main Pressures & Threats

The threats and pressures as listed in the Natura 2000 - Standard Data Form[3] are summarised in Table 5-4. The activities at the Application Site would have contributed to threats associated with discharges and pollution to surface waters, and possibly the spread of non-native invasive species via hydrological pathways.

Table 5-4: Threats and Pressures listed for the Lower River Suir SAC in order of rank and cross refenced to the current (2019-2024) codes and descriptions

Rank	Code [current code[27]]	Threats and Pressures [current description[27]]	Inside/ Outside
High	A08 [PA13]	Fertilisation in agriculture [Application of natural or synthetic fertilisers on agricultural land]	Outside
High	J02.12.02 [PF14; PL04]	Dykes and flooding defence in inland water systems [Modification of flooding regimes, flood protection for built-up areas; Development and operation of dams (mixed or unknown drivers)]	Inside
High	E01 [PF01; PF02; PF13; PF17]	Urbanisation and human habitation [Conversion from other land uses to built-up areas; Construction or modification (e.g. of housing and settlements) in existing built-up areas; Drainage, land reclamation and conversion of wetlands, marshes, bogs, etc. for built-up areas; Active abstraction of water for built-up areas]	Both
High	E03 [PF06; PF07]	Discharges (household/industrial) [Deposition and treatment of waste/rubbish from built-up areas; Residential and commercial activities and structures generating pollution to surface or ground waters]	Both
High	H01 [PK01; PK02]	Pollution to surface waters [Mixed source pollution to surface and ground waters (limnic and terrestrial); Mixed source marine water pollution (marine and coastal)]	Both
Medium	J02.01 [PL02; PL04]	Landfill, land reclamation and drying out, general [Drainage (mixed or unknown drivers); Development and operation of dams (mixed or unknown drivers)]	Both

[27] A guide to cross reference codes from prior reporting periods to the 2019-2024 reporting period as obtained from https://cdr.eionet.europa.eu/help/natura2000

Rank	Code [current code[27]]	Threats and Pressures [current description[27]]	Inside/ Outside
Low	I01 [PI01; PI02]	Invasive alien species [Invasive alien species of Union concern Other invasive alien species (other than species of Union concern)]	Inside
Low	B [PB]	Forestry [Forestry related practices]	Outside
Low	A01 [PA01]	Agricultural cultivation [Conversion into agricultural land (excluding drainage and burning)]	Inside
Low	D03.01 [PE03; PF15]	Port areas [Shipping lanes, ferry lanes and anchorage infrastructure (e.g. canalisation, dredging); Modification of coastline, estuary and coastal conditions for built-up areas]	Both
Low	J02.01.02 [PL02]	Reclamation of land from sea, estuary or marsh [Drainage (mixed or unknown drivers)]	Inside

5.1.4.2 Qualifying Interest

A brief desktop description of the various QIs within the setting of the Lower River Suir SAC is provided below, and QI nomenclature is provided for the EU Annex I Habitat / NPWS Article 17 reporting (NPWS, 2019c and 2025b), (the latter naming is used henceforth throughout this rNIS).

5.1.4.2.1 Atlantic Salt Meadows (Glauco-Puccinellietalia maritimae) / Atlantic Salt Meadows [1330] and Mediterranean Salt Meadows (*Juncetalia maritimi*) / Mediterranean Salt Meadows [1410]

According to the Site Synopsis Report[25] and mapped in the SSCO (NPWS, 2017), Atlantic salt meadows [1330] "*occur below Waterford City in old meadows where the embankment is absent, or has been breached, and along the tidal stretches of some of the in-flowing rivers below Little Island. … More extensive areas are also seen along the south bank at Ballynakill, the east side of Little Island, and in three large salt meadows between Ballynakill and Cheekpoint*".

The Mediterranean salt meadows [1410] has not been confirmed in the Lower River Suir SAC (NPWS, 2017). The SSCO states that important un-surveyed areas may be present within the SAC. If present, it will occupy the similar estuarine and coastal regions as the Atlantic salt meadows [1330] around and downstream of Little Island.

Both habitat types occur in the lowest reaches of the River Suir and the Lower River Suir SAC.

5.1.4.2.2 Water Courses of Plain to Montane Levels with the *Ranunculion fluitantis* and Callitricho-Batrachion Vegetation / Vegetation of Flowing Waters [3260]

According to the Site Synopsis Report[25], Vegetation of flowing waters [3260] is evident in the freshwater stretches of the River Suir and along many of its tributaries. The SSCO broadly describes the habitat in upland rivers (with bryophytes and macroalgae) and lowland depositing rivers (with pondweeds and starworts) with the conservation objectives focussed on sub-types of this habitat with high conservation value, which is not well known/understood in the Lower River Suir SAC (NPWS, 2017).

5.1.4.2.3 Hydrophilous Tall Herb Fringe Communities of Plains and of the Montane to Alpine Levels / Hydrophilous Tall-Herb Swamp [6430]

Hydrophilous tall herb swamp habitat has not been mapped in detail for Lower River Suir SAC (NPWS, 2017). According to the Site Synopsis Report[25], Hydrophilous tall-herb swamp [6430] occurs in association with various areas of Alluvial forest (91E0 - Section 5.1.4.2.5) and where the floodplain of the river is intact and the SCCO (NPWS, 2017) also expects the habitat to occur in association with other woodland habitats in fringe areas along the river.

5.1.4.2.4 Old sessile Oak Woods with Ilex and Blechnum in the British Isles / Old Oak Woodland [91A0] of

According to the Site Synopsis Report[25], Old oak woodland 91A0 is seen in the woodland blocks in Inchinsquillib Wood (blocks with eastern aspects) and Portlaw Wood along the Clodiagh River, which is species-rich, including the "*rare lichen Lobaria pulmonaria, an indicator of ancient woodlands*". Both areas lie within upstream tributaries not hydrologically linked to the Application Site and there is no pathway between these habitats and the Project.

5.1.4.2.5 Alluvial Forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)* / Alluvial Woodland* [91E0]

According to the Site Synopsis Report[25], good examples of Alluvial woodland* [91E0] occur on the islands just below Carrick-on-Suir and further downstream at Fiddown Island where the "*bryophyte and lichen floras appear to be rich*". These areas are associated with the transitional water bodies of the Lower River Suir SAC.

5.1.4.2.6 *Taxus baccata* Woods of the British Isles* / Yew Woodland* [91J0]

According to the latest Article 17 reports (NPWS, 2025b) and the Site Synopsis Report[25], two stands of 91J0 occur within the SAC on limestone ridges around Cahir.

5.1.4.2.7 Freshwater Pearl Mussel (*Margaritifera margaritifera*) [1029]

The conservation objective in the Lower River Suir SAC applies to the Clodiagh freshwater pearl mussel. The habitat in this stretch of river is not ideal, and mussels have not been abundant, but are continually present in low numbers from downstream of Clonea to above Portlaw (NPWS, 2017). The SSCO (NPWS, 2017) goes on to state that the "*distribution in the Clodiagh has contracted since the 1990s*".

5.1.4.2.8 White-clawed Crayfish (*Austropotamobius pallipes*) [1092]

White-clawed crayfish occurs in scattered locations across the Lower River Suir SAC, within the main non-tidal river, from Cabragh, near Thurles, to downstream of Kilsheelanand, and its tributaries (NPWS, 2017). From the NPWS sensitive species information, nine records occur in the neighbouring waterbodies [Black (Twomileborris), North Glengoole, Clover and Drish river sub-basins], spanning over two decades (1988 to 2010). Crayfish plague (*Aphanomyces astaci*) outbreaks have occurred and have likely impacted crayfish populations within the River Suir.

5.1.4.2.9 Sea Lamprey (*Petromyzon marinus*) [1095], Brook Lamprey (*Lampetra planeri*) [1096] and River Lamprey (*Lampetra fluviatilis*) [1099]

The SSCO (NPWS, 2017) and the Site Synopsis[25] do not provide any detailed information regarding the use of the river and tributaries of the Lower River Suir SAC by lamprey species. NBDC indicates no records for sea lamprey and river lamprey in the Lower River Suir SAC, with one record each (in 2022 and 2012 respectively) in the adjacent River Barrow and River Nore SAC [also two historical records (1968 and 1972) in this SAC for spawning sea lamprey]. NBDC records indicate two records (2013 and 2016) for brook lamprey within the Lower River Suir SAC, within the Cabragh Wetlands (SUIR_080 WFD River Sub Basin (IE_SE_16S021100)) upstream of the main channel of the River Suir, c. 9km west of the Application Site. NPWS data also includes two records (undated) for the River Nore in the River Barrow and River Nore SAC. From the 'WFD Fish Ecological status for Rivers, Lakes and Transitional waters 2008 to recent' lamprey species are confirmed sporadically along the length of the River Suir well past Cahir.

Artificial barriers, such as the weirs in Clonmel in Lower River Suir SAC, hamper upstream migration, thereby limiting lampreys to lower stretches of the SAC and restricting access to suitable silted, upstream, spawning areas (NPWs, 2017). The creation of isolated populations also decreases genetic diversity, weakening population adaptability to the changing environment and increasing susceptibility to disease.

5.1.4.2.10 Twaite Shad (*Alosa fallax fallax*) [1103]

According to the Site Synopsis Report[25], the Lower River Suir SAC "*is one of only three known spawning grounds in the country for Twaite Shad*". Artificial barriers hamper upstream migration and limit the Twaite shad to lower stretches of the SAC (NPWs, 2017). The SSCO (NPWS, 2017) and the Site Synopsis[25] do not provide any detailed information regarding the use of the river and tributaries of the Lower River Suir SAC by Twaite shad. NBDC indicates no records for shad in the Lower River Suir SAC, with two records (2014) in the adjacent River Barrow and River Nore SAC. From the 'WFD Fish Ecological status for Rivers, Lakes and Transitional waters 2008 to recent' Twaide shad has been confirmed in the Upper Suir Estuary, Middle Suir Estuary, Lower Suir Estuary, and the Barrow Suir Nore Estuary (into which the Lower River Suir SAC drains)

There are no shad records for the Application Site, as to be expected as the species is confined to transitional water bodies.

5.1.4.2.11 Salmon (*Salmo salar*) [1106]

The SSCO (NPWS, 2017) and the Site Synopsis[25] do not provide any detailed information regarding the use of the river and tributaries of the Lower River Suir SAC by salmon. The River Suir is not designated as a protected river designated in the Salmonid Regulations (S.I. 293 / 1988)[12]. The Aherlow River (IE_SE_16A010500) is the only river in the Lower River Suir SAC that is designated in the Salmonid Regulations (S.I. 293 / 1988) and is situated upstream of the River Suir and is outside the ZoI. The Clodiagh Catchment, also considered upstream of the ZoI, is also considered important in terms of maintaining salmon species due to their role as hosts in the life-cycle of the freshwater pearl mussel (Section 5.1.4.2.7). NBDC records and the 'WFD Fish Ecological status for Rivers, Lakes and Transitional waters 2008 to recent' confirm salmon is present along the length of the River Suir.

The national total salmon catch has fallen by roughly 49% between 2007 and 2022 and continues to decline (NPWS, 2019a). One of the threats / pressures faced by salmon are blockages such as weirs which reduce their ranges in rivers such as in the River Suir SAC.

5.1.4.2.12 Otter (*Lutra lutra*) [1355]

The River Suir and surrounds provide forage area, breeding areas, resting areas and commuting for otters. In terms of attributes, the river and marine habitats provide opportunity for a broad diet and unobstructed movement (in the absence of barriers), and the terrestrial habitat (10m buffer along the shoreline) is stated to be critical for otters (NPWS, 2017), providing couch and holt sites. Other attributes are related to the distribution of otters within the SAC and potential for barriers impeding movement.

Otters are associated with rivers, lakes and coasts which provide their main food source (fish and crustaceans) (NPWS, 2019a), but they are known to occasionally travel across more terrestrial landscapes, as evidenced by occasional terrestrial based meals such as small mammals and waterfowl (Reid *et al.*, 2013). The latest Article 17 Reporting (NPWS, 2025c) states that otters "*remain ubiquitous throughout Ireland with no change in distribution or range since the 1980s*".

Otters and signs of otters (spraint, prints, mucous, droppings) were recorded in the River Suir, Clashawley River [no surveys done in Drish River, Clover River, Black (Twomileborris) River, Breagagh River] during the national 'Otter Survey of Ireland 1982', 'Otter survey of Ireland 2004 & 2005', and 'Otter (*Lutra lutra*) records 2011-2015[28]'. The NBDC National otter data indicates sporadic records (otters and otter signs) in the areas neighbouring the Application Site from as early as 1969, 1984, 1986, 1991, 2005 and between 2010 and 2015.

NPWS sensitive species information indicated two records (1991 and on in 2010) within 2km^2 grids, adjacent to the Application Site [Black (Twomileborris) and the Breagagh(Tipperary) river sub-basins].

The findings from the NBDC, National otter surveys of Ireland and the sensitive species information provided by NPWS indicates that otters were recorded intermittently and rarely around the Application Site.

No otters were recorded on the Application Site and there are no records / data for the years preceding the commencement of peat extraction on the Application Site. Given the nature of the Application Site and the young streams present in and around the area, the Application Site is considered as having limited potential for foraging and commuting otters and unlikely for breeding otters before activities commenced on the Application Site.

[28] Databases were accessed via https://maps.biodiversityireland.ie/Dataset

With the commencement of peat extraction, the foraging value of the Application Site to otters would have deteriorated. Drainage of the Application Site and associated peat extraction, coupled with the anthropogenic activities would have dissuaded otters from venturing onto to the Application Site. Furthermore, peat extraction stains water and elevates ammonium (a natural by-product of decay processes). Ammonium as a water pollutant, is toxic to some fish species at low concentrations (EPA, 2024), would have negatively affected fish populations in the Application Site. With the pumping of water from the bogs to facilitate draining, this would also have caused declines in fish populations in the local downstream catchments, especially prior to water management measures being installed at the Application Site (silt ponds and additional measures implemented as part of the IPC Licence). This is supported by the current paucity of fish (diversity and richness) within the Application Site (Section 5.3.4.1).

Therefore, pre-1994, it is concluded that the Application Site would have had limited value for foraging otters. It can therefore be concluded that the otters that may have inadvertently wondered onto the Application Site would have represented a minority of the surrounding otter population and any disturbance caused to these individuals would have resulted in them moving off the Application Site and retreating to downstream rivers, most likely to the River Suir as the receiving water body for the Application Site.

5.2 Field Survey

Historical data was obtained from Bord na Móna, including the ecological surveys completed to inform the Cutaway Bog Decommissioning and Rehabilitation Plans for the bogs (Appendix 7, Appendix 8 and Appendix 9) that make up Application Site.

Ecological surveys have also been completed by or, where completed by external ecologists, managed by Fehily Timoney ecologists (Chapter 6 Biodiversity in Volume 2 of the rEIAR) to inform a planning application for future land uses. The ecological surveys undertaken are listed in Table 5-5 and the survey methodologies are further provided in this section.

The results (Section 5.3) gives a general overview of the baseline status over the various Project phases where the information is available, but the focus is on the potential for QIs to occur on or utilise the Application Site and surrounds.

Table 5-5: Surveys undertaken within and around the Application Site to inform the current baseline status

Survey	Date	Specialist completing the survey
Habitat Surveys	• 17-19 August 2021 • 14, 22-23 September 2021 • 29-31 August 2022 • 3-4 August 2023 • 25 September 2023 • 21, 24, 29-30 July 2025 (future land development area only) • 21 August 2025 (future land development area only) • 22, 24-25, 30 September 2025 (future land development area only) • 9-10 October 2025 (future land development area only)	Completed by FT ecologists
Mammal Surveys	• Any mammal signs / mammals noted during habitats surveys above were also captured during these surveys. • 22 September 2025 (future land development area only) • 09-10, 14, 23 October 2025 (future land development area only)	Completed by FT ecologists
Aquatic Survey	• September -October 2021 • 5-7 and 21 September 2023 • 12-13 October 2023 • 2-4, 19 September 2025 (future land development area only)	Completed by Triturus (Appendices 4 to 6)
Bord na Móna ecology surveys	Longfordpass Bog: • 28 April 2010 • 10 September 2012 • 11 December 2017 Littleton Bog • 23-24 August 2012 Derryvella Bog • 28 August 2012 • January 2025	Completed by Bord na Móna specialists and / or consultants (Appendices 7 to 9)

*Bird surveys were completed during the summer and winter seasons as indicated, however birds are not further assessed in this rNIS as all SPAs and their SCIs, including use of wetlands on the Application Site by SCIs, will not be adversely affected by the Project

5.2.1 Habitat Surveys

Detailed botanical surveys, including habitat classification and detailed relevé surveys were completed within Application Site and surrounds in support of future land use applications as indicated in Table 5-5. The methodology used during this survey was based on the Heritage Council's '*Best Practice Guidance for Habitat Survey and Mapping*' (Smith *et al.*, 2011) and CIEEM '*Good Practice Guidance for Habitats and Species*' Version 3 May 2021[29]. The classification of habitats recorded during the field survey is based on *'A Guide to Habitats in Ireland*' (Fossitt, 2000). '*A Guide to Habitats in Ireland*' classifies habitats according to a hierarchical framework with Level 1 habitats representing broad habitat groups, Level 2 representing habitat subgroups and Level 3 representing individual habitat types. The Field Survey focused on identifying habitats to Level 3 of the Guide to Habitats in Ireland. Any other records of interest (e.g., invasive plant species) were also marked on ArcGIS Field Maps. For consistency and to allow comparison between BnM habitat classification and Fossitt (2000) classification, a conversion table has been provided in Table 5-6 below, to be read in conjunction with the 2025 habitat maps (Figures 5-5a, 5-5b and 5-5c below).

Percentage cover was used to record species abundance within relevés. All species were readily identifiable during the survey. Plant nomenclature for vascular plants follows '*New Flora of the British Isles*' (Stace, 2019), while mosses and liverworts nomenclature follow '*Mosses and Liverworts of Britain and Ireland - a field guide*' (British Bryological Society, 2010).

The Interpretation Manual of European Union Habitats [EUR28] and Article 17 reports were used to evaluate whether links with Annex I habitats exist. Survey, classification and assessment of peatland habitats was informed by Smith and Crowley (2020) and Fernandez *et al*. (2012 & 2014).

A search for non-native invasive plant species was undertaken, focussing primarily on the identification of invasive species listed under the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (as Amended) (S.I. No. 477/2011).

Table 5-6: Conversion chart from BnM general habitat classification to Fossitt (2000) habitat classification

BnM General Habitat	Fossitt Code
Bare peat	PB4
Bog	PB1
Built	BL3
Conifer plantation	WD4
Cutover Bog	PB4
Fen	PF1 or PF2
Grassland or Agriculture	GA / GS
Gravel sub soil	ED1 or ED2
Heather	HH3
Heather and Scrub	HH3 and WS1
Open Water	FL8, FL1 or FL2

[29] Accessed at https://cieem.net/wp-content/uploads/2021/05/Good-Practice-Guide-April-2021-v6.pdf

BnM General Habitat	Fossitt Code
Pioneer open cutaway habitats	PB4
Riparian	FW2 or FW4 and associated riparian vegetation such as WS1, WL1, WL2 or GS
Scrub	WS1 or WS2 or WS3
Scrub and grassland	WS1 or WS2 and GS1 or GS2
Scrub and pioneer open habitats	WS1 and PB4
Temporary flooded areas	PB4
Wetlands	FS1 or GS4. FL8 if vegetation dominates
Wetland and scrub	WS1 and FS1 or GS4
Woodland	WN7 or WD1 or WN2 or WD2 or WD3

5.2.2 Aquatic Surveys

Aquatic surveys were completed by Triturus in 2021, 2023 and 2025 and their respective 2023, 2024 and 2025 aquatic reports are included as Appendix 4, Appendix 5 and Appendix 6 respectively. Their methodology, findings and recommendations are summarised in this rNIS as relevant to QIs of the Lower River Suir SAC. For full details of methodology, the appendices should be consulted.

All freshwater watercourses which could be affected directly or indirectly by the proposed future development were considered and included survey sites within and in the vicinity of the Application Site. Riverine sites selected for detailed aquatic assessment in the 2023/2025 surveys were associated with the Clover River (EPA code: 16C04), Drish River (EPA code: 16D02), Black (Twomileborris) River (EPA code: 16B01), North Glengoole River (EPA code: 16N28), Breagagh River (EPA code: 16B03) and unnamed tributaries of these rivers. A total of 17 lakes/wetlands within the Application Site were also surveyed in 2023, with four additional lacustrine sites surveyed in 2025.

Survey effort focused on instream and riparian habitats and included a fisheries assessment (electro-fishing and or fisheries habitat appraisal), white-clawed crayfish survey, otter survey (within 150m of the survey site), macrophyte and aquatic bryophyte survey and biological water quality (Q-sampling at riverine sites) or invertebrate sweep sampling (lacustrine sites) for an overall aquatic ecological evaluation and to improve detection of habitats and species of high conservation value.

5.2.2.1 Fisheries Assessment

A single anode Smith-Root LR24 backpack (12V DC input; 300V, 100W DC output) was used to electro-fish sites on riverine sites, following notification to IFI, under the conditions of a Department of the Environment, Climate and Communications (DECC) licence (No. S14.2023.62). The survey was undertaken in accordance with the Licensing requirements, Central Fisheries Board (CFB, 2008) guidelines and Irish Standard EN 14011:2003 (CEN, 2003) requirements.

A fisheries habitat appraisal of all aquatic survey sites (riverine and lake/wetland) was undertaken to establish their importance for salmonid, lamprey, European eel and other fish species. The baseline assessment also considered the quality of spawning, nursery and holding habitat for salmonids and lamprey within the vicinity of the survey sites.

5.2.2.2 *White-clawed crayfish survey*

White-clawed crayfish (*Austropotamobius pallipes*) surveys were undertaken at the aquatic survey sites under NPWS open national licence (No. C24/2023) and followed IFI aquatic biosecurity recommendations, surveying from upstream to downstream locations. Hand-searching of instream refugia and sweep netting was undertaken according to Reynolds *et al.* (2010). A habitat appraisal was conducted at each sample location considering physical habitat attributes, water chemistry and incidental records within mustelid spraint.

5.2.2.3 *Biological Water Quality (Q-Sampling)*

The riverine sites were assessed for biological water quality through Q-sampling with standard kick sampling hand net (250mm width, 500µm mesh size) from areas of riffle/glide as per EPA methodology (Feeley *et al.,* 2020): 2-minute kick sample and 1-minute cobble wash. Samples were secured for laboratory assessment and findings converted to Q-ratings (Toner *et al.*, 2005) and assigned to WFD status. Any rare invertebrate species were identified from the NPWS Red List publications[30].

5.2.3 Otter Surveys

The mammal surveys (which included otter surveys) (Table 5-5) covered the entire Application Site and surrounding suitable habitats within 150m to determine the presence or absence protected mammal species and habitat suitability to support protected mammal species (NRA, 2009a and JNCC, 2004). Sightings, tracks or signs of mammals were recorded using ArcGIS Field Maps.

Survey for otter were conducted in accordance with *'Conserving Natura 2000 Rivers Monitoring Series No. 10', 'Monitoring the Otter* Lutra lutra' (Chanin, 2003) and the *'National Otter Survey of Ireland 2010/12*' (Reid, *et al.*, 2013). The focus was on infrastructure areas and crossing points of drains and watercourses by the proposed future land uses and 200m either side along any drain or watercourse, to adequately capture the disturbance ZoI of 150m for otters.

Additionally, observations of otter activity were also recorded as part of the aquatic ecology surveys (Table 5-5). Signs of otter within 150m of each aquatic survey site (Section 5.2.2) was recorded and included notes on the age and location (ITM coordinates) of the signs, and quantity and visible constituents of spraint (i.e. remains of fish, crustaceans, molluscs etc.).

5.3 Results and Baseline Status

5.3.1 Expected Baseline Status in 1941 (Pre-Extraction)

Prior to the commencement of drainage, which was first installed at the Application Site in 1941, the Application Site was covered by an active raised bog, with the surface being wet, acidic and deficient in plant nutrients, with open *Sphagnum*-dominated vegetation. Pre-development topographies would have been higher. The area would be fed by rainfall, with water loss predominantly through surface water runoff and, to a much lesser degree, through infiltration where clay layers may have been absent (Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR). The pre-development water table at the Application Site was likely very stable with only minor fluctuations and remaining within a few centimetres of the bog's surface.

[30] Various publication can be found at https://www.npws.ie/publications/red-lists

5.3.2 Expected Baseline Status post-1941

The primary land-use change associated with peat extraction and ancillary activities occurred during the initial drainage of the bog in advance of peat extraction. After the Application Site was drained, vegetation was removed from the bog surface, leaving only bare peat fields between the drains. Around this time and in the years that followed, ancillary features were also constructed including railway lines, workshops, welfare facilities and peat loading facilities.

Prior to 1988, all four bogs within the Application Site (i.e. Longfordpass Bog, Littleton Bog, Lanespark Bog, and Derryvella Bog) were fully drained and all four bogs were subject to peat extraction.

During the Peat Extraction Phase of the Project, only minimal land-use change occurred which predominantly related to minor annual topographic changes caused by ongoing peat extraction and ancillary activities.

5.3.3 Extrapolated 1994 Baseline

From the project description (Appendix 2) and the change between the 1988 and 1995 aerial imagery (Appendix 3), a baseline status in 1994 has been extrapolated.

Milled peat extraction and ancillary activities were ongoing in 1994 with supporting infrastructure in place. Water management features were in place, as were other environmental control measures such as bunding for fuel storage and mobile refuelling activities.

In 1995 there was already a significant decrease in areas subject to peat extraction across the Application Site, largely due to the very significant reduction in area subject to peat extraction at Littleton Bog from 795ha in 1988 to 134ha in 1995. An extent of 760ha was drained but not subject to peat extraction at that time (i.e. 1995).

All water management features were in existence at the Application Site in 1988. As a worst-case scenario, the 1994 baseline is assumed unchanged from the 1988 for all the bogs. Additionally, for Littleton Bog a silt pond was added post 1994. Status at the Bogs in 1994 is as follows:

- Longfordpass Bog had 1 no. pump and 3 no. silt ponds.
- Littleton Bog had 12 no. pumps (1 no. silt pond added post 1994).
- Lanespark Bog had no pumps and 4 no. silt ponds.
- Derryvella Bog had no pumps and 1 no. silt pond.

5.3.4 Baseline Status post peat extraction

The descriptions below have been extracted from the ecology reports completed by Bord na Móna, informed by surveys completed prior to 2017, in preparation for the drafting of the Cutaway Bog Decommissioning and Rehabilitation Plans for each of the bogs (Appendix 7 to Appendix 9). Although surveys were completed before the termination of peat extraction, they are considered to represent the status post-peat-extraction in 2017.

The 2025 habitat description was obtained for habitat surveys completed for proposed future development (a subset of the Application Site) and extrapolated based on recent (2024) satellite imagery coupled with the existing Bord na Móna vegetation maps and surveys developed for the Cutaway Bog Decommissioning and Rehabilitation Plans (Appendix 7, Appendix 8 and Appendix 9).

The primary habitat type within the Application Site in 2017 is bare peat (BP). Other habitats present in smaller discrete pockets across the Application Site include raised bog and a representation of grassland, scrub and artificial habitats, fens, open water and aquatic habitats, linear treelines and hedgerows, with limited woodlands.

The surveyed areas of the Application Site (Section 5.4) in 2025 support cutover bog, often in mosaics with areas of scrub of grey willow/downy birch or gorse, immature woodland and wet grassland, indicating some succession of the habitat on site. Raised bog is present along the edges and calcareous and neutral grassland along the railway lines. Conifer plantation forms the largest woodland habitat unit, but various woodlands occur within small areas. Waterbodies include a network of drainage ditches and dystrophic lakes, due to flooding of drainage ditches, along some edges supporting reed and large sedge swamps. The hedgerows and treelines are mainly associated with the agricultural lands and waterbody riparian areas. Artificial habitats still persist in areas of infrastructure or areas recently decommissioned.

5.3.4.1 Longfordpass Bog

In 2017, the majority of Longfordpass was covered by bare peat, with pockets of areas where industrial peat extraction ceased in the past developing as pioneer habitats (Figure 5-2**Error! Reference source not found.**). Areas of open water were present in northern, central, southern and eastern sections of the bog. The western area lies on higher topography with gravity drainage and associated silt pond and is drier than the rest of the bog. An area of cutaway bog to the south of the railway is divided into two by the M8 motorway; the northern side was re-colonising naturally with a mosaic of habitats and the south was being reclaimed as farmland by a local farmer.

The western half of the bog flowed towards the southwest corner to a silt-pond, which drained west into the Drish River. The eastern section drained north, and water was pumped to a silt-pond north of the road, which drained into the upstream Drish River. A small stream/drain (tributary of the Drish River) that flowed along the southern boundary has been culverted and has a typical riparian zone. A drain was developed along the embankment of the new motorway and a silt pond located adjacent to the bog and the motorway at the eastern side.

The 2025 habitat surveys only included the small western area south of the railway line (Figure 5-5 a, b and c). The habitat in this area has not altered significantly in terms of the 2017 findings in this area.

The bog supported areas of open water that has the potential to develop into wet peatland habitat and provided a wildlife refuge for birds and wild fauna.

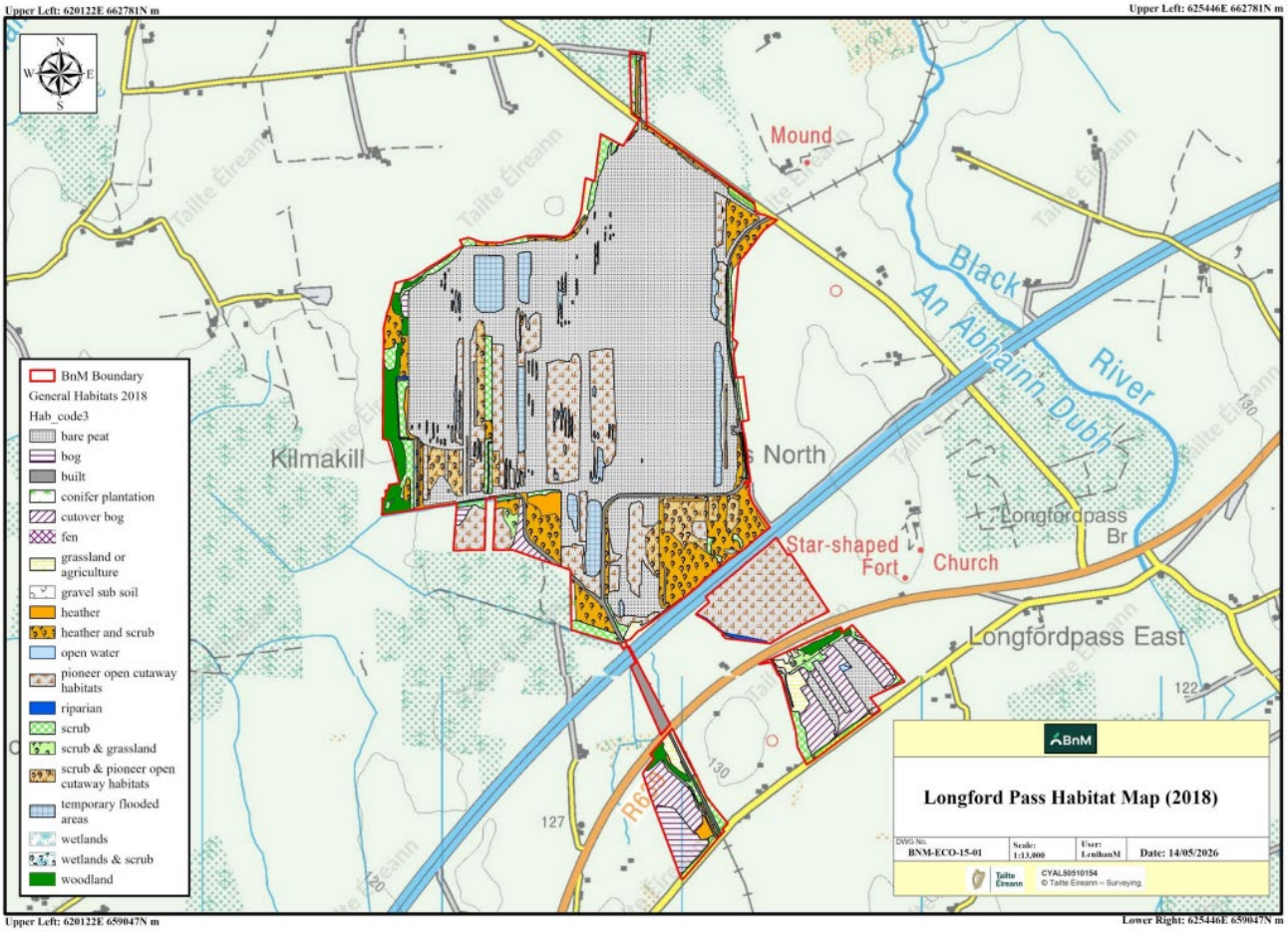


Figure 5-2: Habitat types recorded at Longfordpass Bog (2017 status)

5.3.4.2 Littleton Bog

In 2017, the majority of Littleton Bog was covered by bare peat areas with pockets of areas where industrial peat production ceased in the past developing as pioneer habitats (Figure 5-3). The bog has developed in a basin and its western margin is at a higher level (10 m compared to the central section). There were localised wetlands in the central part of the bog, with open water and wet peatland vegetation and mounds / ridges that created drier habitat patches. Some of the wetter areas had excellent Sphagnum re-generation. Pine was colonising the north-east section.

There are several channelized streams/drains that drained the bog west towards the Clover River, which drains towards the Drish River. Some of the southern section drained south towards the Black (Twomileborris) River, which also drains towards the Drish River. The northern area is the only section treated by a silt-pond. The remainder of the bog had a pumped drainage system (four pumps active at its peak), and water levels rose when pumping was reduced. Pumping was still ongoing in 2017 to protect the last milled peat stockpiles (removed in 2019) and the industrial railway.

The 2025 habitat status shows similar features, but indicates that habitat features at this bog are in succession / maturation, supported by the identification of additional habitat types such as the immature woodland, wet heath, and mixed woodland types (broadleaved and conifer woodland) (Figure 5-5 a, b and c).

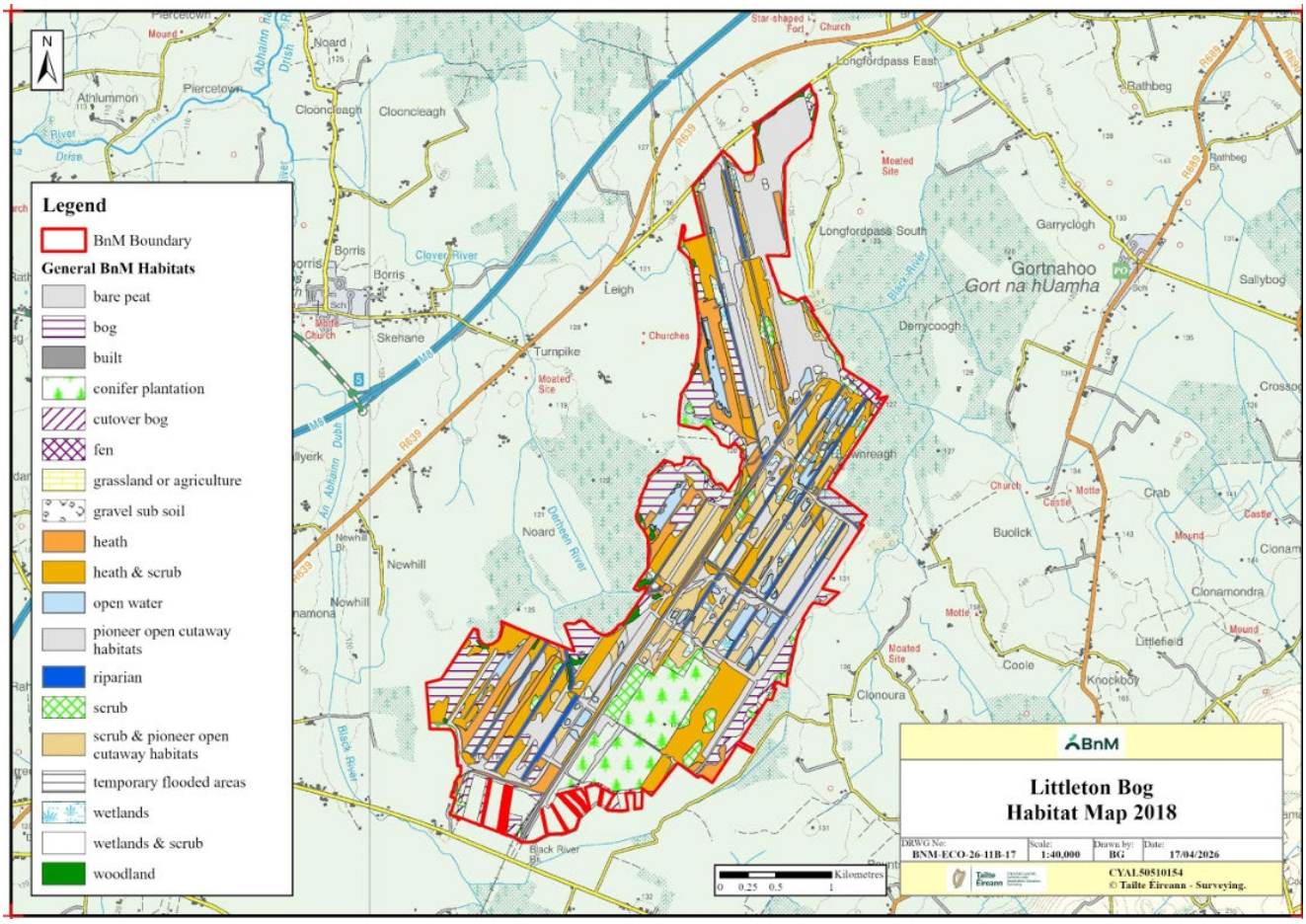


Figure 5-3: Habitat types recorded at Littleton Bog (2017 status)

The bog supported areas of open water that provided wetland bird breeding habitat and wildlife refuge, including wintering birds (used by wintering hen harrier). Marsh fritillary, an Annex II butterfly, has been recorded at the bog. Plant species of conservation value include blue fleabane and marsh hellebore.

5.3.4.3 Lanespark Bog and Derryvella Bog

There was no ecological summary provided for the 2017/2018 baseline status for Lanespark Bog in the Ballybeg/Lanespark/Derryvella Bog Cutaway Bog Decommissioning and Rehabilitation Plan (Appendix 9) and no ecological surveys were completed at Derryvella Bog in 2025 for potential future land uses (although a 2025 survey was completed by Bord na Móna ecologists). As active, neighbouring peat extraction areas up to 2017, with similar operational timeframes, the conditions at the two bogs are comparable and have been extrapolated based on the consolidated verbal and mapped information.

The majority of both bogs was developed for peat production and the narrow marginal zones on old high bog are dominated by scrub. Adjacent improved grassland extends up to the bog's margin along the west of Derryvella Bog and recent conifer forestry planted along its eastern margin. The bogs show elevated areas of mounds and small basins creating drier and wetter substrates. Some light vegetation has established over the drier mounds around the bogs (Figure 5-4).

The North Glengoole River flows along the eastern boundary of the Derryvella Bog, flowing through Lanespark Bog, before discharging into the Black (Twomileborris) River, a tributary of the Drish River. The Derryvella Bog was gravity-drained to the south, towards the outfall into a drain that flowed east along the northern margin of Lough Doire Bhile amenity area and biodiversity area. The catchment was treated by a silt-pond, west of Lough Doire Bhile, where it then drained into the Black River.

Lanespark Bog was a gravity-drained bog, with four silt ponds. The North Glengoole River flows through Lanespark Bog, before discharging into the Black (Twomileborris) River, a tributary of the Drish River. The Breagagh River flows along the southern boundary of Lanespark before confluence with the Drish River.

The 2025 habitat status shows similar features, but indicates that habitat features on this bog are in succession / maturation, supported by the identification of additional habitat types such as the immature woodland, wet heath, and mixed woodland types (broadleaved and conifer woodland) (Figure 5-5a, b and c).

The bogs supported areas of open water that provided wetland birds with breeding habitat and wildlife refuge.

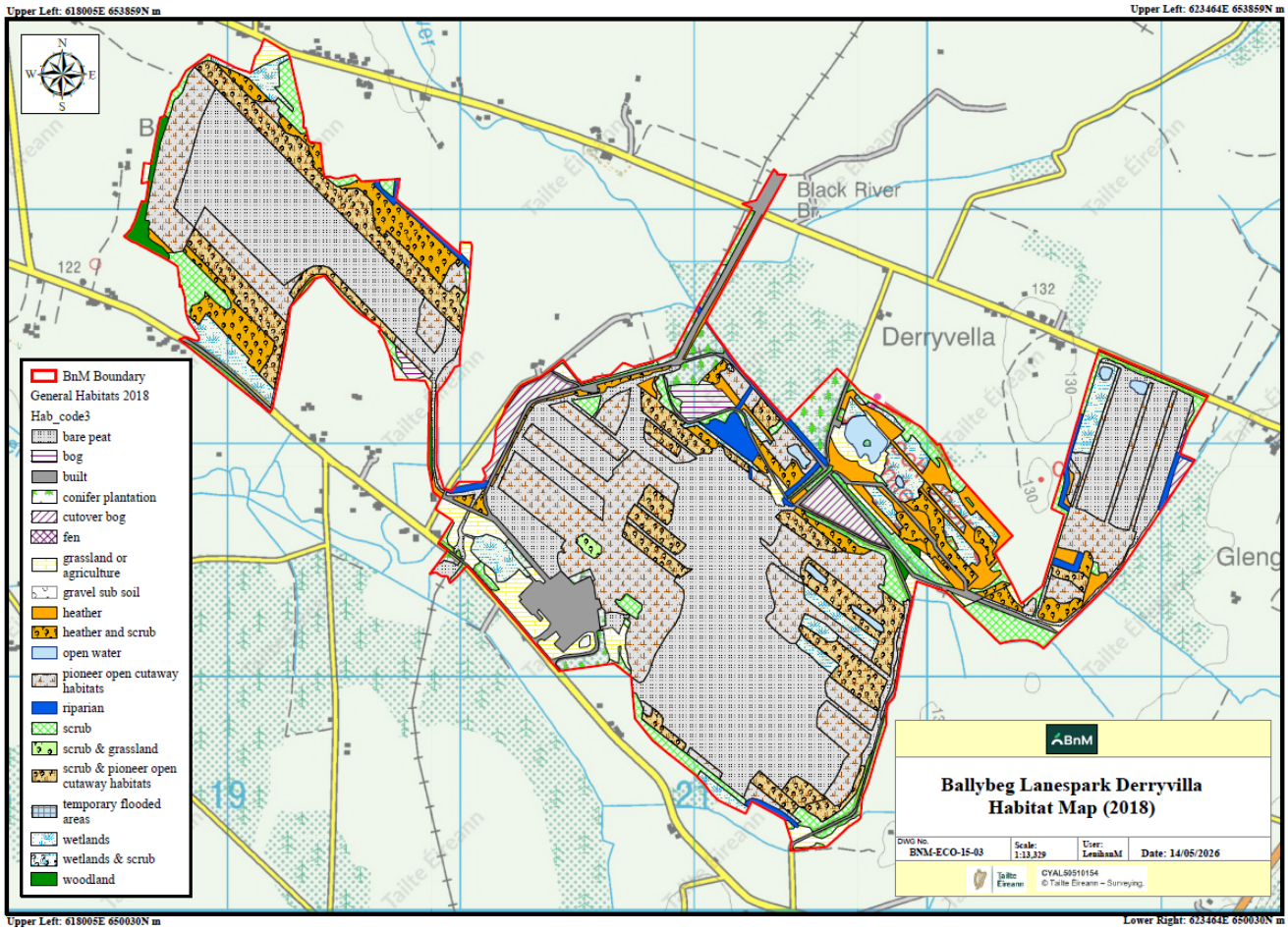


Figure 5-4: Habitat types recorded at Lanespark Bog and Derryvella Bog

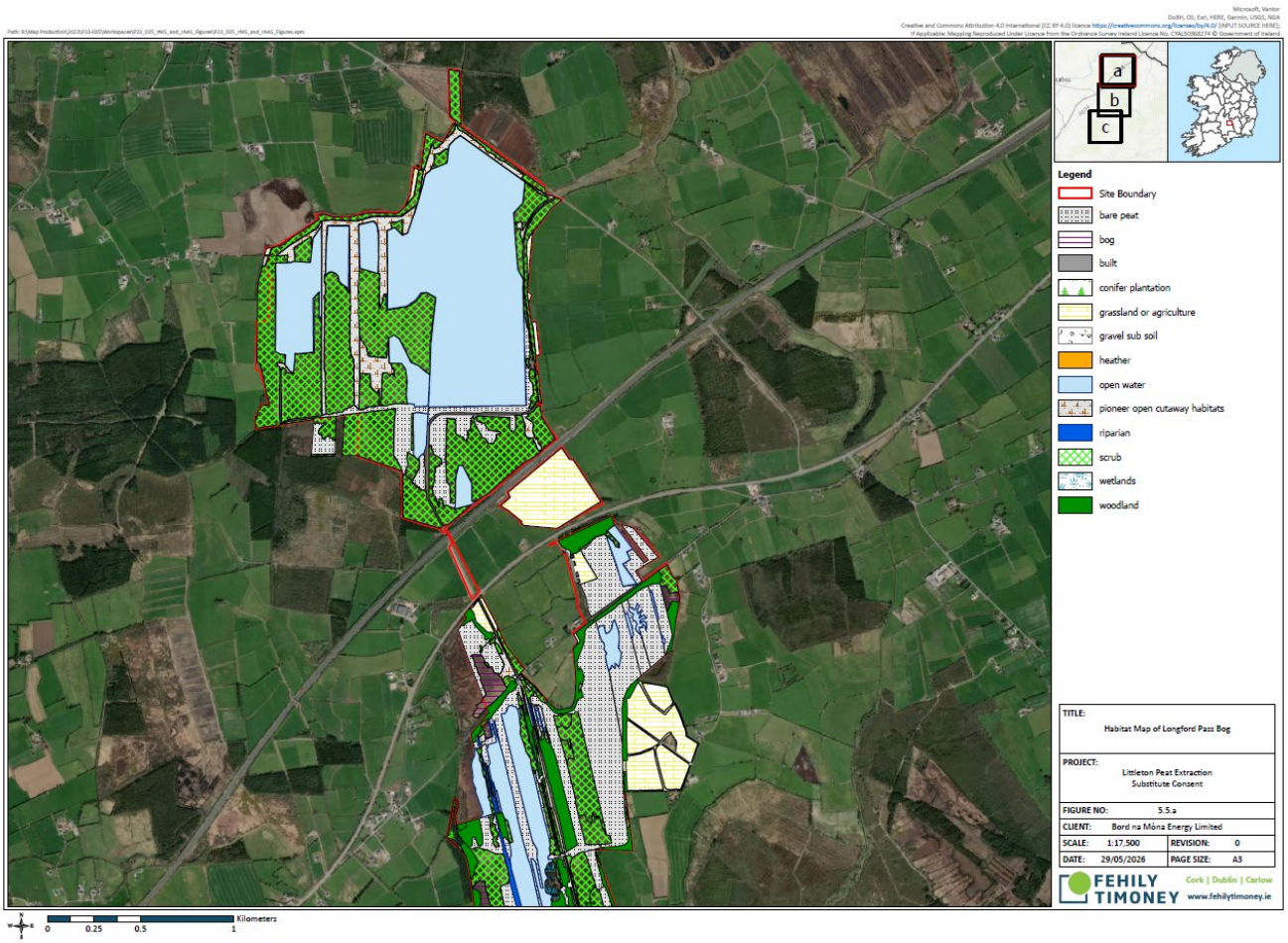


Figure 5-5a: Habitats recorded within the future development areas of the Application Site (2025 status)

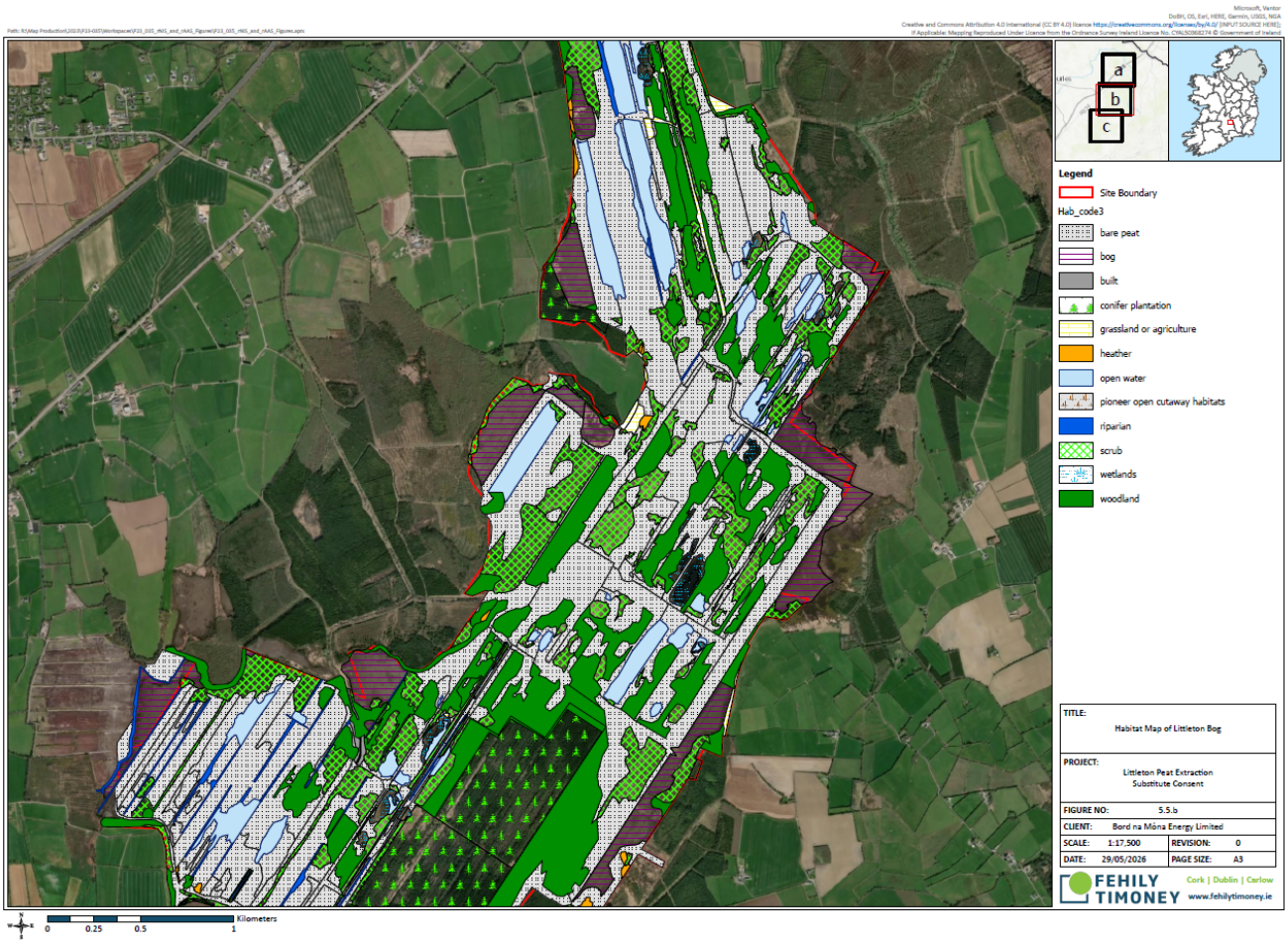


Figure 5-5b: Habitats recorded within the future development areas of the Application Site (2025 status)

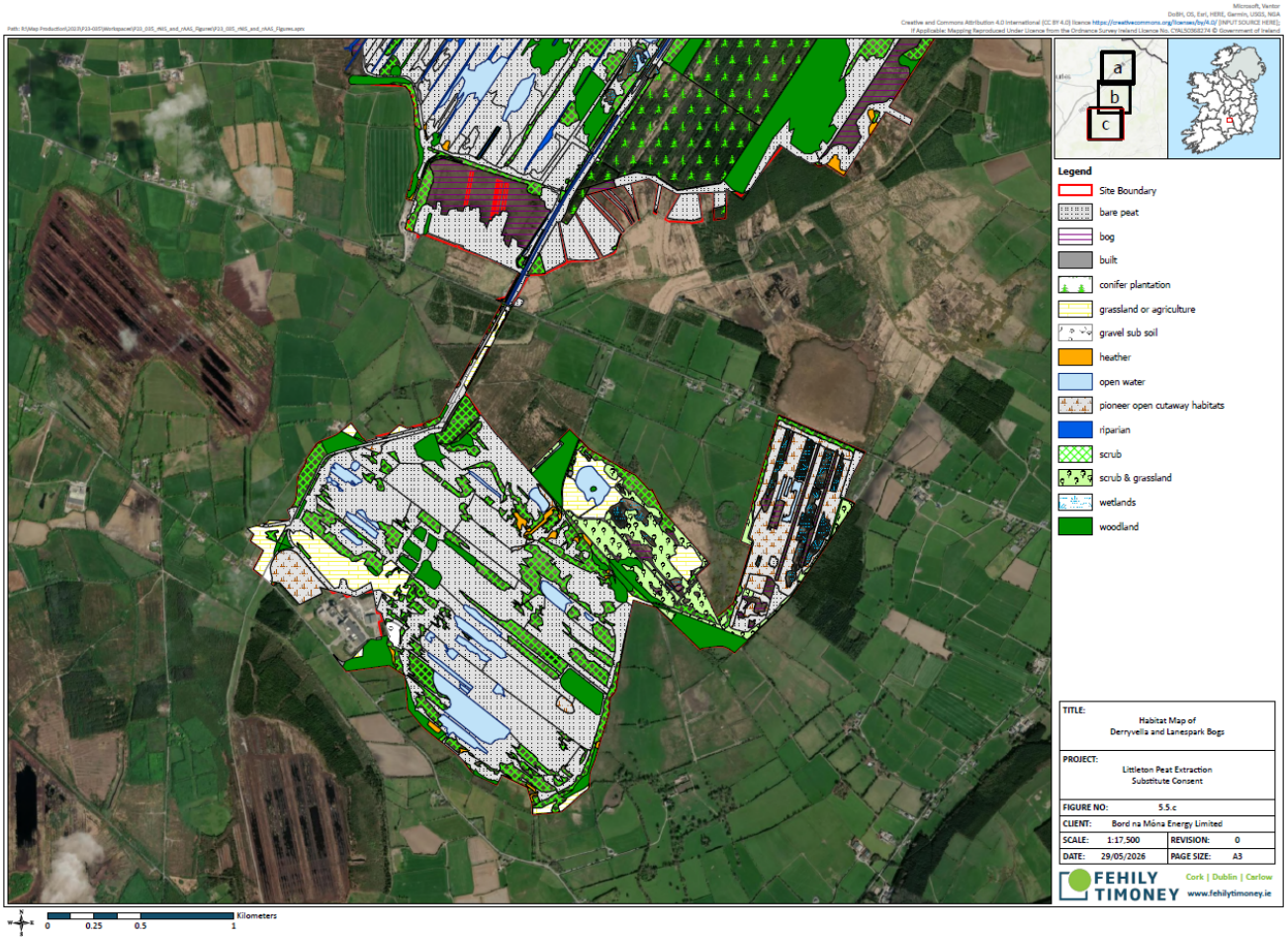


Figure 5-5c: Habitats recorded within the future development areas of the Application Site (2025 status)

5.3.4.4 Rare and Protected Flora

Within the NBDC 10km^2 grid (S25), four notable species have been recorded, namely, cow-horn bogmoss, feathery bogmoss, papillose bogmoss and soft bogmoss, in 2005. While these four bogmosses are categorised as least concern (LC), they are listed on Annex V of the Habitats Directive (restrictions on exploitation of these species in the wild). No FPO vascular plants, bryophytes or lichens have been recorded within the 10km^2 grid over the last two decades.

Feathery bogmoss and papillose bogmoss were found in multiple locations forming hummocks or lawns within the Application Site, especially, associated with Raised bogs and Cutover bogs. In addition, cow-horn bogmoss and soft bogmoss were recorded occasionally within Raised bogs.

In addition, a single stand of least bur-reed (*Sparganium natans*), which is categorised as NT (Near Threatened) in Ireland, was found in the lake on Littleton Bog, just west of the conifer plantation, which may align with historical records within 2km^2 grid S26J, as per BSBI Plant Atlas 2020.

5.3.4.5 Invasive Non-native Flora

One species listed in the Third Schedule, Japanese knotweed (*Reynoutria japonica*), has been recorded within 10km^2 grid S25.

A stand of Japanese knotweed was confirmed near the existing northern entrance along the R639.

5.3.5 Aquatic Survey Findings

The findings from the Triturus assessments discussed for the riverine sites and lake/wetland sites relevant to the Application Site, focussing on the QI species and / or habitats identified as potentially suitable for QI species. The information is summarised in Table 5-7 and the Appendix 4, Appendix 5 and Appendix 6 contain the 2023, 2024 and 2025 aquatic reports respectively.

The riverine watercourses are typically lowland channels that had been straightened and / or deepened as part of drainage and land reclamation works, resulting in poor hydromorphology coupled with reduced habitat heterogeneity. Some instream recovery has occurred (e.g. Drish River, Black (Twomileborris) River, Breagagh River), hydromorphological issues and siltation remain evident in most survey sites. Low summer flows, characteristic of this part of Ireland, impacted the aquatic ecology during the 2025 surveys, with five (5) sites dry at the time of survey (as opposed to only one survey site in the 2023 surveys).

Nevertheless, the majority of the riverine sites are considered of value regarding their potential to support higher conservation value species and habitats and their value as ecological corridors. Annex I Hydrophilous tall-herb swamp [6430] was present along the Drish River [Site B2 (2024) & B3 (2025)] and Annex I Vegetation of flowing waters [3260] was present along the Black (Twomileborris) River [Site C5 (2024) & C6 (2025)] and Breagagh River [Site D3 (2024&2025)], both QIs of the Lower River Suir SAC.

The lakes/wetlands located within the Application Site originate from historical cutover bog activities, and are generally shallow, highly turbid (peat stained), poorly vegetated and lower productivity lakes/wetlands, with relatively poor structure/functionality to support higher conservation value species or habitats. Nevertheless, the lake sites supported a range of macroinvertebrates and have suitability for amphibians (provision of prey species / forage areas). None of these lake/wetland sites corresponded to Annex I lake habitats.

5.3.5.1 Fisheries Assessment Findings

The diversity of fish species recorded (Atlantic salmon, brown trout, lamprey (*Lampetra* sp.), European eel, stone loach, minnow, pike, perch and three-spined stickleback) is considered typical for Irish midland rivers.

Salmonid populations were widespread: Atlantic salmon was recorded from 12) survey sites, including in the Clover River, Drish River, Black (Twomileborris) River and Breagagh River over the three survey years. The quality of salmonid habitat was typically poor due hydromorphological pressures, with conditions improving in downstream locations of Drish River and Breagagh River (high densities of juvenile salmonids recorded at Sites B4, D3 - excellent quality salmonid nurseries).

Lamprey ammocoetes (*Lampetra* sp.) were recorded from six (6) survey sites over the three survey years, including in the Clover River, Drish River, Black River and Breagagh (low to medium densities only). An early stage *Lampetra* sp. transformer was recorded in downstream Clover (Site A7). The restricted distribution of lamprey over the riverine survey sites can be explained through the paucity of suitable nursery and / or spawning habitat, largely due to exiting hydromorphic and associated drainage effects on the rivers.

None of the lakes/wetlands within the Application Site were considered of significant fisheries value (stickleback only), generally due to their shallow nature, peat substrata, lower pH and poor connectivity and isolation from aquatic habitats supporting fish populations. Of the 17 no. lake sites assessed in 2021 and 2024, two had confirmed three-spined stickleback, one had a confirmed fish parasite and may indicate presence of fish (although none were recorded) and two were considered to have low suitability for European eel. Only one additional lake site of four additionally assessed in 2025 had confirmed three-spined stickleback. The lake sites have low fisheries potential, although three-spined stickleback is becoming increasingly representative at these on-site lakes.

5.3.5.2 White-Clawed Crayfish Assessment Findings

The remains of two white-clawed crayfish were identified during the 2021 surveys in the Clover River, although no live samples were found. Crayfish remains were also identified within otter spraints located along the Black River in 2021. Crayfish plague (*Aphanomyces astaci*) outbreaks have occurred and have likely impacted crayfish populations within the River Suir and its tributaries.

No crayfish were recorded in the surveys undertaken at the riverine or lacustrine sites by Triturus (Appendix 4, Appendix 5 and Appendix 6). Furthermore, inspection of otter spraints observed at some of the survey sites did not reveal the presence of crayfish remains.

Of the 17 no. lake sites assessed in 2021 and 2024 only one showed suitability for white-clawed crayfish. Sporadic survey sites within the local streams did provide suitable habitat regardless of the lack of records.

5.3.6 Otters

During the Bord na Móna surveys in preparation for the 2018 Cutaway Bog Decommissioning and Rehabilitation Plans, no otter or signs of otter were recorded at Longfordpass Bog and Littleton Bog. No details are provided on the listing of otter in the rehabilitation plan for Derryvella Bog and Lanespark Bog (Appendix 9) . The 2025 surveys also did not record any otter or signs of otter in the Application Site, supported by the lack of any evidence of otters during the aquatic surveys of the lake/wetland sites (Table 5-7), which provided poor habitat and prey resources.

During the 2023 / 2025 aquatic surveys (Triturus, 2024 / 2025), a total of six (6) / two (2) otter signs (spraints and prints) were recorded across the riverine survey sites. No breeding (holts) or resting (couch) areas were identified in the vicinity of the aquatic survey sites during. The limited activity aligns with historical data, with the instream modifications (straightening, deepening) effecting riverine habitat, eliminating marking features for otters (boulders), and the limited prey (fish and crustaceans) considered contributing factors. The decreased occurrence of signs in 2025 is likely associated with decreased prey due to lower flows attributed to lower rainfall in 2025.

5.4 Limitations

General limitations regarding the nature of field surveys must be considered. Poor weather conditions which may interfere with accessibility around the Application Site or visibility were avoided as far as possible and are not considered a limitation in terms of the terrestrial ecological surveys. In terms of the aquatic surveys, during the 2025 survey, some survey sites had lower water levels / were dry and riffle habitats were poor/lost due to low flows from low summer rainfall.

Where required, surveys, studies, analysis, and reporting have been conducted in accordance with the appropriate guidelines. The habitats and species surveyed were readily identifiable during field assessments, allowing for comprehensive assessments, and no significant limitations were identified in this regard.

Information gathered represents the baseline of the Application Site after extraction had ceased, providing information on areas where peat extraction had recently ceased, areas with various levels of recolonisation and remnant raised bogs, which together with aerial imagery across the various time frames inform the status of the habitat before peat extraction and in 1994.

The retrospective assessment has been carried out based on the information presented in the rNIS which is considered reasonable, but there are limitations in terms of determining a fixed baseline status in 1994 due to the lack of specific information for that specific period in some of the data presented.

Table 5-7: Summary of the aquatic assessment findings

SITE and Description	Q-value	Fish recorded	Salmonid value	Lamprey value	Whit-clawed crayfish value	Otter records
Riverine - Clover River system						
SITE A1 (2021) (Not surveyed in 2024 & 2025) Upper reaches of an unnamed stream	Too dry for Q-value in 2021	None	None	None	None	None
SITE: A2 (2021) & A1 (2024) (Not surveyed in 2025) Unnamed tributary of the Drish River situated in an extensive area of cutover bog. Straightened and deepened homogenous channel, ephemeral with low flow.	No Q-value sampling in 2021 Q-value=3 (poor) in 2024; riffles absent	Three-spined stickleback (*Gasterosteus aculeatus*)	Unsuitable to Poor	Unsuitable to Poor	Unsuitable	None
SITE: A2 (2024) (Not surveyed in 2021 & 2025) Unnamed tributary of the Drish River downstream of A1. Straightened, deepened and culverted homogenous channel, ephemeral.	Q-value=3 (poor) in 2024; riffles absent	None	None	None	Unsuitable	None
SITE: A3 (2021), A3 (2024) & A4 (2025) Unnamed tributary of the Clover River straightened and deepened along field boundaries with ponding and no flow.	Too dry for Q-value in 2021 & 2025 Q-value=3 (poor) in 2024; riffles absent	None	None	None	Unsuitable	None
SITE A4 (2021) (Not surveyed in 2024 & 2025) Uppermost reaches of an unnamed stream in an extensive area of cutover bog; extensively straightened and deepened.	Q-value=3 (poor) in 2021; poor riffles	Three-spined stickleback and European eel (*Anguilla anguilla*)	None	None	Unsuitable	None
SITE A5 (2021) (Not surveyed in 2024 & 2025) uppermost reaches of the Clover River around 150m downstream of a wetland area in cutover bog; historically straightened and extensively deepened.	Q-value=3 (poor) in 2021; poor riffles	Three-spined stickleback	None	None	Poor	None
SITE: A4 (2024) & A1 (2025) (Not surveyed in 2021) Upper reaches of Clover River, straightened and deepened with low flows.	Q-value=3 (poor) in 2024; riffles absent Q-value=3 (poor) in 2025; riffles absent	Brown trout (*Salmo trutta*), stone loach (*Barbatula barbatula*), three-spined stickleback and Perch (*Perca fluviatilis*)	Poor holding / nursery No spawning	Unsuitable	Poor	Regular spraint No signs in 2025
SITE: A5 (2024) & A2 (2025) Unnamed tributary of the Clover River straightened and deepened with slow flow.	Too dry for Q-value in 2025 Q-value=3 (poor) in 2024; riffles absent	None	None	None	Poor	None
SITE: A6 (2021), A6 (2024) & A3 (2025) The Clover River, downstream of A5/A2 at R639 crossing; channel straightened, with peat-stained slow-flowing, deep homogenous glide with riffle and shallower glide upstream.	Q-value=3-4 (moderate) in 2021 Q-value=3 (poor) in 2024 Q-value=3 (poor) in 2025	Brown trout, stone loach and three-spined stickleback	Good holding Limited, localised spawning	Moderate spawning upstream Sub-optimal to none for nursery	Moderate (remains recorded in 2021)	Spraint No signs in 2025
SITE: A7 (2024) & A5 (2025) (Not surveyed in 2021) Lower reaches of Clover River, downstream of A6/A3 at local road crossing; channel straightened, peat-stained slow-flowing glide with localised riffle and pool.	Q-value=3-4 (moderate) in 2024 Q-value=3 (poor) in 2025	Atlantic salmon, brown trout, stone loach, lamprey (*Lampetra* sp.) and pike (Esox lucius)	Moderate holding Limited spawning / nursery	Sub-optimal spawning / nursery	Good	Prints No signs in 2025

SITE and Description	Q-value	Fish recorded	Salmonid value	Lamprey value	Whit-clawed crayfish value	Otter records
Riverine - Drish River system						
SITE B1 (2021, 2024 & 2025) Upper reaches of the Drish River; extensively straightened and deepened, with stagnant glide at the time of survey.	Q-value=3 (poor) in 2021; riffles absent Q-value=3 (poor) in 2024 Q-value=3 (poor) in 2025; riffles absent	Three-spined stickleback	Poor	Poor	None	None
SITE B2 (2025) (Not surveyed in 2021 & 2024) Uppermost reaches of unnamed Drish River tributary; heavily modified and dry at the time of survey, with a mud base covered in leaf litter.	Too dry for Q-value in 2025	None	None	None	Low	None
SITE B2 (2021), B2 (2024) & B3 (2025) Drish River at a local road crossing; straightened and deepened with low water levels, slight flows and ponding. Downstream of the bridge strong flows emanated from a pipe culvert which diverts flow from upstream of the bridge. Annex I Hydrophilous tall herb habitat (6430) present.	No Q-value sampling in 2021 Q-value=2-3 (poor) in 2024 Q-value=3 (poor) in 2025	Atlantic salmon, European eel (*Anguilla anguilla*) and three-spined stickleback	Poor	Poor	Low	Spraint in 2021
SITE B3 (2021), B3 (2024) & B4 (2025) Drish River at Castletown Bridge downstream of B2/B3; channel deepened with slow-flowing glide, with localised faster runs between macrophyte beds exposing gravel substrata.	Q-value=3 (poor) in 2021 Q-value=2-3 (poor) in 2024 Q-value=3 (poor) in 2025	Brown trout, lamprey (Lampetra sp.), stone loach, three-spined stickleback and pike	Good holding Poor spawning / nursery	Poor spawning / nursery	Good	None
SITE B4 (2021) (Not surveyed in 2024 & 2025) Upper reaches Drish River tributary; historically straightened and deepened	Too dry for Q-value in 2021	None	None	None	None	None
SITE B5 (2021) & B4 (2024) (Not surveyed in 2025) Drish River at Ballyduff Bridge downstream of B3, with swift, shallow glide and occasional riffle and pool.	Q-value=3-4 (moderate) in 2021 Q-value=3 (poor) in 2024	Atlantic salmon, brown trout and stone loach, also minnow (*Phoxinus phoxinus*), European eel and pike in 2021	Good holding Good spawning Excellent nursery	Limited spawning Unsuitable nursery	Good	Spraint
SITE B6 (2021) (Not surveyed in 2024 & 2025) Ballygammane River c. 0.6km upstream of the Drish River confluence; straightened historically.	Q-value=3 (poor) in 2021	Brown trout, Atlantic salmon, minnow, three-spined stickleback and *Lampetra* sp.	Good spawning Good nursery	Limited nursey	Low	None
SITE B5 (2024 and 2025) (Not surveyed in 2021) Drish River at Drish Bridge downstream of B4; locally straightened with swift, deep glide and pool with only very localised riffle upstream of the bridge crossing.	Q-value=4 (good) in 2024 Q-value=3 (poor) in 2025	Atlantic salmon, brown trout, European eel, lamprey (*Lampetra* sp.), minnow (*Phoxinus phoxinus*) and stone loach	Excellent holding Excellent nursery Good to high spawning upstream	Limited nursey Good to high spawning upstream	Good	None
SITE B6 (2025) (Not surveyed in 2024) (Not surveyed in 2021) River Suir (16S02) at Thurles Bridge, downstream of Drish River confluence; fast-flowing glide with localised pool. Siltation was low.	Q-value=3 (poor) in 2025	No records	Limited holding Moderate spawning Good nursery	Sub-optimal nursery	Moderate to Poor	None
Riverine - Black (Twomileborris) River system						
SITE C1 (2021, 2024 and 2025) Uppermost reaches of the Black River; straightened and deepened channel, dry at the time of survey and ephemeral, likely only conveying water during wetter periods.	None, site was dry	None	None	None	Unsuitable	None

SITE and Description	Q-value	Fish recorded	Salmonid value	Lamprey value	Whit-clawed crayfish value	Otter records
SITE C2 (2021, 2024 and 2025) Upper reaches of the Black River within Derryvella Bog downstream of C1; straightened and deepened channel and culverted underneath a rail line. Upstream, flows were low and downstream of the culvert, shallow slow-flowing glide and localised riffle with occasional pool, grading to slow-flowing glide.	Q-value=3 (poor) in 2022 Q-value=3 (poor) in 2024 Q-value=3 (poor) in 2025	Atlantic salmon (2021), Brown trout and Three-spined stickleback	Good holding Limited spawning Moderate nursery	Limited spawning Unsuitable nursery	Limited	None
SITE C3 (2021) (Not surveyed in 2024 & 2025) Black River c. 3.6km downstream from site C1; straightened and deepened historically	No Q-value sampling in 2021	Brown trout, Atlantic salmon parr (1+), juvenile eel and three-spined stickleback	Limited spawning & holding Low nursery	Unsuitable	Unsuitable	None
SITE C3 (2025) (Not surveyed in 2021 & 2024) Heavily modified tributary of Glengoole North River; dry at the time of survey, with a mud base covered with leaf litter.	Too dry for Q-value in 2025	None	None	None	Unsuitable	None
SITE C4 (2021), C3 (2024) & C4 (2025) In the North Glengoole River at rail crossing (culvert), upstream of the Black River confluence. Straightened and deepened channel with shallow glide and localised riffle associated with macrophyte beds and rare pool.	Q-value=3-4 (moderate) in 2021 Q-value=3 (poor) in 2024 Q-value=3 (poor) in 2025	Brown trout and Three-spined stickleback	Moderate holding / spawning Good nursery	Poor	Moderate	None
SITE C5 (2021), C4 (2024) & C5 (2025) Black (Twomileborris) River at a local road bridge (corrugated pipe culvert) downstream of C2; straightened and deepened channel with deep slow-flowing glide and occasional pool. Riffle present upstream of the road culvert.	No Q-value sampling in 2021 Q-value=3 (poor) in 2024 Q-value=3-4 (moderate) in 2025	Brown trout and stone loach	Good holding Moderate spawning / nursery	Limited spawning (improved upstream) Unsuitable nursery	Poor	None
SITE C6 (2021), C5 (2024) & C6 (2025) Black River at the N75 road crossing downstream of C4/C5; straightened and deepened channel with slow-flowing glide, with localised riffles near the road bridge and occasional pools. Annex I Vegetation of flowing waters [3260]	Q-value=4 (good) in 2021 Q-value=3 (poor) in 2024 Q-value=3 (poor) in 2025	Atlantic salmon, brown trout, European eel, lamprey (*Lampetra* sp.) and stone loach	Good holding Limited spawning Very high to good nursery	Limited spawning / nursey	Good (remains noted in spraint in 2021)	Abundant prints (2024 & 2025) and spraint (2025)
Riverine - Breagagh River system						
SITE D1 (2021, 2024 and 2025) Breagagh River at a local road crossing, with a stacked three-bore box culvert. Straightened and deepened channel with deep, slow-flowing glide, occasional pool and riffles limited to the vicinity of the culvert.	Q-value=3 (poor) in 2021 Q-value=3-4 (moderate) in 2024 Q-value=3 (poor) in 2025; reduced riffle habitat	Atlantic salmon and Brown trout	High holding Poor spawning Good nursery	Poor	Limited	None
SITE D2 (2021, 2024 and 2025) Breagagh River at Ballymurreen Bridge downstream of D1; straightened channel with slow-flowing glide, occasional riffles near the bridge and pool becoming more frequent downstream.	Q-value=3 (poor) in 2021 Q-value=3 (poor) in 2024 Q-value=3 (poor) in 2025	Atlantic salmon, brown trout, lamprey (*Lampetra* sp.) and stone loach	Poor holding Sparse spawning Moderate nursery	Localised spawning (area reduced in 2025) Sub-optimal nursery	Good	Abundant prints. No signs in 2025
SITE D3 (2024 and 2025) (Not surveyed in 2021) Lower reaches of Breagagh River at Archerstown Bridge downstream of B2; semi-natural in vicinity of the bridge, with some local bank modifications with riffle and swift deep glide with occasional pool. Annex I Vegetation of flowing waters [3260]	Q-value=3-4 (good) in 2024 Q-value=3 (poor) in 2025	Atlantic salmon, brown trout, European eel, minnow and stone loach	Excellent to high holding Excellent to high nursery High to good spawning upstream	Poor nursery High spawning upstream	High	Spraint. No signs in 2025

6. ASSESSMENT OF POTENTIAL EFFECTS TO EUROPEAN SITES

This section provides an assessment of the potential effects of the Project at the Application Site on the Lower River Suir SAC. The rAASR concluded that the Current Phase (2017 to Present Day) and the Remedial Phase (future activities) have not and will not result in any adverse effects on European sites, their QIs/SCIs and their conservation objectives, and it is only the Peat Extraction Phase that is considered.

The Lower River Suir SAC consists of the freshwater stretches of the River Suir south of Thurles (receiving water body for WFD Catchment 16), the tidal stretches as far as the confluence with the Barrow/Nore, and many of the River Suir tributaries including the Clodiagh, the Lingaun, Anner, Nier, Tar, Aherlow and Multeen. The SAC traverses the counties of Tipperary, Kilkenny and Waterford[25].

6.1 Potential for Direct Effects on the European Sites

No European sites overlap with or are located adjacent to the Application Site, and there is no pathway for direct habitat loss. Furthermore, European sites designated for Raised bog (active)* [7110] and Degraded raised bog [7120] (the dominant pre-development and post extraction habitat on the Application Site) as Qualifying Interests (QI) are Knockacoller Bog SAC [002333] and Coolrain Bog SAC [002332][11], both more than 31km north of the Application Site and within different Water Framework Directive (WFD) Catchments and Groundwater Bodies[12]. Therefore, any remnant raised bogs on the Application Site at the time of peat extraction, would not have functioned as supporting habitats for the QI habitats of any European sites.

Otters are not considered to have utilised the Application Site extensively or regularly and otter would not have moved into the Application Site during peat extraction periods due to the anthropogenic activity on the Application Site coupled with the lack of prey. Therefore, there would not have been any direct impact on otter populations and no means to significantly affect the conservation objectives of QI otter populations of the Lower River Suir SAC.

6.1.1 Impact Assessment

There were no direct significant effects on any European sites due to the Project on its own or in combination with other projects or plans.

6.2 Potential for Indirect Effects on the European Sites

The Peat Extraction Phase (from 1988 to 2017) posed no impact pathways to directly and adversely affect any European Sites (Section 3.2) other than a hydrological pathway to the Lower River Suir SAC. This is supported by the findings in Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR.

Peat extraction and ancillary activities, in the absence of mitigation, contribute to degradation of water quality in nearby drainage lines and receiving watercourses. Impacts include changing the characteristics of the streambed, smothering benthic organisms, nutrient-loading and eutrophication leading to oxygen depletion and suffocation of aquatic organisms, and deterioration of overall aquatic habitat through chemical impacts, which may also alter pH and salinity of water.

Furthermore, peat extraction also alters water flow dynamics, as the topography of the Application Site systematically decreases, water reporting to local drainage lines and streams decreases, compounded by pumping on the Application Site which contributes to increased flows into neighbouring areas, altering the natural flow rates or volumes in these waterbodies.

Although potential adverse effects from drainage of the Application Site would still be at its peak in 1994, the extent, magnitude and probability of potential impacts associated with peat extraction would have been reduced as the extent of areas subject to peat extraction were significantly reduced by 1995 at the Application Site. Therefore, the potential for adverse effects from the Project on European sites would, similarly, also be on a decline.

Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR concludes that there is no impact on the flow regime or water quality and "even in the absence of control measures there would not have been a significant effect on downstream designated sites due to their distant location from the Application Site and the large volumes of water within the River Suir."

However the following is concluded in terms of hydrology and water quality for the local water bodies: "in the absence of the control measures relating to surface water management, the effect … would have been a significant, long-term, negative and indirect likely effect on downstream surface water quality and a significant, long-term, negative and indirect effect on downstream surface water quantity (i.e. river flows). The greatest effects would have occurred in the receiving streams closest to the Application Site, with the significance of effects decreasing progressively downstream along each waterbody."

In the absence of mitigation, the Project would therefore have had an impact on the local streams and tributaries which are connected to the River Suir and the Lower River Suir SAC. Although the impacts do not cause any adverse effects downstream within the Lower River Suir SAC, the local tributaries could host QI species or supporting populations to QI species.

The following QIs of the Lower River Suir SAC (Section 5.1.4.2) are restricted to the tributaries, away from the main channel of the River Suir or at transitional water bodies of the River Suir and their attributes, as defined in the SSCO for the Lower River Suir SAC (NPWS, 2017), would not have been adversely affected by the Project at the Application Site:

- Atlantic salt meadows [1330] are mapped on and around Little Island and are restricted to the estuarine transitional water bodies of the River Suir SAC.
- Mediterranean salt meadows [1410] has not been confirmed in the Lower River Suir SAC (NPWS, 2017). The SSCO states that important un-surveyed areas may be present within the SAC. If present, this habitat will occupy similar downstream areas as Atlantic salt meadows [1330] around and downstream of Little Island.
- Old oak woodland [91A0] has been mapped in two areas, both in upstream tributaries not hydrologically linked to the Application Site and there is no pathway between these habitats and the Project. Any impact to potential representative habitat adjacent to the local tributaries, would not cause deterioration of the attributes of the QI habitat in the Lower River Suir SAC.
- Alluvial woodland* [91E0] has been mapped on the islands just below Carrick-on-Suir and further downstream at Fiddown Island where the "bryophyte and lichen floras appear to be rich". Any impact to potential representative habitat adjacent to the local tributaries, would not cause deterioration of the attributes of the QI habitat in the Lower River Suir SAC.
- Yew woodland* [91J0] occur in two stands within the SAC on limestone ridges around Cahir (NPWS, 2025b). The habitat units within the SAC occur at elevated areas and are displaced from the main hydrological ZoI not just by distance but elevation. No representative habitats have been mapped within or near to the Application Site and therefore no impacts are expected to the habitat or attributes of the habitat in the Lower River Suir SAC.

- Freshwater pearl mussel (*Margaritifera margaritifera*) [1029] is mapped for the Clodiagh Catchment which is within a tributary not linked to the Application Site. Given their reliance on salmon for the reproductive life cycle, the conservation objectives for, and potential pathways for adverse effects to, salmon must be considered in conjunction with this species.
- Twaite shad (*Alosa fallax fallax*) [1103] are hampered by artificial barriers which limit them to the lower stretches of the Lower River Suir SAC (NPWs, 2017). There is no data to support their presence in the upper tributaries around the Application Site (NPWS, 2017; NBDC data; aquatic surveys in 2021, 2023 and 2025) supported by the 'WFD Fish Ecological status for Rivers, Lakes and Transitional waters 2008 to recent' which has records limited to the estuaries.

Any impacts to habitats / species that have been confirmed to occur or that cannot be excluded from having occurred in and adjacent to the local water bodies, and that could be part of QI populations or supporting populations to the QI populations of the Lower River Suir SAC, could cause adverse effects on those QI populations.

Vegetation of flowing waters [3260] was confirmed in the Black (Twomileborris) River and Breagagh Rivers during the aquatic surveys (Table 5-7) and cannot be excluded as supporting populations to the QI populations of the Lower River Suir SAC. In the absence of control measures, the habitat within the local tributary would have been adversely affected due to alteration of water flow and deterioration of water quality. Any deterioration of the habitat within the local tributaries could impair the targets and attributes associated with the habitat characteristics (extent, occurrence, species composition) of the QI populations and impair the conservation objectives of the Lower River Suir SAC.

Hydrophilous tall-herb swamp [6430] was confirmed in the Drish River during the aquatic surveys (Table 5-7) and cannot be excluded as supporting populations to the QI populations of the Lower River Suir SAC. In the absence of control measures, the habitat within the local tributary would have been adversely affected due to alteration of water flow, changes in substrate quality and chemistry due to sedimentation, and deterioration of water quality. Any deterioration of the habitat within the local tributaries could impair the targets and attributes associated with the habitat characteristics (extent, occurrence, species, positive indicator species) of the QI populations and impair the conservation objectives of the Lower River Suir SAC.

White-clawed crayfish (*Austropotamobius pallipes*) [1092] has been recorded in the local tributaries and water bodies as per the NPWS sensitive species information. Any local populations can be considered as supporting populations to the QI populations of the Lower River Suir SAC and would at least contribute to genetic diversity within the QI populations. In the absence of control measures, the species within the local tributary would have been adversely affected due to sedimentation and depletion of their habitat and deterioration in water quality. Any loss of species within the local tributaries could impair the targets and attributes (distribution, population structure, disease) of the QI populations and impair the conservation objectives of the Lower River Suir SAC.

The NBDC and NPWS data coupled with the 'WFD Fish Ecological status for Rivers, Lakes and Transitional waters 2008 to recent' show limited sporadic records of lamprey species along the length of the River Suir. Lamprey species were also confirmed in all the assessed local tributaries during the aquatic survey (Table 5-7). The species can migrate extensively through watercourse requiring different habitats for different life phases. Artificial barriers, such as the weirs in Clonmel in Lower River Suir SAC, hamper upstream migration, limiting lampreys to lower stretches of the SAC and restricting access to suitable silted, upstream, spawning areas (NPWs, 2017). Barriers also contribute to genetic weakening of the species through isolation of populations. Any lamprey populations within the local waterbodies should therefore be considered as part of the QI populations. In the absence of control measures, the species within the local tributary would have been adversely affected due to alteration of water flow, changes in substrate quality and chemistry, and deterioration of water quality. Any loss of species within the local tributaries would impair the targets and attributes of the population characteristics (structure, juvenile density) of the QI populations and impair the conservation objectives of the Lower River Suir SAC.

Salmon (*Salmo salar*) [1106] was confirmed within all the assessed local water bodies during aquatic surveys (Table 5-7) although the quality of salmonid habitat was typically poor due hydromorphological pressures, with conditions improving in downstream locations. The Aherlow River (IE_SE_16A010500) is the only river in the Lower River Suir SAC that is designated in the Salmonid Regulations (S.I. 293 / 1988)[12] and is situated upstream of the River Suir, outside the hydrological pathway of the Application Site. Salmon migrate through the water course, requiring different habitats for different life phases. Salmon are impeded by blockages, such as weirs without fish ladders, which may limit their extent to the lower reaches in the Lower River Suir SAC and contribute to isolation of populations. This also has implications to species reliant on salmon for their survival (freshwater pearl mussel and lampreys). Salmon populations within the local tributaries are considered part of the QI populations of the Lower River Suir SAC. In the absence of control measures, the species within the local tributary would have been adversely affected due to alteration of water flow, changes in substrate quality and chemistry, and deterioration of water quality. Any loss of species within the local tributaries would impair the targets and attributes (overall distribution, population dynamics, spawning adults, fry abundance, smolt abundance, redd abundance) of the QI populations and impair the conservation objectives of the Lower River Suir SAC.

Otter (*Lutra lutra*) [1355] active in the area is considered part of the QI populations of the Lower River Suir SAC but will not have been directly affected by the peat extraction and ancillary activities at the Application Site as its activity there would have been negligible (Section 6.1). Otter signs have, however, been observed in the surrounding tributaries (historical records and aquatic surveys) indicating that the otters are commuting through and foraging within these water bodies. In the absence of control measures, the alteration of water flow, changes in substrate quality and chemistry, and deterioration of water quality, including the elevated ammonium levels, would have negatively affected fish populations in the surrounding tributaries, reducing prey species for otter. Loss of fish biomass will adversely affect the QI otter populations and impair the conservation objectives of the Lower River Suir SAC.

6.2.1 Impact Assessment

In the absence of mitigation / control measures there existed the potential for the Project to adversely affect the conservation objectives of QIs or supporting populations of QIs reliant on or using the surrounding local water bodies by indirectly impacting the downstream water bodies through increased sedimentation / altered water chemistry / altered flow regimes during the Peat Extraction Phase (post 1994 to 2017).

In terms of hydrology-related impacts, control measures have been incorporated at the Application Site before 1988 (verbal comments from prior staff members and records on silt ponds kept since 1974) and have continued to be implemented / upgraded / improved with evolving regulation, legislation and social/environmental responsibility.

7. CONTROL MEASURES

The Peat Extraction Phase of the Project had the potential to adversely affect the conservation objectives of the Lower River Suir SAC through indirect effects via the hydrological pathway only. Therefore, the focus is on the mitigation / control measures to protect surface water resources in the neighbouring areas. Appendix 2, which provides a full description of the project, provides details of all environmental control measures implemented at the Application Site.

This rNIS has evaluated the adverse effects of the Project activities at the Application Site, considering that no control / mitigation measures were implemented. Control measures were however implemented during 1941 to 1988, although no formal records exist with the exception of silt control (which from 1974 was subject to a formal management programme). Based on information provided by Bord na Móna through personal communication with a retired Bord na Móna personnel, dedicated measures to manage environmental risks associated with peat extraction, specifically suspended solids and potential contamination, were implemented at all Bord na Móna bogs, including the Application Site, as part of daily, monthly, and annual bog management and operations. Focussing on the protection of local water bodies, the following was implemented:

- Maintenance programme for internal drains, conducted between October and March to remove sludge from drains and dispose of it by spreading it on the adjacent fields. This maintained the functioning of the drains, preventing sedimentation and blockages and reducing water quality issues related to high sediment loads.
- Silt ponds were installed and maintained, including desludging, to trap and reduce the emission of suspended solids to surface water bodies originating from activities associated with peat extraction, such as suspended peat particles generated from the extraction fields and collected in the bog drainage network as well as run-off from workshop areas. Silt ponds were established at all Bord na Móna bogs, including the Application Site, post 1974, driven by an internal Bord na Móna memo and policy outlining the requirement. Silt pond measures were introduced / upgraded across all Bord na Móna bogs in the early to mid-1980s in response to the 1977 Water Pollution Act.
- Maintenance programmes, washing and storage procedure for peat extraction machinery would reduce the risk of break-down and leaks / contamination from machinery on the Application Site during operations.
- Surface water management, including the management of surface water runoff and washing and cleaning machinery on the Application Site.
- All machinery was cleaned at the end of the season via a compressed air wash system at a wash bay located at Littleton Works. There were two interceptor units which facilitated the removal of any oil/grease components at the Works.
- Maintenance of onsite surface water pumps, including regular visual inspection (daily) and operational check (biweekly) and monthly services.
- Waste management, including waste separation, handling, storage and disposal from the Application Site for various waste types, including hydrocarbons and potentially hazardous waste.
- Management and maintenance of refuelling facilities, refuelling procedure and spill clean-up protocols, including stocking of absorbent materials for clean-up of any potential leaks.

7.1 Control Measures 1988 to 2001 (Pre-IPC License)

Post-1988 but prior to the implementation of the IPC Licence at the Application Site in 2001, the environmental management measures, including silt ponds, were in place across the Application Site. This can be considered the status of the Application Site in 1994. The following is related to the management of onsite drains and silt ponds (Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR):

- Internal drains were cleaned on a regular basis in suitable weather to remove sludge and maintain their operational capacity and full functionality. The sludge was disposed of by spreading it on the adjacent production fields where it was dried and harvested.
- Silt ponds were designed for an upper limit of 100mg/l suspended sediment and desludged twice a year to maintain their operational capacity and full functionality. This included the construction of a second adjacent pond, which was used as a backup and to facilitate desludging of the primary pond.

The silt ponds continued to be surveyed throughout the 1980s and 1990s to allow for improvements to silt pond operation so that suspended solids emissions into surface water run-off were reduced.

7.2 Control Measures 2001 to Present Day (Post-IPC Licence)

Bord na Móna was granted an IPC Licence (P0499-01) for the Littleton Bog Group (which encompasses the Application Site) in August 2001. Since August 2001, control and monitoring measures (such as noise, dust, surface water), have been in operation at the Application Site in accordance with the IPC Licence conditions. A copy of the IPC Licence is provided in Appendix 10.

The IPC Licence is subject to 14 no. conditions pertaining to ongoing monitoring and maintenance to ensure any emissions from the Application Site activities will comply with and not contravene, any of the requirements of Section 83(3) of the Environmental Protection Agency Act, 1992.

Conditions 1-4 of the licence outline the Scope, Management, Interpretation and Notification procedures required by the Applicant, respectively. Conditions 11 to 14 detail the Monitoring (equipment use), Recording and Reporting, Emergency Response and Financial Provisions duties of the Applicant. Conditions 5 to 10 pertain to environmental monitoring and management, including emissions to water and protection of water resources, as follows:

- Condition 6 Emissions to Water: ensures the Applicant establishes a surface water discharge monitoring programme which is reviewed annually and a report submitted to the EPA quarterly.
    - pH, flow, suspended solids, total phosphorous (as P), ammonia (as N), colour and chemical oxygen demand (COD) will be monitored weekly / quarterly as stipulated in the IPC licence. One composite sampler will be installed as per the IPC licence.
    - Suspended solids in all outfall water from the bogs and the discharge to Ballybeg River will be below 35mg/l.
    - All drainage water from bogs will be discharged via an appropriately designed / upgraded silt pond treatment system to attain the minimum design criteria dictated in the IPC licence.
    - Operational procedures for desilting of silt ponds will be established as per the IPC licence.
    - Operational procedures will be established for the management of all water-related features, including drains, manholes, pipes, outfalls and ponds as per the IPC license.
- Condition 7 Waste Management: requires the Applicant to correctly dispose of waste to licenced facilities.

- Condition 9 Water Protection: pertains to the 'Water Protection' and outlines the weekly, monthly, quarterly, and annual inspections Bord na Móna must carry out to provide for the protection of surface water and groundwater in addition to the measures required under Condition 6 above.
    - No potentially polluting substance or matter shall be permitted to discharge to off-site surface waters, off site storm drains or groundwater.
    - All tank and drum storage areas / fuel handling and refuelling areas shall be impervious to materials stored therein and, in the case of drums and tanks, be bunded as per the specifications of the IPC licence. Drainage from bunding will be managed so as not to contaminate the local water resources.
    - Oil interceptors will be fitted at discharges from all workshop areas, and these will be inspected and maintained.
    - In the event that monitoring / inspection indicates that contamination has taken place, the source will be identified and isolated, additional measures put in place to prevent recurrence and reduce further/additional contamination and notify the EPA.
    - Absorbent material will be stored on the Application Site to absorb any spillages.
- Condition 10 Decommissioning and Cutaway Bog Rehabilitation: pertains to the decommissioning followed by peatland rehabilitation. These plans have been drafted and submitted and will be reviewed every two years.

The Applicant must continue implementing and practising the mitigation and monitoring measures as listed in the IPC Licence until such time that the Application Site is shown to be stable and no longer contributing to environmental impact.

To facilitate the production of Annual Environmental Reports (AERs) required under IPC Licence, Bord na Móna produced an Environmental and Operational Procedures for Protection of Surface Water document which comprises a suite of Standard Operating Procedures (SOPs) which have the overall aim of promoting and maintaining environmental integrity throughout all Bord na Móna activities. The document includes SOPs for drainage planning and implementation, silt pond and outfall maintenance, waste management, peat extraction methods, and general bog housekeeping. The SOPs also set out emergency preparedness and response procedures, how to deal with complaints, effective communication with Bord na Móna operatives, the local community and local authorities.

8. ASSESSMENT OF RESIDUAL EFFECTS

The following section assesses the potential for residual effects considering the implementation of control measures (Section 7) to mitigate the adverse effects from the Project as described in Section 6.

Control measures include the operational actions and management strategies, the measures set in place for the IPC Licence and the implementation of the Environmental and Operational Procedures for Protection of Surface Water and Cutaway Bog Decommissioning and Rehabilitation Plan, including the monitoring and action / intervention undertaken to mitigate potential environmental impacts from past peat extraction and ancillary activities.

The potential for residual adverse effects on QIs is assessed considering the SSCOs and specific attributes for the habitats and species identified in Section 6. SSCOs provide conservation objectives to maintain / restore the favourable conservation status of the QIs for which European sites are designated in line with the requirements of the Habitats Directive.

8.1 Lower River Suir SAC (002137)

Section 6 states that there were no direct significant effects on any European sites due to the Project on its own or in combination with other projects or plans. However, in the absence of mitigation / control measures there existed the potential for the Project to adversely affect the conservation objectives of QIs of the Lower River Suir SAC and / or supporting populations of QIs reliant on the surrounding local water bodies by indirectly impacting the downstream water bodies through increased sedimentation / altered water chemistry / altered flow regimes during the Peat Extraction Phase, post 1994.

The potential for adverse residual effects on the QIs of the Lower River Suir SAC under potential threat of adverse effects are assessed in view of the SSCOs as presented in Table 8-1. The Application Site was already entirely under peat extraction at the time of the required transposition of the Habitats Directive into Irish Law (1994) and at the time that the Lower River Suir SAC was designated (1998).

In terms of the WFD status of downstream water bodies, Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR concludes that "drainage systems were designed to reduce runoff to greenfield runoff rates while the IPC licence controls also ensured high quality runoff from the Application Site" and with "the implementation of the IPC licence controls no significant effects on the status of downstream SWBs [surface water bodies] … have occurred during the Peat Extraction Phase of the Project".

8.2 Conclusion of Impact Assessment

In light of current available scientific information, through the evaluation of the potential significant impacts (including potential residual affects following effective implementation of mitigation measures) within the ZoI of the Project, it is concluded that the Project did not pose a risk of, directly or indirectly, adversely affecting the conservation objectives that support QI habitats and species of Lower River Suir SAC.

Table 8-1: QIs, SSCOs and assessment of potential adverse residual effects

Attribute (measure)	Target	Assessment
3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation Conservation Objective: To maintain the favourable conservation condition		
Habitat area (km)	Area stable or increasing, subject to natural processes	Section 6.2.1 concluded that the Peat Extraction Phase impacts by way of the hydrological pathway would not have affected the Lower River Suir SAC and only had the potential for adverse effects to the QI conservation objectives by impacting habitats within local waterbodies that may be supporting habits to the QI habitat. The control measures implemented between 1988-2001 (Section 7.1), and in terms of the IPC License (2001 to present - Section 7.2) would have effectively mitigated sedimentation, water quality deterioration and water flow within the surrounds and downstream water bodies. Control measures were effective and there is no potential for adverse residual effects, supported by the presence of this habitat in the local water bodies
Habitat distribution (Occurrence)	No decline, subject to natural processes	
Typical species (Occurrence)	Maintain typical species in good condition, including appropriate distribution and abundance	
Fringing habitats (ha)	Maintain marginal fringing habitats that support the typical species and vegetation composition of the habitat	
Floodplain connectivity (ha)	Maintain floodplain connectivity necessary to support the typical species and vegetation composition of the habitat	Section 6.2.1 concluded that the Peat Extraction Phase impact by way of the hydrological pathway would not have affected the Lower River Suir SAC and only had the potential for adverse effects to the QI conservation objectives by impacting habitats within local waterbodies that may be supporting habits to the QI habitat. The attributes relevant to the local setting within the Lower River Suir SAC would not have been affected by the Project.
Hydrological regime: river flow (m/s)	Maintain appropriate hydrological regimes	
Substratum composition: particle size range (mm)	Maintain appropriate substratum particle size range, quantity and quality, subject to natural processes	
Water quality (Various)	Maintain appropriate water quality to support the natural structure and functioning of the habitat	
Hydrological regime: tidal influence (Daily water level fluctuations - m)	Maintain natural tidal regime	

Attribute (measure)	Target	Assessment
Hydrological regime: groundwater discharge (m/s)	Maintain appropriate hydrological regime	
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels Conservation Objective: To maintain the favourable conservation condition		
Habitat area (ha)	Area stable or increasing, subject to natural processes	Section 6.2.1 concluded that the Peat Extraction Phase impacts by way of the hydrological pathway would not have affected the Lower River Suir SAC and only had the potential for adverse effects to the QI conservation objectives by impacting habitats within local waterbodies that may be supporting habits to the QI habitat. The control measures implemented between 1988-2001 (Section 7.1), and in terms of the IPC License (2001 to present - Section 7.2) would have effectively mitigated sedimentation, water quality deterioration and water flow within the surrounds and downstream water bodies. Control measures were effective and there is no potential for adverse residual effects, supported by the presence of this habitat in the local water bodies.
Habitat distribution (Occurrence)	No decline, subject to natural processes	
Vegetation composition: positive indicator species (Number of species at a representative number of monitoring stops)	At least three positive indicator species present	
Vegetation composition: positive indicator species (% cover at a representative number of monitoring stops)	Cover of positive indicator species at least 40%	
Vegetation composition: non-native species (% cover at a representative number of monitoring stops)	Cover of non-native species not more than 1%	
Vegetation composition: negative indicator species (% at a representative number of monitoring stops)	Cover of negative indicator species not more than 33%	
Vegetation composition: scrub, bracken and heath (% at a representative number of monitoring stops)	Cover of scrub, bracken (*Pteridium aquilinum*) and heath not more than 5%	
Vegetation structure: height (Height (cm) at a representative number of monitoring stops)	Herb height at least 50cm	

Attribute (measure)	Target	Assessment
Hydrological regime: Flooding depth/height of water table (m)	Maintain appropriate hydrological regime	Section 6.2.1 concluded that the Peat Extraction Phase impact by way of the hydrological pathway would not have affected the Lower River Suir SAC and only had the potential for adverse effects to the QI conservation objectives by impacting habitats within local waterbodies that may be supporting habits to the QI habitat. The attributes relevant to the local setting within the Lower River Suir SAC would not have been affected by the Project.
Physical structure: bare soil (% at a representative number of monitoring stops)	Cover of bare soil not more than 10%	
Physical structure: grazing and disturbance (m2 in local vicinity of a representative number of monitoring stops)	Area of the habitat showing signs of serious grazing or disturbance less than 20m2	
1092 White-clawed Crayfish (*Austropotamobius pallipes*) Conservation Objective: To maintain the favourable conservation condition		
Distribution (Occurrence)	No reduction from baseline	Section 6.2.1 concluded that the Peat Extraction Phase impacts by way of the hydrological pathway would not have affected the Lower River Suir SAC and only had the potential for adverse effects to the QI conservation objectives by impacting species within local waterbodies that may be part of the QI population. The machinery and vehicles used by Bord na Móna would have moved between different bogs, were subject to washing regimes and their activity would have remained (not entering any local watercourses) and as such would not be at risk of encountering or transferring crayfish plague (*Aphanomyces astaci*) within nearby catchments. The control measures implemented between 1988-2001 (Section 7.1), and in terms of the IPC License (2001 to present - Section 7.2) would have effectively mitigated sedimentation, water quality deterioration and water flow within the surrounds and downstream water bodies. Control measures were effective and there is no potential for adverse residual effects.
Population structure: recruitment (Occurrence of juveniles and females with eggs)	Juveniles and/or females with eggs in all occupied tributaries	
Negative indicator species (Occurrence)	No alien crayfish species	
Disease (Occurrence)	No instances of disease	

Attribute (measure)	Target	Assessment
Habitat quality: heterogeneity (Occurrence of positive habitat features)	No reduction in habitat heterogeneity or habitat quality	Section 6.2.1 concluded that the Peat Extraction Phase impacts by way of the hydrological pathway would not have affected the Lower River Suir SAC and only had the potential for adverse effects to the QI conservation objectives by impacting species within local waterbodies that may be part of the QI population. The attributes relevant to the local setting within the Lower River Suir SAC would not have been affected by the Project.
Water quality (EPA Q value)	At least Q3-4 at all sites sampled by EPA	
1095 Sea Lamprey (*Petromyzon marinus*) Conservation Objective: To restore the favourable conservation condition		
Distribution: extent of anadromy (% of river accessible)	Greater than 75% of main stem length of rivers accessible from estuary	Section 6.2.1 concluded that the Peat Extraction Phase impacts by way of the hydrological pathway would not have affected the Lower River Suir SAC and only had the potential for adverse effects to the QI conservation objectives by impacting species within local waterbodies that may be part of the QI population. The control measures implemented between 1988-2001 (Section 7.1), and in terms of the IPC License (2001 to present - Section 7.2) would have effectively mitigated sedimentation, water quality deterioration and water flow within the surrounds and downstream water bodies. Control measures were effective and there is no potential for adverse residual effects, supported by cumulative lamprey species records in the local water bodies.
Population structure of juveniles (Number of age/size groups)	At least three age/size groups present	
Juvenile density in fine sediment (Juveniles/m2)	Juvenile density at least 1/m2	
Extent and distribution of spawning habitat (m2 and occurrence)	No decline in extent and distribution of spawning beds	
Availability of juvenile habitat (Number of positive sites in 3rd order channels (and greater), downstream of spawning areas)	More than 50% of sample sites positive	

Attribute (measure)	Target	Assessment
1096 Brook Lamprey (*Lampetra planeri*) Conservation Objective: To restore the favourable conservation condition		
Distribution (% of river accessible)	Access to all water courses down to first order streams	Section 6.2.1 concluded that the Peat Extraction Phase impacts by way of the hydrological pathway would not have affected the Lower River Suir SAC and only had the potential for adverse effects to the QI conservation objectives by impacting species within local waterbodies that may be part of the QI population. The control measures implemented between 1988-2001 (Section 7.1), and in terms of the IPC License (2001 to present - Section 7.2) would have effectively mitigated sedimentation, water quality deterioration and water flow within the surrounds and downstream water bodies. Control measures were effective and there is no potential for adverse residual effects, supported by cumulative lamprey species records in the local water bodies.
Population structure of juveniles (Number of age/size groups)	At least three age/size groups of brook/river lamprey present	
Juvenile density in fine sediment (Juveniles/m2)	Mean catchment juvenile density of brook/river lamprey at least 2/m2	
Extent and distribution of spawning habitat (m2 and occurrence)	No decline in extent and distribution of spawning beds	
Availability of juvenile habitat (Number of positive sites in 2nd order channels (and greater), downstream of spawning areas)	More than 50% of sample sites positive	
1099 River Lamprey (*Lampetra fluviatilis*) Conservation Objective: To restore the favourable conservation condition		
Distribution (% of river accessible)	Access to all water courses down to first order streams	Section 6.2.1 concluded that the Peat Extraction Phase impacts by way of the hydrological pathway would not have affected the Lower River Suir SAC and only had the potential for adverse effects to the QI conservation objectives by impacting species within local waterbodies that may be part of the QI population. The control measures implemented between 1988-2001 (Section 7.1), and in terms of the IPC License (2001 to present - Section 7.2) would have effectively mitigated sedimentation, water quality deterioration and water flow within the surrounds and downstream water bodies.
Population structure of juveniles (Number of age/size groups)	At least three age/size groups of brook/river lamprey present	
Juvenile density in fine sediment (Juveniles/m2)	Mean catchment juvenile density of brook/river lamprey at least 2/m2	
Extent and distribution of spawning habitat (m2 and occurrence)	No decline in extent and distribution of spawning beds	
Availability of juvenile habitat (Number of positive sites in 2nd order channels (and greater), downstream of spawning areas)	More than 50% of sample sites positive	

Attribute (measure)	Target	Assessment
		Control measures were effective and there is no potential for adverse residual effects, supported by cumulative lamprey species records in the local water bodies.
1106 Salmon (*Salmo salar*) Conservation Objective: To restore the favourable conservation condition		
Distribution: extent of anadromy (% of river accessible)	Greater than 75% of main stem length of rivers accessible from estuary	Section 6.2.1 concluded that the Peat Extraction Phase impacts by way of the hydrological pathway would not have affected the Lower River Suir SAC and only had the potential for adverse effects to the QI conservation objectives by impacting species within local waterbodies that may be part of the QI population. The control measures implemented between 1988-2001 (Section 7.1), and in terms of the IPC License (2001 to present - Section 7.2) would have effectively mitigated sedimentation, water quality deterioration and water flow within the surrounds and downstream water bodies. Control measures were effective and there is no potential for adverse residual effects, supported by current presence of salmon species in local water bodies.
Adult spawning fish (Number)	Conservation limit (CL) for each system consistently exceeded	
Salmon fry abundance (Number of fry/5 minutes electrofishing)	Maintain or exceed 0+ fry mean catchment-wide abundance threshold value. Currently set at 17 salmon fry/5 minutes sampling	
Out-migrating smolt abundance (Number)	No significant decline	
Number and distribution of redds (Number and occurrence)	No decline in number and distribution of spawning redds due to anthropogenic causes	
Water quality (EPA Q value)	At least Q4 at all sites sampled by EPA	Section 6.2.1 concluded that the Peat Extraction Phase impacts by way of the hydrological pathway would not have affected the Lower River Suir SAC and only had the potential for adverse effects to the QI conservation objectives by impacting species within local waterbodies that may be part of the QI population. The attributes relevant to the local setting within the Lower River Suir SAC would not have been affected by the Project.

Attribute (measure)	Target	Assessment
1355 Otter (*Lutra lutra*) Conservation Objective: To maintain the favourable conservation condition		
Extent of terrestrial habitat (ha)	No significant decline. Area mapped and calculated as 16.17ha above high water mark (HWM) and 726.61ha along river banks	Section 6.2.1 concluded that the Peat Extraction Phase impacts by way of the hydrological pathway would not have affected the Lower River Suir SAC and only had the potential for adverse effects to the QI conservation objectives by impacting prey species within local waterbodies that support the QI populations. The attributes relevant to the local setting within the Lower River Suir SAC would not have been affected by the Project.
Extent of marine habitat (ha)	No significant decline. Area mapped and calculated as 712.27ha	
Extent of freshwater (river) habitat (km)	No significant decline. Length mapped and calculated as 382.31km	
Couching sites and holts (Number)	No significant decline	
Barriers to Connectivity (Number)	No significant increase	
Distribution (% positive survey sites)	No significant decline	Section 6.2.1 concluded that the Peat Extraction Phase impacts by way of the hydrological pathway would not have affected the Lower River Suir SAC and only had the potential for adverse effects to the QI conservation objectives by impacting prey species within local waterbodies that support the QI populations. The control measures implemented between 1988-2001 (Section 7.1), and in terms of the IPC License (2001 to present - Section 7.2) would have effectively mitigated sedimentation, water quality deterioration and water flow within the surrounds and downstream water bodies, supported by current presence of fish species in local water bodies. Control measures were effective and there is no potential for adverse residual effects.
Fish biomass available (kg)	No significant decline	

9. IN COMBINATION EFFECTS

A single project may not have significant effects on its own but its combined effect with other projects or plans could result in significant effects. In combination effects refer to the potential effects caused from the combined impacts of two or more projects, plans, or activities and this assessment considers the in combination effects of the Peat Extraction Phase of the Project at the Application Site, taking into account the existing and proposed plans listed in Table 9-1 and projects within the shared WFD sub-catchment listed in Appendix 11.

The in-combination assessment considers the interaction of the Project with plans and projects to have resulted in exacerbated effects, not anticipated from the Project / plans / other projects alone. In this instance the only adverse effect identified is through the hydrological pathway and the potential impact to the immediate local water bodies around the Application Site, which will potentially adversely affect any QI populations or populations supporting QI species that may be utilising the local waterbodies as *ex situ* habitats. Given that the extent of peat extraction areas was declining by 1994/1995 and water management features were established and operational at the site, any cumulative impacts such as sediment loading of local water bodies would have already occurred by 1994.

9.1 Assessment of Plans

Table 9-1 summarises the plans and policies and their objectives, focussing on policies and objectives that related to designated sites, biodiversity, peatland management and conservation, and sustainable land use with focus on hydrology and water quality preservation. In the assessment of plans, the focus is on policies and objectives that have the potential for impacting European sites in-combination with the peat extraction and supporting activities at the Application Site.

To provide a structured summary of the findings, an overview of relevant plans and their key environmental considerations is presented in Table 9-1. This table outlines how various planning documents incorporate conservation principles, highlighting their relevance to biodiversity protection, peatland management, and water quality preservation. The insights gained from this review contribute to a broader understanding of the policy landscape influencing land-use decisions and environmental management in areas of ecological sensitivity.

During 1994 the Application Site was an active peat extraction area. Peat extraction and ancillary activities were conducted at varying levels of intensity from 1994 to 2017, but the overall impacts on biodiversity have been identified to be local in extent limited to the Application Site and surrounding water bodies and not significant enough to breach the Policies and Objectives outlined in the various plans assessed in Table 9-1, which aim to protect biodiversity, conserve habitats, regulate land use and safeguard designated sites, including European sites.

Based on analysis of the objectives of the plans and policies, the peat extraction and associated activities were considered compliant with the environmental safeguards specified at that time in terms of ensuring no adverse effects on European sites. The Peat Extraction Phase activities are not considered to be in conflict with the relevant policies and objectives as summarised in Table 9-1.

The implementation of the Cutaway Bog Decommissioning and Rehabilitation Plans compiled and reviewed as per Condition 10 of the IPC Licence for the four Bogs within the Application Site, have to date provided hydrological and ecological (ecosystem services and biodiversity enrichment) benefits to the Application Site and surrounds, improving conditions of *ex situ* habitats used by potential QI populations and thereby contributing positively to European sites. The ongoing rehabilitation of the bogs will also contribute to carbon sequestration and water retention, further supporting regional efforts in conservation and climate change. The restoration of natural hydrological condition is expected to improve water quality, reduce sedimentation, improve riverine ecological corridors and enhance aquatic ecosystems for aquatic species, as well as fauna reliant on these species. Such efforts will also reduce existing threats faced in WFD Catchment 16 and the identified threats of the Lower River Suir SAC. Such outcomes align with policies and objectives outlined within the Development Plans (objectives related to sustainable land use and management, biodiversity protection, climate change and carbon sequestration, and ecological resilience).

As the Cutaway Bog Decommissioning and Rehabilitation Plans (Appendix 7, Appendix 8 and Appendix 9) for the Application Site will ensure the protection and enhancement of these protected areas and have an overall positive effect on the immediate and neighbouring areas, no negative in combination effects have occurred or will occur with activities regulated under plans and policies.

9.2 Assessment of Projects

A list of the projects considered for in combination effects arising from their spatial and temporal overlap with the Application Site's activities are summarised in Appendix 11 presented as projects considered during the Peat Extraction Phase and Current Phase.

During the Peat Extraction Phase (July 1988 – 2017), peat extraction and ancillary activities were carried out at varying levels of intensity across the Application Site, with the extent of areas subject to peat extraction significantly reduced by 1995. These activities caused environmental impacts, particularly on water quality, but these effects remained largely confined to the Application Site and the nearby local water bodies, before confluence with the River Suir (upstream of the Lower River Suir SAC) as presented in this rNIS.

During the Peat Extraction Phase, the application for retention of extension for fire lighter manufacturer and storage and bund area at the former Littleton Briquette Factory (Tipperary County Council Reference 991431) was the main activity within the Application Site. The M8 motorway (An Coimisiún Pleanála Reference NMS10.MS2008) was the most significant activity adjacent to the Application Site. Other projects within the Project's WFD sub-catchment are listed in Appendix 11. Many of these planning applications/projects included the development of, or modifications to, single rural dwelling houses, small residential developments (i.e. modification and/or re-development of existing dwellings) and agricultural development (new entrances, sheds and ancillary plant and infrastructure), and the development of quarries and mines and renewable energy projects (solar and wind farms).

The nearest projects within the ZoI of this rNIS for the Current Phase are associated with minor industrial upgrades at the former Littleton Briquette Factory (Tipperary County Council References 20976 and 20976) and the recreational shared cycle and walkway to connect into the existing Loch Dhoire Bhile Loop (Tipperary County Council Reference 2560154 and An Coimisiún Pleanála Reference 323662-25), which will only pose potential risk to the hydrology of the local catchment (shared with the Project) during the limited construction phase and can be fully mitigated to prevent adverse effects to the conservation objectives of any European site (NIS for the shared cycle and walkway). Future projects (potential renewable energy development and bog rehabilitation) will be subject to project specific statutory assessment and IPC/licensing processes. Other projects within the Project's WFD sub-catchment considered are listed in Appendix 11, but given that there is no impact from the Project during the Current Phase or Remedial Phase, no in combination effects will occur to any European site.

Post 1994 all these developments would have been subject to appropriate assessment and approved only if they screened out with no adverse effects on European sites or could show effective mitigation of impacts to safeguard the conservation objectives of European sites.

This spatial extent of environmental impacts from activities at the Application Site is considered during the in-combination effects of the Project with other projects. This in-combination assessment shows no significant adverse in combination effects on European sites with other projects are anticipated.

The implementation of the rehabilitation plans compiled and reviewed as per Condition 10 of the IPC Licence for the four Bogs within the Application Site, have to date provided hydrological and ecological (ecosystem services and biodiversity enrichment) benefits to the Application Site as detailed above (Section 9.1). As the Cutaway Bog Decommissioning and Rehabilitation Plans (Appendix 7, Appendix 8 and Appendix 9) for the Application Site will ensure the protection and enhancement of these areas and have an overall positive effect on the immediate and neighbouring areas, no negative in combination effects have occurred or will occur with activities related to other projects.

9.3 Conclusion of Assessment on Cumulative and In-combination Effects

The assessment has determined that the Project has not caused / will not cause, significant adverse effects on the integrity of European sites. An evaluation of plans and projects within the ZoI shows that this Project has not contributed / will not contribute to any adverse effects to European site when considered alongside other plans or projects.

The analysis confirms the absence of ecological or hydrological linkages that might have resulted in additional or exacerbated negative effects. No potential for unforeseen consequences having arisen / arising from interactions between this Project and other initiatives has been identified.

Therefore under the mitigated scenario, and in light of current available scientific information, it is concluded that the Project did not and does not pose a risk of, directly or indirectly, adversely affecting the conservation objectives that support QI habitats and species of Lower River Suir SAC on its own or in combination with plans or projects and will not impair the ecological status of any European site.

Table 9-1: Assessment of Plans

Plan	Key Relevant Objectives	Assessment
Climate Action Plan (CAP) 2019, 2021, 2023, 2024, 2025	CAP 23 provides a framework for delivering the Government's target of a 51% reduction (relative to 2018) in greenhouse gas (GHG) emissions by 2030. CAP 25 sets current and future actions including " the restoration of peatland sites, including raised and blanket bog, fens, and other wetland types, along with the development of amenity and tourism opportunities where appropriate" and recognises the socio-economic effects of cessation of peat extraction and opportunities associated with peatland restoration work and alternative land use. The policies and objectives of the CAP 25 are reflected in the Draft National Energy & Climate Plan (NECP) 2021-2030.	Applicable to the Current Phase (2017 – Present) and the Remedial Phase, the activities at the Application Site are in line with the rehabilitation and restoration actions and consideration of future land uses that will allow the current succession of habitat that can support the recovery of local biodiversity. Furthermore, functional peat bogs contribute to natural carbon sequestration.
Ireland's National Energy and Climate Plan (NECP) 2021-2030	Submitted under the EU Governance Regulation, which is the EU legislation under which Ireland is held accountable in meeting its de-carbonisation targets, published and updated through the NECP. National Objectives relate to energy efficiency and increasing reliance on renewable energy to 80%, phasing out peat plants.	
Ireland's 4th National Biodiversity Action Plan (NBAP) for 2023-2030	Five strategic objectives to deliver transformative changes in how Ireland values and protects its natural heritage and biodiversity conservation efforts: • Adopt a Whole of Government, Whole of Society Approach to Biodiversity: This objective emphasises the need for collective action across all sectors of government and society to effectively address biodiversity challenges. • Meet Urgent Conservation and Restoration Needs: Focusing on immediate actions required to conserve and restore Ireland's biodiversity, this objective aims to halt further loss and promote recovery of vital ecosystems. • Secure Nature's Contribution to People: Recognising the essential services that nature provides, this objective seeks to ensure the sustainable use of natural resources, benefiting both people and the environment. • Enhance the Evidence Base for Action on Biodiversity: This objective highlights the importance of strengthening scientific research and data collection to inform effective biodiversity policies and actions. Strengthen Ireland's Contribution to International Biodiversity Initiatives: Aiming to bolster Ireland's role in global biodiversity efforts, this objective focuses on active participation and contribution to international conservation initiatives.	During the Current Phase (2017 – Present), activities at the Application Site has been compliant with the policies and objectives outlined in the NBAP, ensuring that no adverse effects have occurred on biodiversity or European sites. The Current Phase and Remedial Phase have/ will continue to contribute substantially to achieving several of the NBAP's strategic objectives as the rehabilitation plans serve to rehabilitate habitats allowing natural regeneration and succession, enhance water retention and quality, and support the recovery of local biodiversity.

Plan	Key Relevant Objectives	Assessment
	The NBAP also introduces a public sector duty on biodiversity, as mandated by the Wildlife (Amendment) Act 2023, which requires all public service bodies to integrate biodiversity considerations into their plans, policies, and programs, and to report on their progress.	The long-term positive effects on both terrestrial and aquatic environments, including improved conditions for fauna and surrounding sensitive areas, highlight the significant environmental benefits of this phase. The overall impact is expected to be positive, supporting the sustainability and ecological integrity of the Application Site, while aligning with national goals for biodiversity conservation.
National Planning Framework (NPF) - Project Ireland 2040	Recognises the amenity and heritage value of peatlands within the rural setting and "activity-based tourism and trails such as greenways, blueways and peatways" and the role they may have in 'Dark Sky' parks and biodiversity conservation. Consider biodiversity in land-use planning and development. Objectives of relevance to biodiversity: • NPO30: Facilitate the development of the rural economy, in a manner consistent with the national climate objective, through supporting a sustainable and economically efficient agricultural and food sector, together with forestry, fishing and aquaculture, energy and extractive industries, the bio-economy and diversification into alternative on-farm and off-farm activities, while at the same time noting the importance of maintaining and protecting biodiversity and the natural landscape and built heritage which are vital to rural tourism. • NPO 34: Continue to facilitate tourism development and in particular the Strategy for the Future Development of National and Regional Greenways, and a Blueways and Peatways Strategy (also included in NPO60): A coordinated approach to the sustainable management of outdoor recreation sites; and Projects on the basis of their environmental sustainability, achieving maximum impact and connectivity at national and regional level while ensuring their development is compliant with the National Biodiversity Action Plan, the national climate change objective and requirements for environmental assessments.	Many of the NPF objectives are linked to the NBAP addressed above and relevant to the NPF. Applicable to the Current Phase (2017 – Present) and the Remedial Phase, the activities at the Application Site are in line with the rehabilitation and restoration objectives. Furthermore, future land uses consider activities / developments that will allow for the continued current succession of habitat that can support the recovery of local biodiversity. This will add to the natural landscape that has potential to play roles in other objectives and continued support to the goals of the NPF.

Plan	Key Relevant Objectives	Assessment
	• NPO73: Support the co-location of renewable technologies with other supporting technologies and complementary land uses, including agriculture, amenity, forestry and opportunities to enhance biodiversity and promote heritage assets, at appropriate locations which are determined based upon the best available scientific evidence in line with EU and national legislative frameworks. • NPO 82: Integrated planning for Green and Blue Infrastructure will be incorporated into the preparation of statutory land use plans while maintaining ecosystem services and ecosystem functions and conserving and/or restoring biodiversity. • NPO 84: In line with the National Biodiversity Action Plan and the European Union Nature Restoration Law, and best available scientific information, regional and local planning authorities shall support the preparation and implementation of the National Restoration Plan. • NPO 85: In line with the National Biodiversity Action Plan; the conservation, enhancement, mitigation and restoration of biodiversity is to be supported by: Integrating policies and objectives for the protection and restoration of biodiversity, including the principles of the mitigation hierarchy of - avoid, minimise, restore and offset - of potential biodiversity impacts, in statutory land use plan; and Retention of existing habitats which are currently important for maintaining biodiversity (at local/regional/national/international levels), in the first instance, is preferable to replacement/restoration of habitats, in the interests of ensuring continuity of habitat provision and reduction of associated risks and costs. • NPO 86: In line with the objectives of the National Biodiversity Action Plan, planning authorities should seek to address no net loss of biodiversity within their plan making functions. • NPO 87: Enhance the conservation status and improve the management of protected areas and protected species by: Implementing relevant EU Directives to protect Ireland's environment and wildlife and support the objectives of the National Biodiversity Action Plan; Developing and utilising licensing and consent systems to facilitate sustainable activities within Natura 2000 sites; Continued research, survey programmes and monitoring of habitats and species. • NPO 88: Facilitate the protection and restoration of biodiversity [including in European sites and the habitats and species for which they are selected] through the preparation of national guidance in relation to Planning and Biodiversity to: Plan and manage for integration of biodiversity protection and restoration in future planning and development; Ensure a consistent and strategic approach to biodiversity protection and restoration across planning authorities and administrative boundaries; and Support the implementation of the National Biodiversity Action Plan (2023-2030) and the forthcoming National Restoration Plan.	

Plan	Key Relevant Objectives	Assessment
National Peatlands Strategy 2015	Peatland owned and managed by Bord na Móna is specifically referenced in this strategy, and the goals of Bord na Móna for the future use of this peatland are detailed as follows: • The role that peatlands can play in continuing to supply energy to the country, both through traditional fuels and renewables • Their potential to meet national and regional land requirements for infrastructure and industry • The benefits they can bring in terms of recreation and amenity • Their contribution to Ireland's national biodiversity targets.	This Substitute Consent seeks to regularise the Application Site to enable the future development of the area in accordance with the National Peatlands Strategy 2015. The benefits in terms of recreation and biodiversity align with the NBAP and NPF objectives assessed above.
Regional Spatial and Economic Strategy for the Southern Region 2020	Support the implementation of the National Planning Framework – Ireland 2040, by providing a long-term planning and economic framework. The RSES references peatlands within the region in the context of potential beneficial after-uses including renewable energy, biodiversity, amenity uses, water / carbon storage and other infrastructure.	The benefits in terms of the role of peatlands in carbon cycling and renewable energy, recreation and biodiversity align with the CAP 25, NBAP and NPF objectives assessed above.
Tipperary County Development Plans and variations 2022-2028	The Tipperary County Development Plans were subject to an Appropriate Assessment determination that concludes "Having incorporated mitigation measures, it is concluded that the Plan is not foreseen to give rise to any adverse effects on the integrity of any European Site, alone or in combination with other plans or projects. This evaluation is made in view of the conservation objectives of the habitats or species, for which these sites have been designated". The policies and the planning objectives are / will be designed to meet the targets and objectives of the national plans, create among its community, support communities in the development of community-led and biodiversity focused amenity plans and actions, and the safeguarding of European sites. Developments and lower-level plans will be subject to appropriate assessment. Key Strategic Objective (SO) that encompass / consider designated sites, biodiversity and peat extraction: • SO-1: To support the just transition to a climate resilient, biodiversity-rich, environmentally-sustainable and climate-neutral economy. • SO-5: To promote, support and enable sustainable and diverse economic development, and foster new and innovative opportunities, harnessing the talent of our workforce and communities.	The Peat Extraction Phase in 1994 was commencing a decline in areas under peat extraction, and activities would have occurred at varying levels of intensity through to cessation in 2017. The overall environmental impacts on biodiversity were considered limited in extent to the Application Site and the immediate local water bodies and associated habitats and not significant enough to breach the Policies and Objectives outlined in the County Development Plans. The Project was operated with intent to protect biodiversity,

Plan	Key Relevant Objectives	Assessment
	• SO-6: To support a sustainable, diverse and resilient rural economy, whilst integrating the sustainable management of land and natural resources. • SO-7: To protect, enhance and connect areas of natural heritage, blue and green infrastructure and waterbodies, for quality of life, biodiversity, species and habitats, while having regard to climate change adaptation and flood risk management measures. • SO- 8: To support, value and protect our Artistic, Cultural and Built Heritage for future generations and to recognise its key role in our economy. • SO- 9: To enhance connectivity and promote sustainable transport, through the integration of land-use and transport planning and promotion of and prioritisation of public transport and walking and cycling.	conserve habitats, and safeguard designated areas with the evolving regulations that drove County Policies and Objectives. The Current Phase (2017 – Present) and the Remedial Phase activities at the Application Site are/will be in line with the rehabilitation and restoration objectives of national and regional plans and therefore align with the county development plans. Furthermore, the continued current succession of habitat which is and will continue to support the recovery of local biodiversity has the potential to provide a biodiversity-rich land scape that can be considered for other county objectives related to peat and biodiversity cultural and natural heritage objectives.
Kilkenny City and County Development Plan 2021-2027	The Kilkenny City and County Development Plans were subject to an Appropriate Assessment determination that concludes "Having incorporated mitigation measures, it is concluded that the Kilkenny City and County Development Plan 2021-2027 is not foreseen to give rise to any significant effects on the integrity of European Sites, alone or in combination with other plans or projects. This evaluation is made in view of the conservation objectives of the habitats or species, for which these sites have been designated". The policies and the planning objectives are / will be designed to meet the targets and objectives of the national plans, improve ecological coherence with focus on designated sites, consider biodiversity in open spaces, including greenways/blueways, and the safeguarding of European sites. Developments and lower-level plans will be subject to appropriate assessment. Key Strategic Objective (SO) that encompass / consider designated sites, biodiversity and peat extraction: • 2A: To support and encourage sustainable compact growth and settlement patterns, integrate land use and transportation, and maximise opportunities through development form, layout and design to secure climate resilience and reduce carbon emissions. • 2B: To support the implementation of the National Climate Action Plan and the National Climate Action Charter for Local Authorities, and to facilitate measures which seek to reduce emissions of greenhouse gases by embedding appropriate policies within the Development Plan.	

Plan	Key Relevant Objectives	Assessment
	• 2C: To promote, support and direct effective climate action policies and objectives that seek to improve climate outcomes across the settlement areas and communities of County Kilkenny helping to successfully contribute and deliver on the obligations of the State to transition to low carbon and climate resilient society. • 2D: To integrate appropriate mitigation and adaptation considerations and measures into all forms of development. • 2E: To ensure that the Development Plan transposes, supports and implements strategic objectives of the National Planning Framework and the Southern Regional Spatial and Economic Strategy to create an enabling local development framework that: (a) promotes and integrates important climate considerations in local development and the assessment of planning applications and (b) supports the practical implementation of national climate policy and targets to assist in the delivery of the national transition objective. • 2F: To adopt nature-based approaches and green infrastructural solutions as viable mitigation and adaptation measures to reduce greenhouse gas emissions where feasible. The Council will promote and support physical activity, active recreation and an active lifestyle. • 2G: To reduce energy related CO_2 emissions of Kilkenny County Council. 2H To achieve the commitment under the European Climate Alliance to the reduction of greenhouse gas emissions by 10 percent every 5 years.	

10. CONCLUDING STATEMENT

This rNIS provides an assessment of potential adverse effects on European Sites. The Lower River Suir SAC was designated in 1998. At the time of designation, peat extraction and ancillary activities were well established at the Application Site, resulting in a landscape dominated by cutover bog and bare peat, with peat extraction past its peak and in significant decline.

Since 2001, the Application Site has been regulated by the EPA under the IPC Licence which primarily focused / focuses on controlling and monitoring emissions to water and atmosphere and rehabilitation. Peat extraction had significant potential to increase suspended solids in surface water due to soil disturbance, drainage, and sediment runoff, which can increase turbidity, reduce water quality and affect aquatic life, deposit fine sediments which can smother fish spawning areas and invertebrate habitats, and potentially transport nutrients/contaminants, contributing to downstream pollution. Under the IPC licence, AER were / are submitted detailing monitoring of emissions to water and atmosphere, waste management, resource consumption, management and maintenance practices, and bog rehabilitation progress, including incidences / breaches and actions to rectify these and prevent recurrence.

The assessment considered numerous factors, including the potential impacts on habitat quality, species populations and supporting populations, and ecosystem functions. The findings indicate that the measures in place were and are adequate to prevent any significant negative effects on the conservation objectives European sites. Furthermore, the current and proposed rehabilitation plan actions have been / are designed to enhance the ecological value of the Application Site, ensuring that any potential risks are mitigated effectively and indicate a potential positive long-term effect on ecological value of the Application Site and surrounding area, enhancing and restoring hydrological function and habitat condition.

After a thorough examination, evaluation, and analysis, conducted in accordance with the best scientific knowledge and the conservation objectives of the Lower River Suir SAC, it has been determined that the peat extraction and all associated works and activities at the Application Site during the Peat Extraction Phase have not adversely affected the integrity of any European site, on its own or in combination with other plans or projects.

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DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

APPENDIX 1

Appropriate Assessment Screening Report

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DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

LONGFORDPASS, LITTLETON, LANESPARK AND DERRYVELLA BOGS, CO TIPPERARY: APPLICATION FOR SUBSTITUTE CONSENT

Remedial Appropriate Assessment Screening Report

Prepared for:

Bord na Móna Energy Ltd

BnM

Date: **June 2026**

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Remedial Appropriate Assessment Screening Report

REVISION CONTROL TABLE, CLIENT, KEYWORDS AND ABSTRACT

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Abstract: Fehily Timoney and Company is pleased to submit this remedial Appropriate Assessment Screening Report for selected Bord na Móna bogs of the Littleton Bog Group.

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1. INTRODUCTION

1.1 Background

Fehily Timoney and Company (FT) have been appointed to prepare this remedial Screening for Appropriate Assessment (rAASR) on behalf of Bord na Móna Energy Ltd ('the Applicant') as part of an application for substitute consent for the peat extraction and ancillary activities carried out by the Applicant at Longfordpass Bog, Littleton Bog, Lanespark Bog and Derryvella Bog (referred to as the Project and the Application Site in this rAASR), County Tipperary (Figure 1-1). The Application Site covers an extent of approximately 1,616 hectares (ha).

As required under the Council Directive 92/43/EEC (Habitats Directive), which came into force in Ireland on 10th June 1994 (considered the baseline for this assessment), this rAASR assesses the potential for significant effects on Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)[1] resulting from peat extraction and ancillary activities from 1994 to present day. The rAASR also assess the implementation of the Cutaway Bog Decommissioning and Rehabilitation Plans (Appendix 7, Appendix 8 and Appendix 9 of the rNIS) at the four bogs that comprise the Application Site, which have been compiled and were / are implemented and reviewed under Condition 10 of the Environmental Protection Agency (EPA) Integrated Pollution Control (IPC) Licence (P0499-01), following the cessation of peat extraction in 2017. Finally, the assessment considers the Project on its own and in combination with other past, current and planned projects and plans. The rAASR has considered likely significant effects on European sites from the Project since 1994 and considered the following phases:

- 'Peat Extraction Phase': peat extraction and ancillary activities at the Application Site from 1994 to the cessation of peat extraction in 2017 (July 1994 – 2017).
- 'Current Phase': the management of the Application Site from 2017 to present day, including decommissioning works and Rehabilitation Phase 1 works.
- 'Remedial Phase': the activities intended to be carried out at the Application Site into the future (Rehabilitation Phase 2 works), including future activities required under Conditions of the Integrated Pollution Control Licence (IPC) Licence (Ref. P0499-01), specifically related to the Cutaway Bog Decommissioning and Rehabilitation Plans (Appendix 7, Appendix 8 and Appendix 9 of the rNIS).

In 1994, the Application Site was an active peat extraction area dominated by cutaway bog and bare peat, and supporting infrastructure (works and buildings, yards, railway lines, and surface water drainage systems including silt ponds, drainage channels and surface water pumps). After 2017, the Application Site entered decommissioning and rehabilitation phases. Decommissioning at the Application Site is now largely complete with the removal of the last peat stockpiles in 2019 and the removal of the last temporary railway lines in 2024.

This rAASR was prepared in accordance with the following guidance:

- Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Commission Notice (2021) Brussels, 28.9.2021 C (2021) 6913 final (European Commission, 2021).

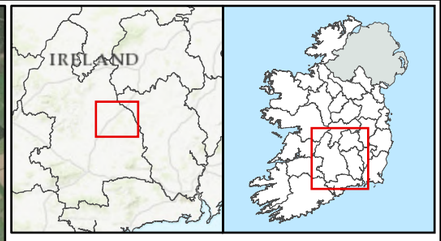
[1] Collectively SACs and SPAs make up the Natura 2000 sites, referred to as European sites. SACs are designated under the Council Directive 92/43/EEC referred to as the Habitats Directive and SPAs under Council Directive 79/409/EEC (amended by Directive 2009/147/EC) referred to as the Habitats Directive.

- Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission (2019). Brussels, (2019/C 33/01). OJ C 33, 25.1.2019.
- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin (2009, updated 2010) (Environment Heritage and Local Government, 2009).
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- Guidelines for Assessment of Ecological Impacts of National Road Schemes (NRA, 2009a).
- Guidelines for the Crossing of Watercourses during the Construction of National Road Schemes (NRA, 2008).
- Guidelines on protection of fisheries during construction works in and adjacent to waters (IFI, 2016).
- Ecological surveying techniques for protected flora and fauna during the planning of National Road Schemes (NRA, 2009b).

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Legend

- Site Boundary
- Lanespark Derryvella
- Littleton
- Longford Pass

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0 0.5 1 2 Kilometers

TITLE: Site Location			
PROJECT: Littleton Peat Extraction Substitute Consent			
FIGURE NO:	1.1		
CLIENT:	Bord na Móna Energy Limited		
SCALE:	1:75,000	**REVISION:**	0
DATE:	07/05/2026	**PAGE SIZE:**	A3

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1.2 Appropriate Assessment Process

AA screening (in this case remedial AA screening as described under Section 1.1) is necessary to determine whether an AA is required for a particular plan or project regarding its potential adverse effects on European sites. AA screening must be carried out by the Competent Authority, who requires the necessary objective information to inform their decision. AA screening is carried out in accordance with the following steps:

1. Establish whether the Project is directly connected with or necessary for the management of a European site, in accordance with Article 6(3) of the Habitats Directive.
2. Describe the Project and based on the nature of the Project, establish zones of influence for potential impacts arising from the Project.
3. Identify which European sites may be affected by determining connectivity / overlap between the Project's established zones of influence and each of the European sites, and the ecology and distribution of the relevant Qualifying Interest (QIs).
4. Identify the impacts of the Project that may result in significant effects (from the Project in isolation) on relevant European site(s).
5. Assess whether significant effects may arise from the Project in combination with other plans/projects,
6. Determine the requirement of AA, based on whether significant effects are deemed likely, or possible (in accordance with the precautionary principle).

Having regard to the European Commission Communication on the Precautionary Principle (European Commission, 2021) the:

> *"absence of scientific evidence on the significant negative effect of an action cannot be used as justification for approval of this action. When applied to Article 6(3) procedure, the precautionary principle implies that the absence of a negative effect on Natura 2000 sites has to be demonstrated before a plan or project can be authorised. In other words, if there is a lack of certainty as to whether there will be any negative effects, then the plan or project cannot be approved."*

Where significant effects are determined to be likely, or where there is uncertainty regarding the likelihood of significant effects, the Project will be required to undergo Appropriate Assessment, which will require the preparation of a Natura Impact Statement (NIS), or in this case a remedial NIS (rNIS).

The process of determining the likelihood of significant effects from a Project on European sites is an iterative process centred around a Source-Pathway-Receptor (S-P-R) model. In order for an effect to be established, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism is sufficient to conclude that a potential effect is not of any significance.

- Source(s) – source of effect e.g., pollutant run-off, noise, removal of vegetation, etc.
- Pathway(s) – functional link, or ecological pathway e.g., groundwater connecting to nearby qualifying wetland habitats.
- Receptor(s) – the qualifying habitats and species of European sites and ecological resources supporting those habitats/species.

Where significant effects are determined to be likely, or where there is uncertainty regarding the likelihood of significant effects, the project will be required under law to be subjected to Appropriate Assessment.

The EC notice (European Commission, 2019) prescribes the content of the Appropriate Assessment and notes the following:

- It must be ensured that the Appropriate Assessment addresses all elements contributing to the European site's integrity as specified in the conservation objectives and Standard Data Form and is based on the best available scientific knowledge in the field.
- The information required should be up to date.
- The Appropriate Assessment should also include a comprehensive identification of all the potential effects of the plan or project likely to be significant on the European site, taking into account in-combination and other effects likely to arise as a result of the combined action of the plan or project under assessment with other plans or projects.
- It should apply the best available techniques and methods to assess the extent of the effects of the plan or project (in this case the scheme) on the integrity of the European site(s).

This Project was / is not necessary for the management of any European sites and is therefore subject to rAA Screening. This report has been prepared to inform the competent authority in completing their statutory obligations in relation to Appropriate Assessment, as required by Article 6(3) under Council Directive 92/43/EEC (Habitats Directive). Furthermore, the AA screening cannot conclusively exclude connectivity between the Project's established zones of influence and European site's relevant QIs and a rNIS has been prepared in accordance with the requirements of Section 177G of the Planning and Development Act 2000 (as amended) which requires that a remedial rNIS contain:

> *"(a) A statement of the significant effects, if any, on the relevant European site which have occurred or which are occurring or which can reasonably be expected to occur because the development the subject of the application for substitute consent was carried out;*
> *(b) details of—:*
> *(i) any appropriate remedial or mitigation measures undertaken or proposed to be undertaken by the applicant for substitute consent to remedy or mitigate any significant effects on the environment or on the European site;*
> *(ii) the period of time within which any such proposed remedial or mitigation measures shall be carried out by or on behalf of the applicant;*
> *(c) such information as may be prescribed under section 177N;*
> *(d) and may have appended to it, where relevant, and where the applicant may wish to rely upon same:*
> *(i) a statement of imperative reasons of overriding public interest;*
> *(ii) any compensatory measures being proposed by the applicant."*

1.3 Information Used to Inform the Remedial Appropriate Assessment Screening

1.3.1 Desk Studies

The desk study undertaken for this assessment included a review of available data pertaining to the Application Site and surrounding area, as well as information pertaining to the relevant European site(s). The purpose of the desk study was to obtain information on the baseline ecological conditions and sources of information included the following:

- Bord na Móna 2018 Habitat Maps for the Application Site as obtained from ecological surveys completed to inform the Cutaway Bog Decommissioning and Rehabilitation Plans for each of the four bogs.
- Bord na Móna Cutaway Bog Decommissioning and Rehabilitation Plans and/or reviews for the four bogs:
    - Cutaway Bog Decommissioning and Rehabilitation Plan - Littleton, 2026 (Appendix 7 of the rNIS).
    - Cutaway Bog Decommissioning and Rehabilitation Plan - Longfordpass, 2026 (Appendix 8 of the rNIS).
    - Ballybeg/Lanespark/Derryvella Bog Cutaway Bog Decommissioning and Rehabilitation Plan, 2025 (Appendix 9 of the rNIS).
- Bord na Móna Biodiversity Action Plan 2016-2021 (2016) Brosna Press, Ferbane.
- Review of the publicly available National Biodiversity Data Centre (NBDC) information pertaining to 10km grid S25[2], accessed on the 20 November 2025.
- Review of records of otter and otter signs in and around the Application Site from the National Otter Survey - National Biodiversity Data Centre accessed on the 20 November 2025.
- Selected Aerial Maps for 1973, 1995, 2001 and 2018 (Appendix 3 of the rNIS) provided by Bord na Móna.
- NPWS Site Synopsis Reports and Site-Specific Conservation Objectives (SSCO) for the European Sites considered in the rAASR.
- Review of NPWS Article 17 reporting and mapping for 2019, 2013 and 2007 accessed via https://www.npws.ie/maps-and-data/habitat-and-species-data/article-17-gis-and-metadata-downloads.
- Hydrology and hydrogeological attributes of the Application Site, especially in relation to the European sites, as obtained from the EPA Maps accessed at https://gis.epa.ie/EPAMaps/.
- Water Framework Directive (WFD), Geological Survey of Ireland (GSI) and Inland Fisheries Ireland (IFI).
- Review of species records from the NPWS Flora (Protection) Order, 2015 (S.I. No. 356 of 2015) Map Viewer - Vascular Plants, Charophytes and Lichens[3].
- No bryophytes are listed for the Application Site[4].

[2] Biodiversity reports generated from the NBDC Biodiversity Maps website: https://maps.biodiversityireland.ie/Map
[3] https://www.npws.ie/maps-and-data/npws-flora-protection-order-2022-map-viewer-vascular-plants-charophytes-and-lichens accessed on the 24 November 2025
[4] https://dahg.maps.arcgis.com/apps/webappviewer/index.html?id=71f8df33693f48edbb70369d7fb26b7e accessed on the 24 November 2025

- No vascular plants are listed for the Application Site[5].
- Review of relevant available historic and current plans (detailed in Table 4-1).
- Fehily Timoney ecological data from recent (2025) field assessments in support of future land use applications where applicable to the QIs and this rAASR.
- Integrated Pollution Control (IPC) Licence, P0499-01.

1.3.2 Scoping and Consultation

Fehily Timoney undertook an EIA scoping and consultation exercise in December 2023 and again in January 2026 during the preparation of the application for Substitute Consent.

A scoping letter was issued on the 1 December 2023 to various stakeholders including the Department of Housing, Local Government and Heritage and Inland Fisheries Ireland (IFI).

Response was received from Department of Housing, Local Government and Heritage on the 4 December 2023 (reference no issued: G Pre00317/2023), acknowledging receipt with instruction to continue further correspondence with the Development Application Unit (DAU), the relevant stakeholder representative in terms of the AA for the Project. The correspondence was forwarded to the relevant stakeholder representative on the 6 December 2023. No further response or comment was received related to the initial scoping letter.

Response was received from IFI on 1 December 2023 acknowledging receipt of the scoping letter and that the e-mail and letter was forwarded to the relevant staff member. No further response or comment was received related to the initial scoping letter.

A scoping letter was again issued on the 20 January 2026 to various stakeholders including the Department of Housing, Local Government and Heritage and Inland Fisheries Ireland (IFI). No responses have been received to date.

1.4 Statement of Authority

This remedial Appropriate Assessment Screening Report was prepared by Barbara Kasl. Barbara holds a B.SC.Hons in Zoology and a PhD in Animal, Plant and Environmental Sciences from University of the Witwatersrand (Johannesburg, South Africa). She has 20 years' experience in the environmental and consulting sectors, predominantly as a terrestrial fauna specialist and behavioural ecologist, with experience in impact assessment and associated technical reporting across various projects, including mining and processing, renewable energy, servitudes (roads, pipelines, powerlines), supporting infrastructure and town-related development (housing and industrial).

This remedial Appropriate Assessment Screening Report has been reviewed by Fehily Timoney Principal Ecologist and Associate Director Rita Mansfield. Rita holds a BSc. (Hons) in Applied Ecology and a H. Dip Environmental Protection and Pollution Control. Rita is experienced as a technical ecology lead within the environmental and planning services sector. She is a qualified ecologist of 22 years' experience with responsibility for environmental impact assessment, planning applications (conventional and strategic infrastructure development), Appropriate Assessment, foreshore licensing, and stakeholder engagement for large scale plans and projects in Ireland, including for industrial peat extraction.

[5] https://heritagedata.maps.arcgis.com/apps/webappviewer/index.html?id=a41ef4e10227499d8de17a8abe42bd1e accessed on the 24 November 2025

Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR was completed by Hydro-Environmental Services (HES). HES are a specialist geological, hydrological, hydrogeological and environmental practice which delivers a range of water and environmental management consultancy services to the private and public sectors across Ireland and Northern Ireland. HES was established in 2005. Their core areas of expertise and experience include upland hydrology and drainage design. They routinely complete impact assessment reports for hydrological and hydrogeological aspects for a variety of project types.

2. DESCRIPTION OF THE PROJECT

The full project description is provided in Chapter 4 Description of Development in Volume 2 of the rEIAR, which adopts July 1988 as the assessment baseline, the year when the European Communities EIA Directive was required to be transposed into Irish law. This rAASR assesses activities within the Application Site from 1994, the status of which was confirmed from assessing the 1988 baseline status and changes in activities leading up to cessation of peat extraction in 2017.

2.1 Description of the Application Site

The Application Site occupies approximately 1,616ha and comprises Longfordpass Bog, Littleton Bog, Lanespark Bog, and Derryvella Bog. The Application Site is in Co Tipperary, within the townlands of Littleton, Gorthnahoe and New Birmingham. The Application Site lies largely south of the M8 motorway, with Longfordpass Bog lying north of the M8 motorway (Figure 1-1).

The Application Site overlaps with the S25 (south of M8), S26 (north of M8) and S15 10km^2 national grids (specifically the 2km grids: S25A, S25B, S25C, S25F, S25G, S25H, S25I, S25J, S25M, S25P, S25N, S26A, S26F, S26G and S15V[6]).

The Application Site lies within WFD Sub-Catchment Suir_SC_040, which drains into the upper reaches of the River Suir via the WFD River Sub Basins and associated streams. The main streams draining the northern extent of the Application Site are the Drish River and its tributaries (the Clover River and Breagagh River) and the Black (Twomileborris) River with its tributary, the North Glengoole River. The Drish River drains north and then southwest wrapping around the Application Site boundary before joining the River Suir downstream of Thurles. Further downstream the River Suir enters the Lower River Suir SAC. The Drish River suffered significant pollution from a zinc and lead mine at Lisheen until recently (AECOM, 2020 in Triturus, 2024).

The River Suir (SUIR_070) (IE_SE_16S020900) is the main receiving waterbody from the Application Site, before entering the Lower River Suir SAC. The River Suir flows into the Upper Suir Estuary (Transitional Waterbody IE_SE_100_0600), the Middle Suir Estuary (Transitional Waterbody IE_SE_100_0550), the Lower Suir Estuary (Transitional Waterbody IE_SE_100_0500) and the Barrow Suir Nore Estuary (Transitional Waterbody IE_SE_100_0100) before draining into the Waterford Harbour (Coastal Waterbody IE_SE_100_0000) and Eastern Celtic Sea.

The historical and current EPA Q-values of the surrounding water bodies show great variability across the spatial and temporal scale with no clear or consistent trends that could be linked to activities at the Application Site. Where Q-values of the local streams are available, values just before 1994 and just after 1994 were consistent at most monitoring stations across those years, with no improvement at any of the monitoring stations and deterioration in Q-value in one monitoring station in the Clover River, one monitoring station in the Drish River, and three monitoring stations in the River Suir.

[6] National Biodiversity Data Centre's Biodiversity Maps available at https://maps.biodiversityireland.ie/Map and accessed on the 14 November 2025

Between 1994 and 2017, the Q-values for the rivers in the immediate area of the Application Site again show fluctuation with no consistent trends. The Black (Twomileborris) River showed a very minor decline at its upstream monitoring station. The Drish River's monitoring stations showed the most severe declines in Q-value, except at the downstream monitoring station, which ended on a Good Q-value in 2017. This indicates that any effects in the rivers remain local and attenuate downstream, not adversely affecting the River Suir or the Lower River Suir SAC.

Q-values of the local streams pre- and post-2002 (pre- and post-implementation of IPC Licence requirements) also fluctuate with no clear trends. From 1999 to 2008 the Drish River shows some deterioration in Q-value, with the downstream monitoring station recording a Poor Q-value in 2008. The receiving section of the River Suir also shows decline in Q-value in 2008 but is marginally worse than the receiving Drish River, indicating that deterioration in this section of the River Suir is affected by tributaries in sub-catchments adjacent to and upstream of the Application Site.

Although an impact from the Project on local streams and rivers cannot be excluded, there is no evidence to support that these local impacts are adversely affecting the downstream River Suir or the Lower River Suir SAC. With the rehabilitation of the Application Site, a gradual improvement in water quality in local streams is expected in the absence of other impacts in the catchment, but the quality of the rivers will still be subjected to the existing pressures in the catchment.

The Application Site is underlain by a sequence of Carboniferous Period limestone formations, with the bulk of the Application Site on Waulsortian limestone (unbedded lime-mudstone), intersecting formations of the Tournaisian and Visean limestone.

Most of the Application Site overlaps the karstic Thurles GWB (IE_SE_G_158), a Regionally Important Aquifer, and the Templemore GWB (IE_SE_G_131), an overall poorly productive bedrock rated as a Locally Important Aquifer that may be moderately productive in very local zones[7]. There are geological faults along the western and southeastern boundaries of the Application Site. There are no karst features mapped within the Application Site due to the coverage of peat and glacial subsoils.

The groundwater vulnerability to contamination has been rated as moderate across most of the Application Site, with limited areas around the outskirts rated as highly vulnerable to contamination as a result of human activities. The historical and current WFD status for all GWBs across the Application Site is Good and indicates that the on-site activities have not detrimentally impaired local GWBs, supported by the low infiltration rates indicated in Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR and the WFD assessment completed for the Application Site (Appendix 8-2 of Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR).

Groundwater bodies relevant to the Application Site and surrounds have retained good WFD status over the entire recording period[8] and there is no evidence to suggest that the Project had any significant detrimental effect on the WFD status of groundwater bodies and the 'good' WDF status is expected to continue into the future in absence of other catchment pressures.

[7] Information obtained from the Geological Survey of Ireland's Spatial Resources online viewers accessed via https://www.gov.ie/en/department-of-climate-energy-and-the-environment/policy-information/geological-survey-ireland/#data-and-maps

[8] WDF Status and Risk for groundwater bodies access at EPA Maps on the 27 February 2026

2.2 Overview of Peat Extraction Activity at the Application Site

Peat extraction maps for the years 1973, 1988, 1995, 2004 and 2017 are presented in Figure 2-1 to Figure 2-5 and illustrate the extent of peat extraction at the Application Site over time. These should be read together with the chronological summaries in this section. Aerial images for the years 1973, 1995, 2004 and 2018 are included in Appendix 3 of the rNIS.

2.2.1 Commencement of Peat Extraction

The primary and greatest land-use change associated with peat extraction and ancillary activities on the Application Site occurred during the initial drainage and vegetation removal in advance of the commencement of peat extraction. Clearance and drainage of the Application Site commenced in 1941, with the Application Site experiencing a relatively abrupt change in land cover with the commencement of peat extraction in 1952. Peat extraction consisted of a combination of sod peat and milled peat extraction up to 1984, with milled peat the only form of peat extraction after 1984.

As part of the development of the Application Site for peat extraction, parallel surface water drains were created. The strips of bog between these drains were retained to form peat extraction 'fields'. By 1988 drainage channels, silt ponds, outfalls and pumps were extant at the Application Site as follows:

- Longfordpass Bog: Drainage works first commenced in Longfordpass Bog by 1947. The earliest available aerial imagery dating from 1973 shows sod peat drainage inserted at Longfordpass Bog. By 1988, there was 1 no. pump, and 3 no. silt ponds installed on Longfordpass Bog.
- Littleton Bog: Drainage works first commenced in Littleton Bog by 1941 according to Bord na Móna Annual Reports. The earliest available aerial imagery dating from 1973 shows sod peat drainage inserted at Littleton Bog. By 1988, there were 12 no. pumps installed on Littleton Bog.
- Lanespark Bog: Drainage works first commenced in Lanespark Bog by 1968. The earliest available aerial imagery dating from 1973 shows drainage inserted at the periphery of Lanespark Bog. By 1988 the bog was fully drained for industrial scale peat extraction, and there were no pumps, and 4 no. silt ponds installed on Lanespark Bog.
- Drainage works first commenced in Derryvella Bog by 1968. The earliest available aerial imagery dating from 1973 shows drainage inserted at the periphery of Derryvella Bog. By 1988 the bog was fully drained for industrial scale peat extraction, and there were no pumps, and 1 no. silt ponds installed on Derryvella Bog.

The main access point to the Application Site was via the local road the L2201 running from southeast to northwest adjacent to Lanespark Bog, into Littleton Briquette Factory, which was built in 1981 and opened in 1982. Ancillary services and supporting infrastructure were also largely established by 1988 and maintained and upgraded as required.

It is estimated that in 1973, 1,052ha across the Application Site were cleared and subjected to peat extraction. In 1988 this increased to approximately 1,353ha across the Application Site being cleared, drained, and subject to peat extraction, and a total of approximately 110ha were drained but not subject to peat extraction. Approximately 144ha were out of peat extraction in 1988.

Some drain maintenance was carried out during the full year, but it was mainly restricted to outside the peat extraction season (i.e. from October to March). General activities within the Application Site over a calendar year from 1952 when peat extraction commenced to July 1988, included:

- January to March: Drain/machinery/pump/silt pond maintenance, stockpile removal, peat transportation
- April to June: Peat extraction, stockpile development/removal, peat transportation
- July to September: Peat extraction, stockpile development/protection/removal, peat transportation
- October to December: Drain/machinery/pump/silt pond maintenance, stockpile removal, peat transportation

An estimate of the volumes produced during the period July 1988—2017 was determined based on peat extraction volumes taken from the Bord na Móna Annual Reports, peat extraction records at the Application Site and an average of production tonnages over the period from 1978 – 1987 when annual quantities were unavailable.

The volumes of peat removed from the Application Site varied from year to year with a general and gradual increase with time as more of the Application Site was developed and became available for peat extraction. Fluctuations in peat extraction volumes are generally attributable to weather conditions in any given year, with wetter weather resulting in lower volumes of peat extraction due to poorer ground conditions for operating machinery, and poorer peat drying conditions; conversely, drier weather usually resulted in higher volumes of peat extraction due to better ground and drying conditions.

Between 1952 and 1988, approximately 3,534,355 tonnes of sod and milled peat were extracted at the Application Site. From 1952 to 1978, the volume of peat extracted was an average of 50,000 – 60,000 tonnes per year. Preparation for the extraction of milled peat began in 1975 and extraction of milled peat commenced in 1978. From 1978 to 1984, both sod and milled peat extraction were being carried out at the Application Site where an average of 179,543 tonnes of peat was extracted per year. The extraction of milled peat increased from approximately 5,317 tonnes in 1979 to approximately 246,833 tonnes in 1988.

2.2.2 Peat Extraction Phase: 1988 to 2017 (Drainage, Peat Extraction & Associated Activities)

Sod peat extraction ceased by 1984. From 1988 onwards, milled peat extraction and ancillary activities were fully underway. The deepening and maintenance of the drains continued beyond 1988, up until the cessation of peat extraction in 2017.

As the areas subject to peat extraction from 1988 to 2017 reduced in their extent and the depth of peat available was reduced after each harvest, the extent and number of drains requiring deepening and maintenance reduced accordingly. This also resulted in a reduction of the intensity of supporting activities such as stockpiling, use of heavy machinery, fuel use and rail movements.

Although control measures were implemented on Application Site before 1988, other than the silt ponds, the formal records of such activities were minimal. With the IPC Licence taking effect in 2001, the control measures, monitoring and environmental reporting became more formalised, particularly fuel storage and handling procedures, dust control measures, the installation of silt ponds, maintenance of railway and water management features (drains, pumps and silt ponds), waste management, emissions to water and atmosphere, and archaeological finds.

Drain maintenance and the general activities as described leading up to 1988 would have continued through to cessation of peat extraction and would have also reduced with reduction of peat extraction areas. Temporary rail tracks would have been added and removed alongside peat stockpiles as required.

The status at the Application Site (Figure 2-1 to Figure 2-5) is as follows:

- Longfordpass Bog:
  - In 1988, peat extraction was at its peak across the Longfordpass Bog. Investigation of satellite imagery and annual reports indicate that by 1988, approximately 226ha of Longfordpass Bog was subject to peat extraction. Thus, the main landcover type at this time was cutover peat. Drainage was already installed, predominantly in a north-south orientation.
  - Railway infrastructure was laid in the bog.
  - In 1988, there was 1 no. pump, and 3 no. silt ponds installed on Longfordpass Bog.
  - Between 1988 and 2017, the extent of peat extraction gradually decreased. In 1995, approximately 173ha were subject to peat extraction.
  - Cessation of peat extraction had occurred by 2017.
  - There is now 1 no. pump, and 3 no. silt ponds installed on Longfordpass Bog.
  - The status in 1994 was as described for 1988, with all infrastructure in place and activities ongoing, but peat extraction would have just surpassed its peak extraction period, and most extraction-related activities would have started to decrease by 1994.
- Littleton Bog:
  - In 1988, peat extraction was being carried out across the majority of Littleton Bog. Investigation of satellite imagery and annual reports indicate that by 1988, approximately 795ha of Littleton Bog was subject to peat extraction, while approximately 99ha were drained (but not subject to peat extraction). Thus, the main landcover type at this time was cutover peat.
  - Railway infrastructure was laid at Littleton Bog.
  - In 1988, there were 12 no. pumps installed on Littleton Bog.
  - In 1995, there was a significant reduction in peat extraction at Littleton Bog and approximately 134ha were subject to peat extraction, approximately 760ha were drained (but not subject to peat extraction). A gradual and consistent reduction in peat extraction activity can be seen in both Littleton North and Littleton South from 2004 onwards.
  - Cessation of all peat extraction activity had occurred by 2017.
  - There is now 1 no. silt pond on the western boundary of Littleton Bog. There are 4 no. pump stations at Littleton Bog. None of the 4 no. pumps are active today.
  - The status in 1994 was as described for 1988, with all infrastructure in place (other than one additional silt pond added to the bog after 1994) and activities ongoing. Peat extraction would have been near its peak with extraction-related activities starting to decrease in 1994/1995.
- Lanespark Bog:
- In 1988, peat extraction was at its peak across Lanespark Bog. Investigation of satellite imagery and annual reports indicate that by 1988, approximately 239ha of Lanespark Bog were subject to peat extraction, occupying the majority of the central portion with some undeveloped land along the northeastern and southwestern boundaries. Thus, the main landcover type at this time was cutover peat. Drainage was already installed, predominantly in a north-south orientation.
  - Railway infrastructure was laid in the bog.
  - In 1988, there were no pumps, and 4 no. silt ponds installed on Lanespark Bog.
  - Between 1988 and 2017, the extent of peat extraction reduced. In 1995, approximately 201ha were subject to peat extraction. In 2004, approximately 65ha were subject to peat extraction.
  - Cessation of all peat extraction occurred by 2017.

- There are now no pumps in Lanespark Bog. There are 4 no. silt ponds i.e. 2 no. along the northern boundary of Lanespark Bog and 2 no. along the southern boundary.
- The status in 1994 was as described for 1988, with all infrastructure in place and activities ongoing, but peat extraction would have just surpassed its peak extraction period, and most extraction-related activities would have started to decrease by 1994.

- Derryvella Bog:
  - In 1988, peat extraction was at its peak across Derryvella Bog. Investigation of satellite imagery and annual reports indicate that by 1988, approximately 92ha of Derryvella Bog were subject to peat extraction. Thus, the main landcover type at this time was cutover peat. Drainage was already installed, predominantly in a north-south orientation.
  - Railway infrastructure was laid in the bog.
  - In 1988, there were no pumps, and 1 no. silt ponds installed on Derryvella Bog.
  - Between 1988 and 2017, the extent of peat extraction reduced. In 1995, approximately 44ha were subject to peat extraction. In 2004, approximately 30ha were subject to peat extraction.
  - Cessation of all peat extraction occurred by 2017.
  - There are now no pumps in Derryvella Bog. There are 1 no. silt ponds. along the western boundary.
  - The status in 1994 was as described for 1988, with all infrastructure in place and activities ongoing, but peat extraction would have just surpassed its peak extraction period, and most extraction-related activities would have started to decrease by 1994.

Improvements and modernisation of machinery occurred between 1988 and 2017 which increased the efficiency and speed of operations over this time period. There were significant developments in diesel-powered engines which would have resulted in the use of more fuel-efficient tractors on the bogs with significantly cleaner exhaust emissions compared to earlier counterparts.

An estimate of the volumes produced during the period July 1988 - 2017 was determined based on peat extraction volumes taken from the Bord na Móna Annual Reports, production records at the Application Site and an average of peat extraction tonnages over the period from 1978 – 1987 when annual quantities were unavailable.

Between July 1988 and 2017, an average of 170,593 tonnes of peat were extracted each year, with a total of approximately 5,117,798 tonnes extracted between July 1988 and the cessation of peat extraction in 2017.

The volumes of peat removed from the Application Site varied from year to year with a general and gradual decrease with time as more of the Application Site became exhausted thus reducing the area available for peat extraction. Fluctuations in peat extraction volumes are generally attributable to weather conditions in any given year, with wetter weather resulting in lower volumes of peat extraction due to poorer ground conditions for operating machinery, and poorer peat drying conditions; conversely, drier weather usually resulted in higher volumes of peat extraction due to better ground and drying conditions.

By July 1988, the extraction of sod peat had ceased and milled peat production had increased significantly e.g. from approximately 5,317 tonnes in 1978 to approximately 246,833 tonnes in 1987. The average volume of milled peat extracted per year during the period July 1988—2017 was approximately 170,593 tonnes. The milled peat was supplied to Littleton Briquette Factory from the year it opened (1982) to the year in which the factory closed (2018).

Peat extraction ceased at the Application Site in 2017. Following the cessation of peat extraction, any remaining peat stockpiles were delivered to Littleton Briquette Factory, Shannonbridge Power Station and Derrinlough Briquette Factory, with the last stockpile being sent here in mid-2019.

N

Tailte Éireann

Tailte Éireann

Tailte Éireann

Tailte Éireann

Tailte Éireann

Tailte Éireann

Legend

Application Boundary

1973 Peat Production

Drained - Not Subject to Peat Extraction

Neither Drained nor Subject to Peat Extraction

Subject to Peat Extraction

0 0.5 1 2 Kilometres

BnM

Littleton Substitute Consent
1973 Peat Extraction Activities

DRWG No:	Scale:	Drawn by:	Date:
BNM-PG-24-21-37_v6	1:35,000	JG	23/01/2026

Tailte Éireann CYAL50510154

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N

Castletown
Black River
Abhainn
Bootabeha Br.
Mound
Carrowna
Shanballyduff
Ballyduff Br.
Church
Grave Yd
Manselstown
Kilmakill
North
An Abhainn Dubh
River
R639
Fennor
Graiguepadeen
Longfordpass Br.
Boat-shaped Fort
Church
Longfordpass East
Abhainn Na Drise
Drish River
135
Mound
Piercetown
Noard
Athlummon
Piercetown
Clooncleagh
Clooncleagh
River Dysse
Black River
Moated Site
Coldfields
Garraun
Longfordpass South
Garryclogh
Twomileborris
Buiríos Léith
Borris
Clover River
Borris
Leigh
Gortnahoo
Gort na hUamha
Castle
Motte
Church
N75
Blackcastle
Skehane
Tumpike
Churches
Derrycoogh
Lahardan Lower
Moated Site
Moated Site
M8
Monaraheen
Castle
Rathcunikeen
Ballyerk
Ag Abhainn Dubh
R639
Mound
Coolcroo
Derrynaveagh
Buolick
Noard
Derheen River
Newhill Br.
Newhill
Ballyvinane
Lackendarragh Cross
Nowhill
Ballynamona
Castle
Ballydavid
Moated Site
Coole
Knockboy
Littleton
An Baile Beag
Castle
Clonoura
Ballysloe
Gorteen
Castle
Ballybeg
Ballymurreen Br.
Black River Br.
Poyntstown
Melisson
Old Deer Park
Castle
Ballyley River
Derryvella
New Birmingham
Gleann an Ghuail
Liskeveen
Glengoole North
Glengoole South
Holy Well
Church
Lanespark
17
18
19
22
23
24
25
26
Earlshill
Moated Site
Mound
Waterloo Hill
Castle
Church

Legend

- Application Boundary

1988 Peat Production

- Drained - Not Subject to Peat Extraction
- Neither Drained nor Subject to Peat Extraction
- Subject to Peat Extraction

Kilometres
0 0.5 1 2

BnM

Littleton Substitute Consent
1988 Peat Extraction Activities

DRWG No:	Scale:	Drawn by:	Date:
BNM-PG-24-21-36_v5	1:35,000	JG	23/01/2026

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CYAL50510154
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N

Castletown
Black River
Abhainn
Bootabeha Br.
Manselstown
Shanballyduff
Ballyduff Br.
Church
Grave Yd
Kilmakill
Mound
Black An Abhainn Dubh River
Fennor
R639
Graiguepadeen
Longfordpass Br.
Star shaped Fort
Church
Longfordpass East
Piercetown
Mound
Abhainn Na Drise
Drish River
135
Noard
Athlummon
Clooncleagh
River Dysse
Coldfields
Garraun
Black River
Twomileborris
Buiríos Léith
Borris
Clover River
Leigh
Moated Site
Longfordpass South
Garryclogh
Gortnahoo
Gort na hUamha
N75
Blackcastle
Lahardan Lower
Skehane
Tumpike
Churches
Derrycoogh
M8
Monaraheen
Castle
Rathcunikeen
Ballyerk
Ag Abhainn Dubh
Coolcroo
Mound
Derryveen River
Newhill Br.
Newhill
Ballyvinane
Lackendonnell Cross
Ballynamona
Ballydavid
Littleton
An Baile Beag
Black River
Ballybeg
Ballyhea River
Derryhogan
Derryvella
Old Deer Park
New Birmingham
Gleann an Ghuail
Glengoole North
Glengoole South
Holy Well
Church
Lanespark
Mound
Waterloo Hill
Castle
Church
Poyntstown
Melissan
Buolick
Motte
Coole
Knockboy
Cloonoura
Ballysloe
Gorteen
Earlshill
17
18
19
22
23
24
25
26
27

Legend

Application Boundary

1995 Peat Production

Drained - Not Subject to Peat Extraction

Neither Drained nor Subject to Peat Extraction

Subject to Peat Extraction

0 0.5 1 2 Kilometres

BnM

Littleton Substitute Consent
1995 Peat Extraction Activities

DRWG No:	Scale:	Drawn by:	Date:
BNM-PG-24-21-35_v5	1:35,000	JG	23/01/2026

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N

Castletown

Black River

Abhainn

Bootabeha Br.

Mound

Black

An Abhainn Dubh

River

Fennor

Carrowna

Manselstown

Shanballyduff

Ballyduff Br.

Church

Grave Yd

135

Kilmakill

North

R639

Graiguepadeen

Abhainn Na Drise

Drish River

Mound

Piercetown

Noard

Star shaped Fort

Church

Longfordpass East

Athlummon

Piercetown

Clooncleagh

Clooncleagh

River Dyrse

Moated Site

Coldfields

Garraun

Black River

Longfordpass South

Garryclogh

Twomileborris

Buiríos Léith

Borris

Clover River

Borris

Leigh

Gortnahoo

Gort na hUamha

Blackcastle

N75

Castle

Motte

Church

Skehane

Tumpike

Churches

Derrycoogh

Lahardan Lower

Moated Site

Moated Site

M8

Monaraheen

Castle

Rathcunikeen

Ballyerk

Ag Abhainn Dubh

R639

Brownreagh

Church

Motte

Castle

Coolcroo

Mound

Noard

Derrygeen River

Buolick

Newhill Br.

Newhill

Ballyvinane

Lackendarragh Cross

Ballynamona

Nowhill

Motte

Castle

Moated Site

Ballydavid

Coole

Knockboy

Littleton

An Baile Beag

Clonoura

Ballysloe

Derryhogan

Black River

Gorteen

Castle

Ballybeg

Black River Br.

Poyntstown

Melisson

Old Deer Park

Castle

Ballyley River

Derryvella

New Birmingham

Gleann an Ghuail

Ballynast

Liskeveen

Glengoole North

Glengoole South

Holy Well

Church

Lanespark

17

18

19

21

22

23

24

25

26

Earlshill

27

Moated Site

Mound

Waterloo Hill

Castle

Church

Legend

Application Boundary

2004 Peat Production

Drained - Not Subject to Peat Extraction

Neither Drained nor Subject to Peat Extraction

Subject to Peat Extraction

0 0.5 1 2 Kilometres

BnM

Littleton Substitute Consent 2004 Peat Extraction Activities

DRWG No:	Scale:	Drawn by:	Date:
BNM-PG-24-21-34_v5	1:35,000	JG	23/01/2026

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N

Kilimakill

Longfordpass North

Longfordpass East

Longfordpass South

Graiguepadeen

Fennor

Carrowna

Manselstown

Shanballyduff

Piercetown

Noard

Athlummon

Clooncleagh

Coldfields

Garraun

Twomileborris
Buiríos Léith

Borris

Leigh

Garryclogh

Gortnahoo
Gort na hUamha

Derrycoogh

Tumpike

Blackcastle

Lahardan Lower

Monaraheen

Skehane

Rathcunikeen Upper

Coolcroo

Ballyerk

Newhill

Ballynamona

Ballyvinane

Ballydavid

Littleton
An Baile Beag

Ballybeg

Derryhogan

Derryvella

Lanespark

Noard

Buolick

Coole

Clonoura

Knockboy

Ballysloe

Gorteen

Poyntstown

Melisson

New Birmingham
Gleann an Ghuail

Glengoole North

Glengoole South

Earlshill

Liskeveen

Castletown

Black River
Abhainn Dubh
An Abhainn Dubh
Abhainn Na Drise
Drish River
River Drise
Clover River
Derheen River
Ballyerk River
Black River

R639
N75
M8

Mound
Church
Castle
Moated Site
Motte
Churches
Holy Well
Star-shaped Fort

Tailte Éireann

Legend

- Application Boundary

2017 Peat Production

- Drained - Not Subject to Peat Extraction
- Neither Drained nor Subject to Peat Extraction
- Subject to Peat Extraction

0 0.5 1 2 Kilometres

BnM

Littleton Substitute Consent
2017 Peat Extraction Activities

DRWG No:	Scale:	Drawn by:	Date:
BNM-PG-24-21-33_v5	1:35,000	JG	23/01/2026

CYAL50510154

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2.2.3 Current Phase (Including Rehabilitation Phase 1): 2017 to Present Day

Peat extraction ceased at the Application Site in 2017. The Application Site still operates under the conditions of IPC Licence P0499-01 (waste handling and disposal, the decommissioning and rehabilitation of cutaway bogs and monitoring and maintenance, particularly around water management).

As required by the IPC Licence, waste items are and will continue to be removed for recycling or disposal, using external contractors with the required waste collection permits, and waste records are and will continue to be maintained. Rehabilitation Phase 1 works commenced in Littleton, Longfordpass, Lanespark and Derryvella in 2018 with extensive drain-blocking and hydrological management.

The only decommissioning underway at the Application Site was the removal of remaining peat stockpiles from the bogs (delivered to Littleton Briquette Factory, Shannonbridge Power Station and Derrinlough Briquette Factory), completed by mid-2019 and the removal of rail infrastructure in Lanespark was completed in 2024. Infrastructure to be decommissioned at the Application Site will be completed in line with all conditions of the IPC Licence.

Bord na Móna rehabilitates the bogs in a programmed approach under the requirements of the IPC Licence (Condition 10.3) through Cutaway Bog Decommissioning and Rehabilitation Plans (Appendix 7 Appendix 8 and Appendix 9 of the rNIS). Following from the cessation of the licenced activity (i.e. peat extraction), the key objective of the Cutaway Bog Decommissioning and Rehabilitation Plans is environmental stabilisation. The rehabilitation of the bogs supports biodiversity e.g., plants, insects, bird and mammals, and the formation of wetland peatland and woodland habitats. In addition, peatland rehabilitation will bring a range of benefits to the local community via improvements in the local landscape, and it is also complying with national policies and strategies regarding the reduction of carbon emissions, supporting biodiversity and enhancing water quality. It is anticipated it will take up to 30 years for naturally functioning wetland and peatland ecosystems to fully re-establish.

The cessation of peat extraction has allowed the colonisation of vegetation into the area, gradual succession of vegetation communities in the older decommissioned areas, reduced dust and emissions to atmosphere, and lowered local ambient noise levels.

2.2.4 Remedial Phase

For Rehabilitation Phase 2 works, Bord na Móna are proposing to carry out additional rehabilitation in Derryvella Bog in 2026. No additional rehabilitation works are proposed at Littleton, Longfordpass and Lanespark bogs, other than the measures described under Rehabilitation Phase 1 (Section 2.2.3), including revegetation and monitoring. The rehabilitation, monitoring and maintenance will proceed as per the requirements of IPC Licence P0499-01, (waste handling and disposal, the decommissioning and rehabilitation of cutaway bogs and monitoring and maintenance, particularly around water management).

As with the Current Phase, the active ongoing remediation / rehabilitation of the Application Site during the remedial phase and the continued natural recolonisation and succession with flora, habitats and fauna, coupled with continued monitoring and aftercare means the continued removal of potential sources for detrimental effects, and the improvement of the area for ecological gain through colonisation by native and indigenous species. With the rehabilitation at the Application Site, the local area, neighbouring areas and downstream areas (which includes the Lower River Suir SAC) will stabilise and improve and may also benefit from biodiversity improvements at the Application Site.

It is expected that more of the Application Site will develop into the wetland habitats and contribute to the biodiversity improvements described under the Current Phase.

3. IDENTIFICATION OF RELEVANT EUROPEAN SITES WITHIN THE LIKELY ZONE OF INFLUENCE

3.1 Assessment Approach Overview

In terms of the AA process (Section 1.2), this section establishes the zones of influence (ZoI) for potential impacts arising from the Project, identifies the European sites that may be affected by the Project's ZoI, and identifies the impacts of the Project that may result in significant adverse effects.

In order to achieve these outcomes, the following was completed:

1. The potential impacts of the Project are identified to establish sources for potential adverse effects. The impacts have been considered for the three phases:
    a. Peat Extraction Phase: 1994-2017.
    b. Current Phase (Including Rehabilitation Phase 1): 2017 to Present Day.
    c. Remedial Phase (Rehabilitation Phase 2).
2. The impacts that have been considered and discussed in terms of their ZoI include:
    a. Direct habitat loss and degradation on the Application Site in terms of supporting habitats and species as there is no overlap with European sites.
    b. Indirect loss and degradation of ex-situ habitats in neighbouring and downstream areas.
    c. Hydrological impacts through deviations in water flow and sediment load and alteration to water chemistry which may indirectly impact European sites or *ex situ* habitats.
    d. Hydrogeological impacts through dewatering/recharge and contamination through shared groundwater bodies which may indirectly impact European sites or *ex situ* habitats.
    e. Dust and emissions which may affect *ex situ* habitats.
    f. Noise which may disturb fauna species.
3. The available geographical information (sources listed in Section 1.3.1) is assessed to determine the presence of a pathway (potential overlap/connectivity) between the source impact's ZoI and European sites / or their Qualifying Interest (QI)/Species of Conservation Importance (SCIs) (the receptors).
    a. Ecological connectivity considers linear ecological features, foraging distances of birds, home-ranges and territories of species, and stepping-stone habitats used by birds or butterflies.
    b. Connectivity also considered hydrological, hydrogeological and atmospheric pathways.

In this way the Source-Pathway-Receptor model can be systematically applied to ensure that all relevant receptors related to European sites are identified and assessed.

It is important to note that through this process some nearby European sites are excluded from further assessment as a pathway is not present that will impair that European sites' specific set of QI/SCI populations.

3.2 Preliminary European Sites Considered

Considering the baseline status in 1994, activities undertaken to date and activities still to be undertaken at the Application Site, the potential sources for adverse effects and preliminary pathways, the European sites listed in Table 3-1 and Figure 3-1 are considered in the rAASR for reasons of proximity in terms of connectivity, hydrological and hydrogeological pathways, and proximity to *ex situ* habitats that may be utilised QIs/SCIs. These are assessed in detail for each phase of the project.

Table 3-1: European sites in the vicinity of the Application Site considered during AA screening

European site	Distance (km)*	Qualifying Interests (* denotes a priority habitat)
SAC (code) [year proposed / designated]		
The Loughans SAC (000407) [1997 / 2016[9]] (NPWS, 2020)	c. 7.8km east of Application Site	3180 Turloughs*
Lower River Suir SAC (002137) [1998 / no data[10]] (NPWS, 2017)	c. 9.3km west & c. 15.4km south of Application Site	1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1410 Mediterranean salt meadows (*Juncetalia maritimi*) 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and Callitricho-Batrachion vegetation 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels 91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles 91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)* 91J0 *Taxus baccata* woods of the British Isles* 1029 Freshwater Pearl Mussel (*Margaritifera margaritifera*) 1092 White-clawed Crayfish (*Austropotamobius pallipes*) 1095 Sea Lamprey (*Petromyzon marinus*) 1096 Brook Lamprey (*Lampetra planeri*) 1099 River Lamprey (*Lampetra fluviatilis*) 1103 Twaite Shad (*Alosa fallax fallax*) 1106 Salmon (*Salmo salar*) 1355 Otter (*Lutra lutra*)
River Barrow and River Nore SAC (002162) [2002 / no data[11]] (NPWS, 2025a)	c. 8.9km southeast & 9km east of Application Site	1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1170 Reefs 1310 Salicornia and other annuals colonising mud and sand 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1410 Mediterranean salt meadows (*Juncetalia maritimi*) 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and Callitricho-Batrachion vegetation 4030 European dry heaths 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels 7220 Petrifying springs with tufa formation (Cratoneurion)* 91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles 91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)* 1016 Desmoulin's Whorl Snail (*Vertigo moulinsiana*) 1029 Freshwater Pearl Mussel (*Margaritifera margaritifera*) 1092 White-clawed Crayfish (*Austropotamobius pallipes*) 1095 Sea Lamprey (*Petromyzon marinus*) 1096 Brook Lamprey (*Lampetra planeri*)

[9] Natura 2000 Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF000407.pdf
[10] Natura 2000 Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF002137.pdf
[11] Natura 2000 Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF002162.pdf

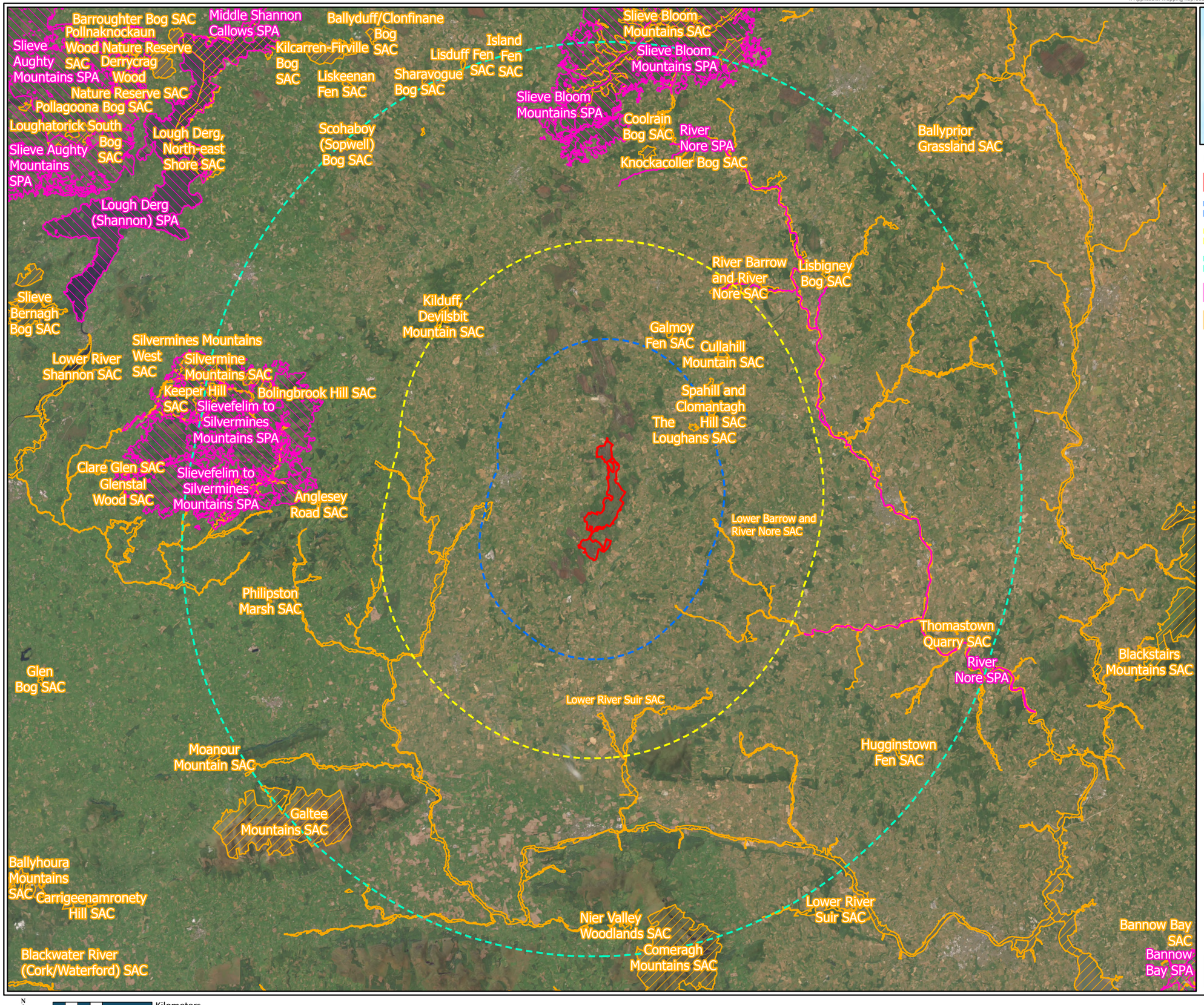
European site	Distance (km)*	Qualifying Interests (* denotes a priority habitat)
		1099 River Lamprey (*Lampetra fluviatilis*) 1103 Twaite Shad (*Alosa fallax fallax*) 1106 Salmon (*Salmo salar*) 1355 Otter (*Lutra lutra*) 1421 Killarney Fern (*Trichomanes speciosum*)
Spahill and Clomantagh Hill SAC (000849) [1997 / 2021[12]] (NPWS, 2021a)	c. 9.8km northeast of Application Site	6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)
Galmoy Fen SAC (001858) [2003 / 2016[13]] (NPWS, 2019b)	c. 11.8km northeast of Application Site	7230 Alkaline fens
Cullahill Mountain SAC (000831) [1997 / 2016[14]] (NPWS, 2021b)	c. 13.8km northeast of Application Site	6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)
SPA (code) [Year classified]		
River Nore SPA (004233) [2010[15]] (NPWS, 2024a)	c. 21.6km southeast of Application Site	A229 Kingfisher (*Alcedo atthis*)
Slievefelim to Silvermines Mountains SPA (004165) [2007[16]] (NPWS, 2022b)	c. 26.9km west of Application Site	A082 Hen Harrier (*Circus cyaneus*)
Slieve Bloom Mountains SPA (004160) [2007[17]] (NPWS, 2022a)	c. 27.7km north of Application Site	A082 Hen Harrier (*Circus cyaneus*)

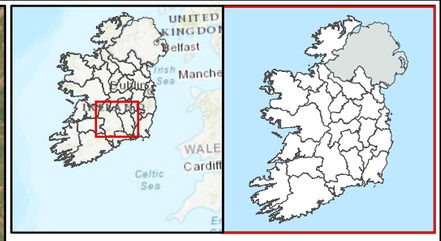
* Distance is expressed from Application Site boundary to European site boundary as-the-crow-flies

[12] Natura 2000 Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF000849.pdf
[13] Natura 2000 Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF001858.pdf
[14] Natura 2000 Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF000831.pdf
[15] Natura 2000 Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF004233.pdf
[16] Natura 2000 Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF004165.pdf
[17] Natura 2000 Standard Data Form: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF004160.pdf

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Legend

- Site Boundary
- 10km
- 20km
- 40km
- Special Protection Areas
- Special Area of Conservation

N W E S

Kilometers
0 2.5 5 10

TITLE: European Sites			
PROJECT: Littleton Peat Extraction Substitute Consent			
FIGURE NO:	3.1		
CLIENT:	Bord na Móna Energy Limited		
SCALE:	1:375,000	**REVISION:**	0
DATE:	07/05/2026	**PAGE SIZE:**	A3

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3.3 Impact Sources, Zones of Influence and Pathways

3.3.1 Peat Extraction Phase

The main activities that are relevant between 1994 to the cessation of peat extraction and ancillary activities in 2017 include:

- Continued milled peat extraction and ancillary activities, including deepening of drains, use of heavy machinery, and supporting activities and services.

Given the extent of the area subject to peat extraction at the Application Site in 1988, most of the impacts related to the Project (impacts on habitat, hydrology, water quality and natural drainage patters) would have taken place by 1994.

The impacts (under an unmitigated scenario) could have been associated with accidental habitat loss, alteration (contamination / nutrification / sedimentation) of water quality, continued alteration of local downstream drainage/flow regime and effects, dust and emissions to atmosphere, and noise at the Application Site. Impacts to downstream water resources would have also affected the aquatic and riverine ecosystems and other habitats dependent on these water bodies/ecosystems. With the reduction of active peat extraction areas by 1994, these impacts would also have reduced in likelihood, magnitude and extent.

No European sites overlap with or are located adjacent to the Application Site, and there is no pathway for direct habitat loss. Furthermore, the nearest European sites designated for Raised bog (active)* [7110] and Degraded raised bog still capable of natural regeneration [7120] (the dominant pre-development and post extraction habitat on the Application Site) as Qualifying Interests (QI) are Knockacoller Bog SAC [002333] and Coolrain Bog SAC [002332][18]. Both sites are located more than 31km north of the Application Site and within different Water Framework Directive (WFD) Catchments and Groundwater Bodies[19]. Therefore, any remnant raised bogs on the Application Site would not have functioned as supporting habitats for the QI habitats of any European sites. There is no S-P-R connectivity to Knockacoller Bog SAC [002333] and Coolrain Bog SAC [002332] and these are not considered further in this assessment.

The Lower River Suir Special Area of Conservation (SAC) (002137) is the only European site identified with direct hydrological connectivity with the Application Site. The River Suir is the main receiving river for the Suir WFD Catchment (WFD Catchment 16). The Application Site lies within this catchment and eventually drains to the River Suir via drainage lines, streams and rivers surrounding the Application Site. Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR states that even in the absence of control measures there would not have been a significant effect on downstream European sites due to their distant location from the Application Site and the large volumes of water within the River Suir. However, the remedial AA screening has taken a precautionary approach that the Project would have had the potential to adversely affect the QI habitats and QI species within this European site through downstream water quality effects (potential altered flow, contamination / nutrification / sedimentation) which could have adversely affected the local water bodies supporting potential QI populations. Therefore, the Project has been screened in for potential adverse effects to this European site.

[18] Assessed on https://natura2000.eea.europa.eu/?views=Habitats_View accessed on 19 November 2025
[19] Environmental Protection Agency (EPA) Water Map available at https://gis.epa.ie/EPAMaps/Water accessed on 19 November 2025

No European sites share the same groundwater body (GWB) with the Application Site, and no direct hydrogeological pathway exists that could have adversely affected any European site or their groundwater dependent terrestrial ecosystems (GWDTEs).

The International Air Quality Management (IAQM) "*Guidance on the assessment of dust from demolition and construction*" (IAQM, 2014) (updated in 2024) includes for earthmoving activities and dust dispersion during construction. This rAASR assesses peat extraction, stockpiling and drain deepening under these activity types. The IAQM adopts a conservative approach in determining if an activity will require a detailed air quality assessment, which is required if an 'ecological receptor' is within "*50 m of the boundary of the site; and/or 50 m of the route(s) used by construction vehicles on the public highway, up to 250 m from the site entrance(s)*". No European sites occur within 50m-250m of the Application Site and any dust generated on the Application Site would not have directly affected any European sites or their QI habitats.

Transport Infrastructure Ireland's guidance document "*Air Quality Assessment of Specified Infrastructure Projects*" (PE-ENV-01106, TII, 2022) provides specific scoping criteria for whether a detailed air quality assessment is required for vehicle emissions associated with infrastructure projects. According to the guidance, a detailed air quality assessment is necessary when sensitive receptors are located within a 200m Zone of Influence of affected road links. Road links are not expected to influence pollutant concentrations at receptor locations beyond 200m. The heavy machinery and equipment used at the Application Site would have contributed to air emissions, but do not constitute the triggers (increased traffic flow) associated with the TII guidelines. Therefore, the 200m ZoI can be considered as a very conservative ZoI for air emissions associated with traffic and machinery associated with activities at the Application Site. No European sites occur within 200m of the Application Site and any air emissions from the Application Site would not have directly affected any European sites or their QI habitats/species.

Disturbance from noise could have affect fauna using the Application Site, which may have been part of the QI populations of surrounding European sites. For otters, the ZoI for disturbance, including noise, is 150m for active breeding or natal holts (NRA National Roads Authority, 2006)[20] and NIEA (2011)[21] (Northern Ireland Environmental Agency). NRA guidelines go on to stipulate that no wheeled or tracked vehicles (of any kind) should be used within 20m (NIEA recommends 30m protection zone) of active, non-breeding, otter holts and light work, such as digging by hand or scrub clearance should also not take place within 15m of such holts.

Otters are associated with rivers, lakes and coasts which provide their main food source (fish and crustaceans) (NPWS, 2019a and 2025c), which will be affected by deteriorating water quality. Otters are also known to occasionally travel across more terrestrial landscapes, as evidenced by occasional terrestrial based meals such as small mammals and waterfowl (Reid *et al*., 2013). In moderately productive rivers, female otters will hold ranges averaging a 7.5km (up to 9.0km) length of river; for male otters this increases to 13.2 (up to 18.5km) (Reid *et al*., 2013). The otter is designated as a QI for the Lower River Suir SAC which is c. 7.8km west and c. 13.3km south of Application Site and within the ranges kept by otters.

[20] National Roads Authority (2006). *Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes*. Dublin: National Roads Authority. Accessed at https://www.tii.ie/media/wsmlbxmv/guidelines-for-the-treatment-of-otters-prior-to-the-construction-of-national-road-schemes.pdf

[21] Northern Ireland Environmental (2011). Agency Otters and Development. Belfast. Accessed at https://cieem.net/wp-content/uploads/2019/07/natural-information-otters-and-development-2011.pdf

Marsh fritillary butterfly, an Annex II species, has been recorded on the Application Site during the preparation of the Littleton Bog Rehabilitation Plan (Appendix7 of the rNIS), but no further details are provided. In 2025, five (5) to six (6) larval cases were recorded within Devil's bit scabious (*Succisa pratensis*) in a c. 2m stretch along the railway route in the centre of the Littleton Bog. The populations of marsh fritillary observed at the Littleton Bog will not form part of, nor be a supporting population to, any QI population for any European site, as the nearest European site designated for the species is Ballynafagh Lake SAC [001387] more than 85km northeast of the Application Site, and well beyond the maximum 20km dispersal range for the species (NPWS, 2019a and 2025c).

With respect to potential direct effects on Species of Conservation Interest (SCIs) that could have utilised the Application Site, no SPAs overlap with or are located adjacent to the Application Site. Considering whether connectivity or ecological continuity existed for SCI bird species from nearby SPAs to the Application Site, consideration was given to foraging distances provided in the Scottish Natural Heritage (SNH, 2016) guidance on *'Assessing Connectivity with Special Protection Areas (SPAs)'* (28km recorded as the furthest distance) and in "*Foraging flight distances of wintering ducks and geese: a review*" (Johnson *et al*., 2014) (32.5km recorded as the furthest distance). An initial extended area of 40km was scoped (rounding up 32.5km) to determine whether the Application Site could have been likely to support any of the SCI bird species associated with any SPA. SCIs listed for SPAs within this 40km area (Table 3-1) include:

- Kingfisher (*Alcedo atthis*) [A229] is a QI for the River Nore SPA [004233], c. 21.6km southeast of the Application Site. The kingfisher remains within its riverine range, and its conservation objectives (NPWS, 2024a) indicate limited movement within the riverine range (<9km). There are no shared rivers from the Application Site to the River Nore and therefore no direct riverine connectivity; furthermore, the River Nore SPA is upstream of the hydrological pathway from the Application Site. Therefore, any kingfisher that could have utilised the Application Site and surrounding areas would not have been part of the SCI populations and there would have been no pathway for any potential disturbance to SCI populations of any European site.
- Hen harrier (*Circus cyaneus*) [A082] is a QI for the Slievefelim to Silvermines Mountains SPA [004165] and Slieve Bloom Mountains SPA [004160], c. 26.9km west and c. 27.7km north of the Application Site respectively. Hen harrier has been observed in the Littleton Bog by Bord na Móna and by Fehily Timoney ecologists (recorded years include 2012, 2014 and 2025) and the Application Site and surrounding areas provide winter roosts suitable for hen harrier. Although the Application Site is outside the typical breeding forage range for the QI species (a maximum range of 10km (SNH, 2016)), wintering ranges can be more extensive as hen harrier are considered partial migrants. The non-breeding individual hen harriers observed at the Application Site, cannot be excluded as part of the breeding populations of the SPAs and, on a precautionary basis, are considered to be part of the QI populations.
    - Considering the conservation objectives for the two relevant SPAs (Slievefelim to Silvermines Mountains SPA and Slieve Bloom Mountains SPA), the targets associated with breeding pairs and fledgelings would not have been / will not be directly impacted by the activities at the Application Site post 1994, as the Application Site is a wintering roost and no breeding or nesting has been recorded on the Application Site. Furthermore, peat extraction and ancillary activities dominated in the spring to summer months (April to August), with only maintenance (drains, silt ponds, machinery and pumps), stockpile removal and peat transportation activities scheduled and undertaken at the bogs over autumn to winter (September to March). The latter activities would have occurred in specific locations (at the ponds or pump stations) for limited time frames (a few days to undertake the tasks). As a worst case, these brief activities may have caused local hen harrier individuals to fly off to quieter nearby areas but would not pose any mortality risk to the birds. Therefore, wintering populations would not be at any adverse risk from peat extraction and ancillary activities and there would be no indirect effect on breeding pairs.

- Conservation objectives for the two relevant SPAs related to non-breeding targets for hen harrier include the extent and condition of heath, bog and associated habitats, extent and condition of low intensity managed grasslands and associated habitats, extent and condition of hedgerows, and age and structure of the forest estate. None of these habitats would have been degraded post 1994 and would be recovering in areas where peat extraction had ceased before 1994.
- Even though the hen harrier species are considered part of the QI populations for the relevant SPAs, there is no impact pathway that would significantly affect the targets and attributes of the QI populations to compromise the conservation objectives of any European site.

The Lower River Suir Special Area of Conservation (SAC) (002137) is the only European site identified with direct hydrological connectivity with the Application Site. The River Suir is the main receiving river for the Suir WFD Catchment (WFD Catchment 16). The Application Site lies within this catchment and eventually drains to the River Suir via drainage lines, streams and rivers surrounding the Application Site. Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR states that even in the absence of control measures there would not have been a significant effect on downstream European sites due to their distant location from the Application Site and the large volumes of water within the River Suir.

After evaluation of the relevant available data concerning the Application Site and its surrounding area, based on the current best available scientific knowledge and the conservation objectives for the European sites considered, there is the potential, under the precautionary approach, for the Project to have adversely affected the QI habitats and QI species within the Lower River Suir SAC through downstream water quality effects (potential altered flow, contamination / nutrification / sedimentation) during the Peat Extraction Phase (1994 to 2017) which may have had adverse effects on the integrity of the Lower River Suir SAC.

It was therefore concluded that the Lower River Suir SAC be taken forward for further consideration in this rNIS to assess whether activities from 1994 to 2017 at the Application Site have had likely adverse effects on the integrity of the Lower River Suir SAC.

3.3.2 Current Phase (Including Rehabilitation Phase 1): 2017 to Present Day

Peat extraction and ancillary activities ceased at the Application Site in 2017. The Application Site still operates under the requirements of IPC Licence P0499-01 (waste handling and disposal, the decommissioning and rehabilitation of cutaway bogs and monitoring and maintenance, particularly around water management).

As required by the IPC Licence, waste items are and will continue to be removed for recycling or disposal, using external contractors with the required waste collection permits, and waste records are and will continue to be maintained.

Rehabilitation Phase 1 works commenced in Littleton, Longfordpass, Lanespark and Derryvella in 2018 with drain-blocking and hydrological management. Drains have been blocked at the Application Site using a number of methods depending on the size and type of drain in accordance with the Best Practice in Raised Bog Restoration in Ireland (Mackin *et al.*, 2017). These methods included the following:

- Peat dams within small drainage channels on the cutover bog; and
- Removal or blocking of drainage pipes, or modification of drainage levels, where required.

Decommissioning at the Application Site included removal of remaining peat stockpiles from the bogs (completed by mid-2019) and removal of rail infrastructure at Lanespark Bog (completed in 2024). Remaining decommissioning at the Application Site will be completed in line with all conditions of the IPC Licence.

Bord na Móna rehabilitates the bogs in a phased approach under the requirements of the IPC Licence (Condition 10.3) through Cutaway Bog Decommissioning and Rehabilitation Plans for the Longfordpass, Littleton, Lanespark and Derryvella bogs (Appendix 7, Appendix 8 and Appendix 9 of the rNIS), with the key objective being environmental stabilisation. The rehabilitation of the bogs supports biodiversity including plants, insects, bird and mammals, and the formation of wetland peatland and woodland habitats. In addition, peatland rehabilitation will bring a range of benefits to the local community via improvements in the local landscape, and it is also complying with national policies and strategies regarding the reduction of carbon emissions, supporting biodiversity and enhancing water quality. It is anticipated it will take up to 30 years for naturally functioning wetland and peatland ecosystems to fully re-establish.

The cessation of peat extraction at the Application Site in 2017 has resulted in no further habitat loss and has allowed the colonisation of vegetation into the area, and the gradual succession of vegetation communities in historically decommissioned areas. It has also resulted in reduced dust and emissions to atmosphere and lowered local ambient noise levels.

The blocking of drains and cessation of pumping has allowed water levels to recover at the Application Site, reduced water outflow from the Application Site and has resulted in a reduced risk of adverse effects (contamination / nutrification / sedimentation) on water quality.

The containment of water at the Application Site and the associated reduced risk of adverse effects on water quality in neighbouring areas means that there will be no further adverse effects to the downstream and hydrologically connected Lower River Suir SAC and its QIs. Chapter 8 Hydrology, Hydrogeology and Water Quality in Volume 2 of the rEIAR supports this statement and indicates the pre-mitigation potential effect of decommissioning and rehabilitation of the Application Site on downstream European sites is considered to be positive.

The decommissioning and rehabilitation activities at the Application Site have resulted in areas developing into wetland habitats, facilitated by the cessation of pumping coupled with the lowered topography through historic peat extraction. The natural succession at the Application Site is supporting growing colonisation by floral and faunal species.

Due to the overall reduction of adverse effects due to decommissioning and rehabilitation activities at the Application Site, impact sources have ceased and therefore there are no impact pathways to adversely affect receptors; consequently, there were / are no likely significant adverse effects on any European sites during the Current Phase.

3.3.3 Remedial Phase

For Rehabilitation Phase 2 works, Bord na Móna are proposing to carry out additional rehabilitation in Derryvella Bog in 2026. No additional rehabilitation works are proposed at Littleton, Longfordpass and Lanespark, other than the measures described under Rehabilitation Phase 1 (Section 2.2.3), including revegetation and monitoring. The rehabilitation, monitoring and maintenance will proceed as per the requirements of IPC Licence P0499-01, (waste handling and disposal, the decommissioning and rehabilitation of cutaway bogs and monitoring and maintenance, particularly around water management).

As with the Current Phase, the active ongoing remediation / rehabilitation of the Application Site during the Remedial Phase and the continued natural recolonisation of the Application Site with flora, habitats and fauna, coupled with continued monitoring and aftercare will result in the continued removal of potential sources for detrimental effects, and the improvement of the area for ecological gain through colonisation by native and indigenous species. With the rehabilitation at the Application Site, the local area, neighbouring areas and downstream areas (which includes the Lower River Suir SAC) will stabilise and improve.

Given that there are no impacting activities identified at the Application Site during the Remedial Phase, there are no likely significant adverse effects on any European sites during the Remedial Phase.

3.4 European Sites within the Likely Zone of Influence

Based on the detailed assessment of the ZoIs of impacts identified during the phases of the Project and the possible interaction with the QIs and SCIs of European sites listed in Table 3-1, it can be concluded that there was potential, on a precautionary basis, for the following European Site to have been significantly affected by the Project:

- Lower River Suir SAC (002137) has a hydrological pathway with the Application Site, occurring within the same WFD Catchment 16.

The Peat Extraction Phase had the potential to adversely affect the local water bodies through altered flow, sediment-load and altered chemistry, degrading habitats which may have been used by the QI populations (or supporting populations to the QI populations) of the Lower River Suir SAC and adversely affect the conservation objectives of the Lower River Suir SAC. Based on the presented source and pathway the following QIs were at potential adverse risk from the Project:

- 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and Callitricho-Batrachion vegetation
- 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
- 1092 White-clawed Crayfish (*Austropotamobius pallipes*)
- 1095 Sea Lamprey (*Petromyzon marinus*)
- 1096 Brook Lamprey (*Lampetra planeri*)
- 1099 River Lamprey (*Lampetra fluviatilis*)
- 1106 Salmon (*Salmo salar*)
- 1355 Otter (*Lutra lutra*)

The remaining QIs are restricted to the lower reaches of and the transitional water bodies of the Lower River Suir SAC, or within distinct and separate sub-catchments draining into the River Suir, or within terrestrial landscapes that were not subjected to the hydrological impacts. These QIs were not present within the ZoI of the local water bodies and immediate confluence of the River Suir.

4. IN-COMBINATION ASSESSMENT

A single project may not have significant effects on its own but its combined effect with other projects or plans could result in significant effects. In combination effects refer to the potential effects caused from the combined impacts of two or more projects, plans, or activities and this assessment considers the in combination effects of the Peat Extraction Phase of the Project at the Application Site, taking into account the existing and proposed plans listed in Table 4-1 and projects within the shared WFD sub-catchment listed in Appendix 12 of the rNIS.

The in-combination assessment considers the interaction of the Project with plans and projects to have resulted in exacerbated effects, not anticipated from the Project / plans / other projects alone. In this instance the only adverse effect identified is through the hydrological pathway and the potential impact to the immediate local water bodies around the Application Site, which will potentially adversely affect any QI populations or populations supporting QI species that may be utilising the local waterbodies as *ex situ* habitats. Given that the extent of peat extraction areas was declining by 1994/1995 and water management features were established and operational at the site, any cumulative impacts such as sediment loading of local water bodies would have already occurred by 1994.

4.1 Assessment of Plans

Table 4-1 summarises the plans and policies and their objectives, focussing on policies and objectives that related to European sites, biodiversity, peatland management and conservation, and sustainable land use with focus on hydrology and water quality preservation. In the assessment of plans, the focus is on policies and objectives that have the potential for impacting European sites in-combination with the peat extraction and supporting activities at the Application Site.

To provide a structured summary of the findings, an overview of relevant plans and their key environmental considerations is presented in Table 4-1. This table outlines how various planning documents incorporate conservation principles, highlighting their relevance to biodiversity protection, peatland management, and water quality preservation. The insights gained from this review contribute to a broader understanding of the policy landscape influencing land-use decisions and environmental management in areas of ecological sensitivity.

During 1994 the Application Site was an active peat extraction area. The peat extraction and ancillary activities were conducted at varying levels of intensity from 1994 to 2017, but the overall impacts on biodiversity have been identified to be local in extent limited to the Application Site and surrounding water bodies and not significant enough to breach the Policies and Objectives outlined in the various plans assessed in Table 4-1, which aim to protect biodiversity, conserve habitats, regulate land use and safeguard European sites.

Based on analysis of the objectives of the plans and policies, the peat extraction and ancillary activities were considered compliant with the environmental safeguards specified at that time in terms of ensuring no adverse effects on European sites. The Peat Extraction Phase activities are not considered to be in conflict with the relevant policies and objectives as summarised in Table 4-1.

The implementation of the Cutaway Bog Decommissioning and Rehabilitation Plans (Appendix 7, Appendix 8 and Appendix 9 of the rNIS) compiled and reviewed as per Condition 10 of the IPC Licence for the four Bogs within the Application Site, have to date provided hydrological and ecological (ecosystem services and biodiversity enrichment) benefits to the Application Site and surrounds, improving conditions of ex-situ habitats used by potential QI populations and thereby contributing positively to European sites. The rehabilitation of the bogs will also contribute to carbon sequestration and water retention, further supporting regional efforts in conservation and climate change. The restoration of natural hydrological condition is expected to improve water quality, reduce sedimentation, improve riverine ecological corridors and enhance aquatic ecosystems for aquatic species, as well as fauna reliant on these species. Such efforts will also reduce existing threats faced in WFD Catchment 16 and the identified threats of the Lower River Suir SAC. Such outcomes align with policies and objectives outlined within the Development Plans (objectives related to sustainable land use and management, biodiversity protection, climate change and carbon sequestration, and ecological resilience).

As the Cutaway Bog Decommissioning and Rehabilitation Plans (Appendix 7, Appendix 8 and Appendix 9 of the rNIS) for the Application Site will ensure the protection and enhancement of these protected areas and have an overall positive effect on the immediate and neighbouring areas, no negative in combination effects have occurred or will occur with activities regulated under plans and policies.

4.2 Assessment of Projects

A list of the projects considered for in combination effects arising from their spatial and temporal overlap with the Application Site's activities are summarised in Appendix 12 presented as projects considered during the Peat Extraction Phase and Current Phase.

During the Peat Extraction Phase (July 1988 – 2017), peat extraction and ancillary activities were carried out at varying levels of intensity across the Application Site, with significant declines in peat extraction areas by 1995. These activities caused environmental impacts, particularly on water quality.

During the Peat Extraction Phase, the application for retention of extension for fire lighter manufacturer and storage and bund area at the former Littleton Briquette Factory (Tipperary County Council Reference 991431) was the main activity within the Application Site. The M8 motorway (An Coimisiún Pleanála Reference NMS10.MS2008) was the most significant activity adjacent to the Application Site. Other projects within the Project's WFD sub-catchment are listed in Appendix 12. Many of these planning applications/projects included the development of, or modifications to, single rural dwelling houses, small residential developments (i.e. modification and/or re-development of existing dwellings) and agricultural development (new entrances, sheds and ancillary plant and infrastructure), and the development of quarries and mines and renewable energy projects (solar and wind farms).

The nearest projects within the ZoI of this Project for the Current Phase are associated with minor industrial upgrades at the former Littleton Briquette Factory (Tipperary County Council References 20976 and 20976) and the recreational shared cycle and walkway to connect into the existing Loch Dhoire Bhile Loop (Tipperary County Council Reference 2560154 and An Coimisiún Pleanála Reference 323662-25),, which will only pose potential risk to the hydrology of the local catchment (shared with the Project) during the limited construction phase and can be fully mitigated to prevent adverse effects to the conservation objectives of any European site (NIS for the shared cycle and walkway). Future projects (potential renewable energy development and bog rehabilitation) will be subject to project specific statutory assessment and IPC/licensing processes. Other projects within the Project's WFD sub-catchment considered are listed in Appendix 12, but given that there is no impact from the Project during the Current Phase or Remedial Phase, no in combination effects will occur to any European site.

Post 1994 all these developments would have been subject to appropriate assessment and approved only if they screened out with no adverse effects on European sites or could show effective mitigation of impacts to safeguard the conservation objectives of European sites.

As the Project will have no other adverse effects other than potential effects on hydrology, the in-combination effects will be limited to hydrology. The spatial extent of environmental impacts from activities at/near the Application Site needs consideration in terms of the cumulative effect of these projects under the mitigated scenario on the local hydrology in order to appropriately assess the in-combination effects of the Project with other projects. This will be further evaluated in the rNIS.

Table 4-1: Assessment of Plans

Plan	Key Relevant Objectives	Assessment
Climate Action Plan (CAP) 2019, 2021, 2023, 2024, 2025	CAP 23 provides a framework for delivering the Government's target of a 51% reduction (relative to 2018) in greenhouse gas (GHG) emissions by 2030. CAP 25 sets current and future actions including " the restoration of peatland sites, including raised and blanket bog, fens, and other wetland types, along with the development of amenity and tourism opportunities where appropriate" and recognises the socio-economic effects of cessation of peat extraction and opportunities associated with peatland restoration work and alternative land use. The policies and objectives of the CAP 25 are reflected in the Draft National Energy & Climate Plan (NECP) 2021-2030.	Applicable to the Current Phase (2017 – Present) and the Remedial Phase, the activities at the Application Site are in line with the rehabilitation and restoration actions and consideration of future land uses that will allow the current succession of habitat that can support the recovery of local biodiversity. Furthermore, functional peat bogs contribute to natural carbon sequestration.
Ireland's National Energy and Climate Plan (NECP) 2021-2030	Submitted under the EU Governance Regulation, which is the EU legislation under which Ireland is held accountable in meeting its de-carbonisation targets, published and updated through the NECP. National Objectives relate to energy efficiency and increasing reliance on renewable energy to 80%, phasing out peat plants.	
Ireland's 4th National Biodiversity Action Plan (NBAP) for 2023-2030	Five strategic objectives to deliver transformative changes in how Ireland values and protects its natural heritage and biodiversity conservation efforts: • Adopt a Whole of Government, Whole of Society Approach to Biodiversity: This objective emphasises the need for collective action across all sectors of government and society to effectively address biodiversity challenges. • Meet Urgent Conservation and Restoration Needs: Focusing on immediate actions required to conserve and restore Ireland's biodiversity, this objective aims to halt further loss and promote recovery of vital ecosystems. • Secure Nature's Contribution to People: Recognising the essential services that nature provides, this objective seeks to ensure the sustainable use of natural resources, benefiting both people and the environment. • Enhance the Evidence Base for Action on Biodiversity: This objective highlights the importance of strengthening scientific research and data collection to inform effective biodiversity policies and actions.	During the Current Phase (2017 – Present), activities at the Application Site has been compliant with the policies and objectives outlined in the NBAP, ensuring that no adverse effects have occurred on biodiversity or European sites. The Current Phase and Remedial Phase will / will continue to contribute substantially to achieving several of the NBAP's strategic objectives as the rehabilitation plans serve to rehabilitate habitats allowing natural regeneration and succession, enhance water

Plan	Key Relevant Objectives	Assessment
	Strengthen Ireland's Contribution to International Biodiversity Initiatives: Aiming to bolster Ireland's role in global biodiversity efforts, this objective focuses on active participation and contribution to international conservation initiatives. The NBAP also introduces a public sector duty on biodiversity, as mandated by the Wildlife (Amendment) Act 2023, which requires all public service bodies to integrate biodiversity considerations into their plans, policies, and programs, and to report on their progress.	retention and quality, and support the recovery of local biodiversity. The long-term positive effects on both terrestrial and aquatic environments, including improved conditions for fauna and surrounding sensitive areas, highlight the significant environmental benefits of this phase. The overall impact is expected to be positive, supporting the sustainability and ecological integrity of the Application Site, while aligning with national goals for biodiversity conservation.
National Planning Framework (NPF) - Project Ireland 2040	Recognises the amenity and heritage value of peatlands within the rural setting and "activity-based tourism and trails such as greenways, blueways and peatways" and the role they may have in 'Dark Sky' parks and biodiversity conservation. Consider biodiversity in land-use planning and development. Objectives of relevance to biodiversity: • NPO30: Facilitate the development of the rural economy, in a manner consistent with the national climate objective, through supporting a sustainable and economically efficient agricultural and food sector, together with forestry, fishing and aquaculture, energy and extractive industries, the bio-economy and diversification into alternative on-farm and off-farm activities, while at the same time noting the importance of maintaining and protecting biodiversity and the natural landscape and built heritage which are vital to rural tourism. • NPO 34: Continue to facilitate tourism development and in particular the Strategy for the Future Development of National and Regional Greenways, and a Blueways and Peatways Strategy (also included in NPO60):	Many of the NPF objectives are linked to the NBAP addressed above and relevant to the NPF. Applicable to the Current Phase (2017 – Present) and the Remedial Phase, the activities at the Application Site are in line with the rehabilitation and restoration objectives. Furthermore, future land uses consider activities / developments that will allow for the continued current succession of habitat that can support the recovery of local biodiversity.

Plan	Key Relevant Objectives	Assessment
	A coordinated approach to the sustainable management of outdoor recreation sites; and Projects on the basis of their environmental sustainability, achieving maximum impact and connectivity at national and regional level while ensuring their development is compliant with the National Biodiversity Action Plan, the national climate change objective and requirements for environmental assessments. • NPO73: Support the co-location of renewable technologies with other supporting technologies and complementary land uses, including agriculture, amenity, forestry and opportunities to enhance biodiversity and promote heritage assets, at appropriate locations which are determined based upon the best available scientific evidence in line with EU and national legislative frameworks. • NPO 82: Integrated planning for Green and Blue Infrastructure will be incorporated into the preparation of statutory land use plans while maintaining ecosystem services and ecosystem functions and conserving and/or restoring biodiversity. • NPO 84: In line with the National Biodiversity Action Plan and the European Union Nature Restoration Law, and best available scientific information, regional and local planning authorities shall support the preparation and implementation of the National Restoration Plan. • NPO 85: In line with the National Biodiversity Action Plan; the conservation, enhancement, mitigation and restoration of biodiversity is to be supported by: Integrating policies and objectives for the protection and restoration of biodiversity, including the principles of the mitigation hierarchy of - avoid, minimise, restore and offset - of potential biodiversity impacts, in statutory land use plan; and Retention of existing habitats which are currently important for maintaining biodiversity (at local/regional/national/international levels), in the first instance, is preferable to replacement/restoration of habitats, in the interests of ensuring continuity of habitat provision and reduction of associated risks and costs. • NPO 86: In line with the objectives of the National Biodiversity Action Plan, planning authorities should seek to address no net loss of biodiversity within their plan making functions.	This will add to the natural landscape that has potential to play roles in other objectives and continued support to the goals of the NPF.

Plan	Key Relevant Objectives	Assessment
	• NPO 87: Enhance the conservation status and improve the management of protected areas and protected species by: Implementing relevant EU Directives to protect Ireland's environment and wildlife and support the objectives of the National Biodiversity Action Plan; Developing and utilising licensing and consent systems to facilitate sustainable activities within Natura 2000 sites; continued research, survey programmes and monitoring of habitats and species. • NPO 88: Facilitate the protection and restoration of biodiversity [including in European sites and the habitats and species for which they are selected] through the preparation of national guidance in relation to Planning and Biodiversity to: Plan and manage for integration of biodiversity protection and restoration in future planning and development; ensure a consistent and strategic approach to biodiversity protection and restoration across planning authorities and administrative boundaries; and support the implementation of the National Biodiversity Action Plan (2023-2030) and the forthcoming National Restoration Plan.	
National Peatlands Strategy 2015	Peatland owned and managed by Bord na Móna is specifically referenced in this strategy, and the goals of Bord na Móna for the future use of this peatland are detailed as follows: • The role that peatlands can play in continuing to supply energy to the country, both through traditional fuels and renewables • Their potential to meet national and regional land requirements for infrastructure and industry • The benefits they can bring in terms of recreation and amenity • Their contribution to Ireland's national biodiversity targets.	This Substitute Consent seeks to regularise the Application Site to enable the future development of the area aligns with the Peatlands Strategy. The benefits in terms of recreation and biodiversity align with the NBAP and NPF objectives assessed above.
Regional Spatial and Economic Strategy for the Southern Region 2020	Support the implementation of the National Planning Framework – Ireland 2040, by providing a long-term planning and economic framework. The RSES references peatlands within the region in the context of potential beneficial after-uses including renewable energy, biodiversity, amenity uses, water / carbon storage and other infrastructure.	The benefits in terms of the role of peatlands in carbon cycling and renewable energy, recreation and biodiversity align with the CAP 25, NBAP and NPF objectives assessed above.

Plan	Key Relevant Objectives	Assessment
Tipperary County Development Plans and variations 2022-2028	The Tipperary County Development Plans were subject to an Appropriate Assessment determination that concludes "Having incorporated mitigation measures, it is concluded that the Plan is not foreseen to give rise to any adverse effects on the integrity of any European Site, alone or in combination with other plans or projects. This evaluation is made in view of the conservation objectives of the habitats or species, for which these sites have been designated". The policies and the planning objectives are / will be designed to meet the targets and objectives of the national plans, create among its community, support communities in the development of community-led and biodiversity focused amenity plans and actions, and the safeguarding of European sites. Developments and lower-level plans will be subject to appropriate assessment. Key Strategic Objective (SO) that encompass / consider designated sites, biodiversity and peat extraction: • SO-1: To support the just transition to a climate resilient, biodiversity-rich, environmentally-sustainable and climate-neutral economy. • SO-5: To promote, support and enable sustainable and diverse economic development, and foster new and innovative opportunities, harnessing the talent of our workforce and communities. • SO-6: To support a sustainable, diverse and resilient rural economy, whilst integrating the sustainable management of land and natural resources. • SO-7: To protect, enhance and connect areas of natural heritage, blue and green infrastructure and waterbodies, for quality of life, biodiversity, species and habitats, while having regard to climate change adaptation and flood risk management measures. • SO- 8: To support, value and protect our Artistic, Cultural and Built Heritage for future generations and to recognise its key role in our economy. • SO- 9: To enhance connectivity and promote sustainable transport, through the integration of land-use and transport planning and promotion of and prioritisation of public transport and walking and cycling.	The Peat Extraction Phase in 1994 was commencing a decline in areas under peat extraction, and activities would have occurred at varying levels of intensity through to cessation in 2017. The overall environmental impacts on biodiversity were considered limited in extent to the Application Site and the immediate local water bodies and associated habitats and not significant enough to breach the Policies and Objectives outlined in the County Development Plans. The Project was operated with intent to protect biodiversity, conserve habitats, and safeguard designated areas with the evolving regulations that drove County Policies and Objectives. The Current Phase (2017 – Present) and the Remedial Phase activities at the Application Site are/will be in line with the rehabilitation and restoration objectives of national and regional plans and therefore align with the County Development Plans.

Plan	Key Relevant Objectives	Assessment
Kilkenny City and County Development Plan 2021-2027	The Kilkenny City and County Development Plan was subject to an Appropriate Assessment determination that concludes " Having incorporated mitigation measures, it is concluded that the Kilkenny City and County Development Plan 2021-2027 is not foreseen to give rise to any significant effects on the integrity of European Sites, alone or in combination with other plans or projects. This evaluation is made in view of the conservation objectives of the habitats or species, for which these sites have been designated". The policies and the planning objectives are / will be designed to meet the targets and objectives of the national plans, improve ecological coherence with focus on designated sites, consider biodiversity in open spaces, including greenways/blueways, and the safeguarding of European sites. Developments and lower-level plans will be subject to appropriate assessment. Key Strategic Objective (SO) that encompass / consider designated sites, biodiversity and peat extraction: • 2A: To support and encourage sustainable compact growth and settlement patterns, integrate land use and transportation, and maximise opportunities through development form, layout and design to secure climate resilience and reduce carbon emissions. • 2B: To support the implementation of the National Climate Action Plan and the National Climate Action Charter for Local Authorities, and to facilitate measures which seek to reduce emissions of greenhouse gases by embedding appropriate policies within the Development Plan. • 2C: To promote, support and direct effective climate action policies and objectives that seek to improve climate outcomes across the settlement areas and communities of County Kilkenny helping to successfully contribute and deliver on the obligations of the State to transition to low carbon and climate resilient society. • 2D: To integrate appropriate mitigation and adaptation considerations and measures into all forms of development. • 2E: To ensure that the Development Plan transposes, supports and implements strategic objectives of the National Planning Framework and the Southern Regional Spatial and Economic Strategy to create an enabling local development framework that: (a) promotes and integrates important climate considerations in local development and the assessment of planning applications and (b) supports the practical implementation of national climate policy and targets to assist in the delivery of the national transition objective.	Furthermore, the continued current succession of habitat which is and will continue to support the recovery of local biodiversity has the potential to provide a biodiversity-rich land scape that can be considered for other county objectives related to peat and biodiversity cultural and natural heritage objectives.

Plan	Key Relevant Objectives	Assessment
	• 2F: To adopt nature-based approaches and green infrastructural solutions as viable mitigation and adaptation measures to reduce greenhouse gas emissions where feasible. The Council will promote and support physical activity, active recreation and an active lifestyle. • 2G: To reduce energy related CO_2 emissions of Kilkenny County Council. 2H To achieve the commitment under the European Climate Alliance to the reduction of greenhouse gas emissions by 10 percent every 5 years.	

5. APPROPRIATE ASSESSMENT SCREENING CONCLUSIONS

After examination, analysis, and evaluation of the relevant available data concerning the Application Site and its surrounding area, this rAASR has concluded that, based on the current best available scientific knowledge and the conservation objectives for the European sites considered, it cannot be excluded that activities undertaken during the Peat Extraction Phase (1994 to 2017) may have had adverse effects on the integrity of European sites, either on its own or in combination with other projects. This rAASR concludes that further assessment is required to understand the full scope of these potential impacts related specifically to the hydrological pathway and the aquatic QIs of the Lower River Suir SAC.

It is therefore concluded that the Lower River Suir SAC be taken forward for further consideration in a remedial Natura Impact Statement (rNIS) to assess whether activities from 1994 to 2017 at the Application Site have had likely adverse effects on the integrity of the listed European site.

The examination also concluded that the activities associated with Current Phase (2017 to present day) as well as Remedial Phase going forward will not have adverse effects on any European Site on its own or in combination with other plans and projects.

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APPENDIX 2

Project Description - Chapter 4: Description of the Development in Volume 2 of the rEIAR

FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

LONGFORDPASS, LITTLETON, LANESPARK AND DERRYVELLA BOGS – APPLICATION FOR SUBSTITUTE CONSENT

Remedial Environmental Impact Assessment Report

Chapter 4 –Description of Development

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4. DESCRIPTION OF DEVELOPMENT

4.1 Introduction

This chapter of the rEIAR provides a description of the activities at the Application Site from 1941 at the onset of site preparations up to July 1988, a description of the baseline as of July 1988, and a description of activities from 1988 to the cessation of peat extraction in 2017, the management of the Application Site since 2017 and the activities intended to be carried out at the Application Site into the future. The elements of the Project as described in this chapter are the baseline as of July 1988, the activities from July 1988 to the cessation of peat extraction in 2017, the management of Longfordpass, Littleton, Lanespark, and Derryvella bogs (hereafter known as 'the Application Site') since 2017, and the activities relating to historic peat extraction intended to be carried out into the future. As described in Chapter 1, July 1988 is taken as the baseline assessment year for this rEIAR as this is the latest date that the EIA Directive (Council Directive 85/337/EEC) was required to be transposed into Irish legislation. This approach has been taken on a precautionary basis and strictly without prejudice, as EIA may not have been a legal requirement at that time. The assessment period for the rEIAR is from July 1988 to the present day.

Section 177E of the Planning and Development Act 2000, permits an application to be made for substitute consent in respect of development which has been carried out where an Environmental Impact Assessment (EIA), screening for EIA and/or Appropriate Assessment (AA) was or is required.

Neither the EIA Directive (Directive 85/337/EEC) nor the Habitats (Directive 92/43/EC) has retrospective effect; neither Directive imposes legal requirements to have been carried out prior assessments of projects which had already commenced or been completed. There was, therefore, no legal requirement for EIA, screening for EIA or Appropriate Assessment in respect of *any* project prior to the latest dates for transposition of the Directives. In the case of the EIA Directive, the latest date for transposition was 3rd July 1988. In the case of the Habitats Directive, the latest date for transposition was 10th June 1994.

Accordingly, this application for substitute consent is, of necessity confined to the development which took place after those dates. The baseline against which the environmental effects of the development required to be assessed has therefore been identified as being the position as of July 1988 (being the earlier of the transposition dates of the relevant Directives).

However, as the Project formed part of a development which commenced many years prior to those dates, in order to facilitate as complete an assessment as is possible of the Project since July 1988, a description of the Application Site and the peat extraction and ancillary activities which took place there up to July 1988 are included in this chapter.

Although no EIA or AA can be required of development which took place prior to the latest date for transposition of the Directives, it is clear that in considering cumulative or in combination effects of development to which the Directives do apply, it is necessary to consider the effects of that development cumulatively or in combination with existing development, even development which took place before the Directives came into force: see Case C-142/16, *Commission v Germany*. Moreover, where an application for consent relates to development which is functionally interdependent on another development such that they should be considered part of the same project, it is necessary to carry out a cumulative assessment of the separate parts of that project: see *O'Grianna v An Bord Pleanála* [2014] IEHC 632; *Fitzpatrick v An Bord Pleanála* [2019] 3 IR 617.

In this case, therefore, in carrying out any EIA or AA, it will be necessary to consider the cumulative or in-combination effects of the development which has taken place since July 1988 with that which had already taken place prior to that date in order to properly consider those cumulative or in-combination effects. Since development which took place before and after that date are part of a single project, it is necessary and appropriate, therefore, that the development which took place before July 1988 is adequately described to enable that cumulative or in-combination assessment to be completed.

The activities described below include: the peat extraction processes, the construction, operation, and maintenance of supporting infrastructure and a description of ancillary activities undertaken. It also describes the current onsite activities and infrastructure as well as the proposed future remedial measures which will be implemented at the site in the form of Cutaway Bog Decommissioning and Rehabilitation Plans, subject to the agreement of the Environmental Protection Agency (EPA), and as required under Condition 10 of its Integrated Pollution Control (IPC) Licence P0499-01. Please see Appendix 4-1 for a copy of the licence.

Peat extraction is a historic activity, with a considerable number of activities and site preparation works pre-dating both the commencement of the formal Irish planning system (i.e., were first carried out prior to the establishment of the *Planning & Development Act 1963* (which was enacted on 1st October 1964)) as well as the required dates of the transposition into Irish law of the EIA and Habitats Directive in 1988 and 1994 respectively. Other infrastructure such as workshops, and storage facilities were also developed prior to the commencement of the formal planning system, while other ancillary services and infrastructure around the Application Site were previously granted their own planning consents (where required). This infrastructure is included below and considered within the overall rEIAR assessment.

4.1.1 Statement of Authority

This chapter has been prepared by Emma Cross and Margaret Gleeson and reviewed by Evan Rossiter and Jim Hughes of Fehily Timoney and Company.

Emma Cross is a Planning Programme Manager in BnM with over 8 years' experience in the environmental and planning sector. Emma has contributed to and co-ordinated the preparation of EIAs and technical reports for projects across a wide range of development including projects in the energy, natural resources, industrial and residential sectors. Emma holds a BA Natural Science awarded by Trinity College Dublin, an MSc Environmental Sustainability from University College Dublin and an Advanced Diploma in Planning and Environmental Law awarded by the Honorable Society of King's Inns.

Margaret Gleeson (BnM) holds a B.SC.Hons in Earth Sciences and an MSc in Sustainable Energy and Green Technologies from University College Dublin. She has almost 7 years' experience in the environmental and consulting sectors, predominantly as an EIA specialist, with experience in impact assessment and associated technical reporting across various projects.

Evan is a Senior Project Planner with a BSc in City Planning and Environmental Policy and a Masters in Regional and Urban Planning (MRUP) from University College Dublin. Evan has 4 years' experience and has prepared EIAR Chapters for a range of development types, including renewable energy developments, throughout Ireland.

Jim holds a BA in Public Administration from the University of Limerick, an MSc in Town Planning from Queen's University Belfast and a Higher Diploma (H.Dip) in Environmental Impact Assessment from University College Dublin and has over 20 years of experience. Jim has led major Irish projects in the planning, environmental assessment and permitting disciplines including many wind farm developments.

4.1.2 Project Description Information Sources

- Littleton Bog Group Integrated Pollution Control Licence (IPC) Licence (Ref. P0499-01) Environmental Protection Agency (included in Appendix 4-1);
- Bord na Móna Cutaway Bog Decommissioning and Rehabilitation Plans (included in Appendix 4-2);
- Cutaway Bog Decommissioning and Rehabilitation Plan Longfordpass 2026;
- Cutaway Bog Decommissioning and Rehabilitation Plan Littleton 2026;
- Lanespark, Ballybeg and Derryvella Bog Cutaway Bog Decommissioning and Rehabilitation Plan 2025;
- Bord na Móna Annual Reports which contain information relevant to the Application Site;
- Bord na Móna Living History website[1];
- Teagasc Peatlands of Ireland Map[2];
- Clarke, Donal, Brown Gold, A History of Bord na Móna and the peat industry in Ireland (2010);
- IPC Licence, Annual Environmental Reports 2002-2024 (included in Appendix 4-3 (2018 to 2024 are also publicly available[3]));
- Inspection of production records from Littleton Works;
- Aerial Imagery from 1973, 1988, 1995, 2004 and 2018 (included in Appendix 4-4);
- Bord na Móna, *IPC Licence Environmental Code of Practice for Peat Energy Works* (included as Appendix 4-5);
- IPC Licence Compliance Training Programme (included as Appendix 4-6);
- Communications with former Bord na Móna Employees;
- Silt Committee Interim Report Recommended Measures 1976 (included in Appendix 4-7);
- Silt Committee Excavator records 1984 included in Appendix 4-8);
- Harkins, Jim, *Silt Control Report for Peat Energy Division*, (Internal Bord na Móna Report) (1991) (Appendix 4-9);
- Bord na Móna Peat Development in Ireland 1954 (included in Appendix 4-10);
- Bord na Móna, Environmental & Operational Procedures for the Protection of Surface Water (included in Appendix 4-11);
- Irish Engineers Journal Supplement 1970 (p.13-15);
- Bord na Móna, *Bord na Móna Biodiversity Action Plan 2016-2021* (2016) Brosna Press, Ferbane (included in Appendix 4-12);
- Silt Control Study No. 1 – Internal Bord na Móna Report 1983 (included in Appendix 4-13);
- Drainage Study with Particular Reference to Pumping – Internal Bord na Móna Report 1983 (included in Appendix 4-14);
- Peco Harvester Tests – Internal Bord na Móna Report 1986 (included in Appendix 4-15);

[1] *Available at:* https://www.bordnamonalivinghistory.ie/

[2] Available at: https://www.teagasc.ie/media/website/environment/soil/Peatlands-of-Ireland-Map.pdf;

[3] Annual Environmental Reports 2002-2018 can be found at the following link: https://leap.epa.ie/licence-profile/P0499

- Distribution and Nature of Mineral 'Ash' Material in a Milled Peat Stockpile – Internal Bord na Móna 1982 (included in Appendix 4-16);
- Regional Administration in Relation to Milled Peat Operation – Internal Bord na Móna Report 1988 (included in Appendix 4-17);
- Industrial Cutaway Bog Land-Use Studies (Clonsast) – Internal Bord na Móna Report 1978 (included in Appendix 4-18);

4.1.3 Information Required for the Description of the Project

Article 5(1) of Annex IV of Directive 2014/52/EU and amending Directive 2011/92/EU outlines the items that should be included in an EIAR when assessing the effects of certain public and private projects on the environment. Item 1 of Annex IV is reproduced in Table 4-1 and lists what should be included in the description of the Project. These items are described in detail in this chapter and associated appendices. They can also be found in more detail in their respective chapters.

Table 4-1: Information referred to in Article 5(1) Annex IV of Directive 2014/52/EU, 2011/92/EU to be included in the description of the Project.

Description of the Project, including in particular:		Relevance to application	Location In rEIAR
a)	*a description of the location of the project;*	The Application Site (i.e. Longfordpass, Littleton, Lanespark, and Derryvella bogs) forms part of the Littleton Bog Group and is located in Co Tipperary, in the town lands of Kilmakill, Longfordpass North, Longfordpass East, Longfordpass South, Leigh, Bawnreagh, Clonoura, Noard, Newhill, Derryhogan, Ballybeg, Derryvella, Lanespark, and Killee and is adjacent to the M8 motorway.	• Chapter 1 Introduction • Chapter 4 Description
b)	*a description of the physical characteristics of the whole project, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases;*	Site baseline description (as of July 1988), site preparation works pre-commencement of industrial peat extraction, drainage implementation, supporting infrastructure	• Chapter 4 Description • Chapters 5 to 15
c)	*a description of the main characteristics of the operational phase of the project (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used;*	Peat extraction operations from July 1988 – 2017 including peat volumes extracted, peat extraction methods, machinery requirements, scale of operational areas required peat extraction methods, supporting activities Vegetation clearance, habitat removal, peat volumes extracted, energy used	• Chapter 4 Description • Chapter 6 Biodiversity • Chapter 7 – Land, Soils and Geology • Chapter 8 – Hydrology and Hydrogeology • Chapter 9 Air Quality • Chapter 10 Climate • Chapter 14 Material Assets • Appendix 4-3 Annual Environment Reports

Description of the Project, including in particular:		Relevance to application	Location In rEIAR
d)	*an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation) and quantities and types of waste produced during the construction and operation phases.*	Silt run off, waste management, noise and vibration emissions, dust and CO_2, CH_4 and NO_2 emissions	• Chapter 4 Description • Chapter 7 Land Soil and Geology • Chapter 8 Hydrology and Hydrogeology • Chapter 9 Air Quality • Chapter 10 Climate • Chapter 11 Noise and Vibration • Chapter 14 Material Assets • Appendix 4-3 Annual Environment Reports

4.2 Project Description

This rEIAR is prepared in support of an application for substitute consent for peat extraction and ancillary activities carried out by Bord na Móna on lands at the Application Site since July 1988. The Application Site, comprising an approximate area of 1,616 ha, is located in north County Tipperary, c. 3km from Littleton village, as outlined in Plate 4-1 Site Location Map.

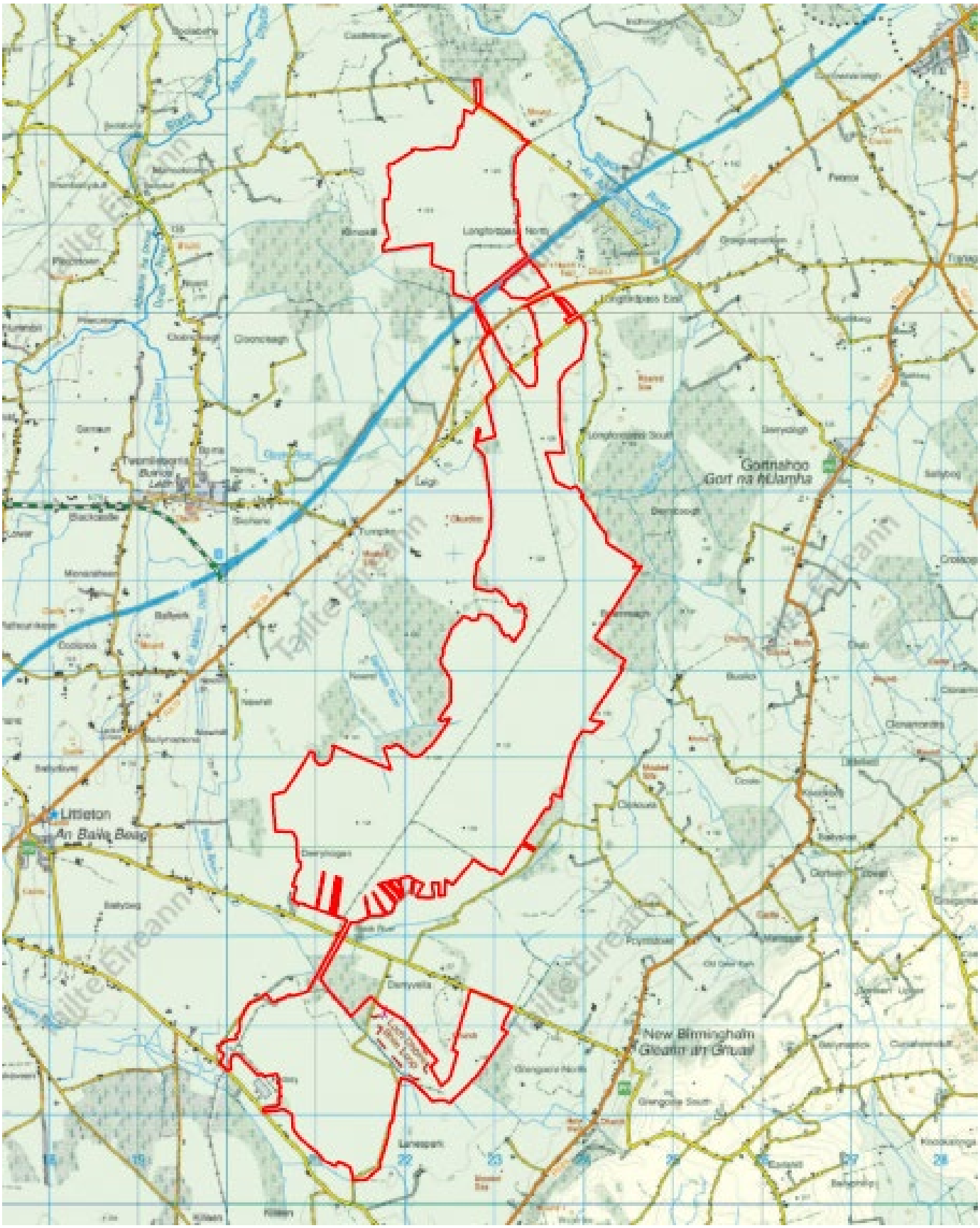


Plate 4-1: Site Location Map

Peat extraction and ancillary activities undertaken at the Application Site since 1988, which comprise the development for which substitute consent is being sought, and the Project for which this rEIAR has been prepared, consists of the following:

- Installation of surface water drainage infrastructure at the Application Site to facilitate peat extraction activities from 1988 to present day;
- Vegetation clearance to facilitate peat extraction activity from 1988 to 2017;
- Industrial scale peat extraction (milled peat) at the Application Site from 1988 to 2017;
- Use and maintenance of pre-existing ancillary supporting infrastructure and services to facilitate peat extraction (e.g. railway infrastructure, drainage (drains, silt ponds, pumps), etc.), from 1988 to present day;
- Control Measures associated with the above, inclusive of the IPC Licence measures (Ref. P0499-01) which commenced from August 2001 onwards to the present day; and
- All associated site development and ancillary works.

4.2.1 Project Phases

As detailed in Section 1.1.1, for the purposes of this rEIAR, the Project is defined under three different timeframes termed 'Phases':

- **'Peat Extraction Phase':** peat extraction and ancillary activities at the Application Site from July 1988 to the cessation of peat extraction in 2017 (July 1988 – 2017). The Peat Extraction Phase is described in detail in **Sections 4.4 to Section 4.7.**
- **'Current Phase:** the management of the Application Site since 2017 to present day including decommissioning works and Rehabilitation Phase 1 works. The Current Phase is described in detail in **Section 4.7 and Section 4.8**.
- **'Remedial Phase':** the activities intended to be carried out at the Application Site into the future (Rehabilitation Phase 2 works). The Remedial Phase is described in detail in **Section 4.9.**

Rehabilitation Phase 1 works were carried out at the Application Site in accordance with the Cutaway Bog Decommissioning and Rehabilitation Plans (2018) (See Section 4.7 and Section 4.8 for further details). Rehabilitation Phase 2 works include works which will be carried out at the Application Site in accordance with Decommissioning and Rehabilitation Plan 2025 (See Section 4.9 for further details).

- Initial opening of drains:
  - Drains were first opened by a plough pulled by a Bord na Móna tractor at a slow speed (approx. ½ to 1 mile per hour (0.8km/h – 1.6km/h)); and
  - The drain depth at the plough stage was 20" (0.51m). Drains had a trapezoidal section with a top width of approximately 30" (0.76m) and a bottom width of 12" (0.3m) bottom width.
- Deepening of drains:
  - Following their initial opening, drains were deepened by rotating disc machines operating at speeds of 200-600 yards per hour (approx. 180-550m/hour);
  - Rotating disc machines could deepen the drains to a maximum depth of approximately 60" (approx.1.5m), with a bottom width of approximately 12" (approx. 0.3m); and

- Whether further deepening of drains was required depended on the purpose of the drain was achieved by smaller-type bucket excavators and peat cutting machinery, by drag lines specially tracked to Bord na Móna's design, by several other excavator types, or by hand where it was desired that the drain should conform to certain maximum dimensions.

Arterial drainage works were not always adequate to achieve the levels of drainage required to allow the extraction of peat deposit to the bog floor. Pumping of whole bog areas or certain portions of bog areas arose where gravity drainage was impossible or achievable only at prohibitive cost. In these instances, the pumps favoured were the Archimedean screw type or the Axial flow type electrically powered, and electrode controlled.

Once drained, the upper acrotelm layer (which comprises the biologically active component of the bog) was removed to facilitate peat extraction activities, all ancillary works and the drying of peat. The acrotelm is one of two distinct layers in undisturbed peat bogs. It overlies the catotelm. The boundary between the two layers is defined by the transition from peat containing living plants (acrotelm) to peat containing dead plant material (catotelm).

The machinery involved in drainage work on the Application Site is described in Section 4.2.2.1.1 below.

4.2.1.1.1 Drainage and Bog Preparation Machinery

Dragline/Shovel Excavator: Types 287 CU. Metres and 478 CU. Metres

These machines excavated the main outfalls for the bog drainage system in the early development stages and maintained main outfalls during the production life of the bog. While these excavators were generally of conventional design and were suitable to be mounted with dragline attachments, back and front acting shovels, and pile driving attachments, they were used mainly with the dragline attachment. The machines were powered by a diesel engine. All drives were mechanical with friction clutches and brake control of winches and turntables, while the track drives and steering were controlled by a claw clutch and brake arrangement.

In 1958, a new underframe for the dragline was designed to minimise surface pressure and peat compaction, thereby eliminating the need for the use of timber mats. The increased mobility and reliability of the machine resulting from the new underframe allowed the machines to move rapidly over the bog to do relatively small jobs which would earlier have been done by hand, owing to the slowness and difficulty of moving the dragline over timber mats. Additionally, the elimination of the timber mats meant that groundsmen were no longer required to move the timber mats. This meant that draglines could be operated by the driver only, with no support staff required. The 287-model excavator had caterpillar-type tracks with timber sleepers, which provide the necessary bearing area for operation on bog, without using mats. The 478-model excavator, while equipped with caterpillar track chains, was not fitted with track sleepers but was supported on timber mats where necessary.

When excavating bog these machines were fitted with a special dragline bucket of light design with a capacity of 750L. Plate 4-2 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-2: Dragline/Shovel Excavator (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/draglineshovel-excavator/)

Drainage Machine Type – Klassmann

The Klassmann drainage machine was designed and developed for operation on sod moss production bogs. The machine was supplied with a variety of attachments to suit specific duties. For Bord na Móna's applications it was fitted with a slit drainer, a drain cleaner and a levelling screw. The tractor was of light construction with the chassis fabricated from folded steel sections supported on two tracks each comprising two chains carrying steel swamp shoes, running on end sprockets and frictionless bearing mounted intermediate support rollers. The power unit was an air-cooled diesel engine and the transmission consisted of an over-centre single plate clutch, vee belt drive, specially designed four speed gearbox, and chain drives which powered both tracks and the Power Take Off (PTO) for attachments. Additional sprockets were supplied to give a variety of forward speeds to suit specific attachments. Steering was assisted by coil clutch and brake bands. The machine was fitted with a hydraulic system to control the transmission of power to the various attachments. All controls were centralised in an enclosed cab.

The slit drainage attachment was used to open initial drains in virgin bog. It comprised a cutting boom of small buckets carried on special chains and sprockets. The content of the buckets was discharged mechanically into a vane-type spinner which threw the spoil clear of the drain. The drain cleaner attachment was similar to the slit drainer but cut a wider drain and was used to deepen and maintain drains after the first sod cut was made. The screw leveller attachment was used for the preparation of fields on moss peat bogs to remove the vegetation and level the surface to facilitate the performance of cutting machines and the stability of the sod walls formed by these machines. The attachment had the ability to camber surfaces if required.

Drainage Machine Type – M.P. Field Slitter

This machine was developed to cut slit drains in milled peat fields to accelerate drainage in the poorer quality areas. The drains cut to a definite pattern comprising three longitudinal slits, one central and one on either side, with cross drains giving exit to the ditches at regular intervals. The machine comprised a tractor on full tracks with a chain saw cutting attachment similar to the chain saw machine. The tractor had a special transmission to give the correct forward travel speeds in second and third gear. The modification involved the replacement of the gearbox primary gear train and the differential crown wheel and pinion, in addition to the insertion of a special reduction gearbox. The tracks comprised flat metal cleats carried on two chains and run on the standard tractor tyre wheels with an additional jockey wheel. The attachment was carried at the rear of the tractor, pivoted on the centre of a standard power-take-off bevel box output shaft and is raised and lowered about this pivot by a hydraulic ram operated from the driving position. The cutting element was a standard transmission chain with cutting teeth secured to it by welding, running over a top driven sprocket and a bottom driven sprocket whose shaft carries a cutting impeller on either side outside the support bearings. These impellers, in conjunction with the cutting chain, excavated a tunnel of rectangular section at the bottom of the slit drain cut by the chain only. The machine had a cab with toughened glass windows, allowing good vision for manoeuvring and observing the behaviour of the attachment. Plate 4-3 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-3: Drainage Machine Type – M.P. Field Slitter.
(Source: https://www.bordnamonalivinghistory.ie/equipment-detail/drainage-machine/)

Ditching Attachment – Milled Peat Type – Disc

The purpose of this attachment was to cut the drains separating the milled peat fields in development bogs and deepen existing drains in production bogs. The attachment consisted of a rotating cutting disc set at an angle to the line of travel, carried on an arm from the tractor unit. The arm and disc were controlled and supported by wire ropes and a hydraulic ram passing over a mast on the tractor unit and anchored to a projecting ballast box on the other side of the tractor unit. The disc was driven by the tractor main gearbox PTO shaft via a bevel gear reduction box and universal propeller shaft. On other machines a chain drive reduction was inserted between the bevel gearbox and universal propeller shaft to achieve a slower disc speed. The disc had cutting blades and a stationary shield which deflected the flying spoil away from the machine and spread it evenly over the adjacent field.

Drain Cutting Attachment – Cross Drain

The purpose of this attachment was to cut small drains in milled peat fields from the centre of the field to the ditches separating the fields. The attachment consisted of a cutting boom which was mounted on the rear of the H.D. Tractor Type II on radius arms, controlled for height and level by hydraulic rams. To cut the drain, the tractor stopped, and the cutting boom started, trimmed for level if necessary and lowered into the bog, discharging the spoil to the centre of the field. The boom was of light construction using standard steel sections. The chain was carried on sprockets at the ends of the boom while it ran in a guide with the aid of welded-on cleats along the bottom horizontal portion of the boom. The drive is taken from the P.T.O. shaft of the tractor main gearbox via chain drivers and universal jointed propeller shaft. Plate 4-4 below is an image of this type of machinery operating on a Bord na Móna bog.

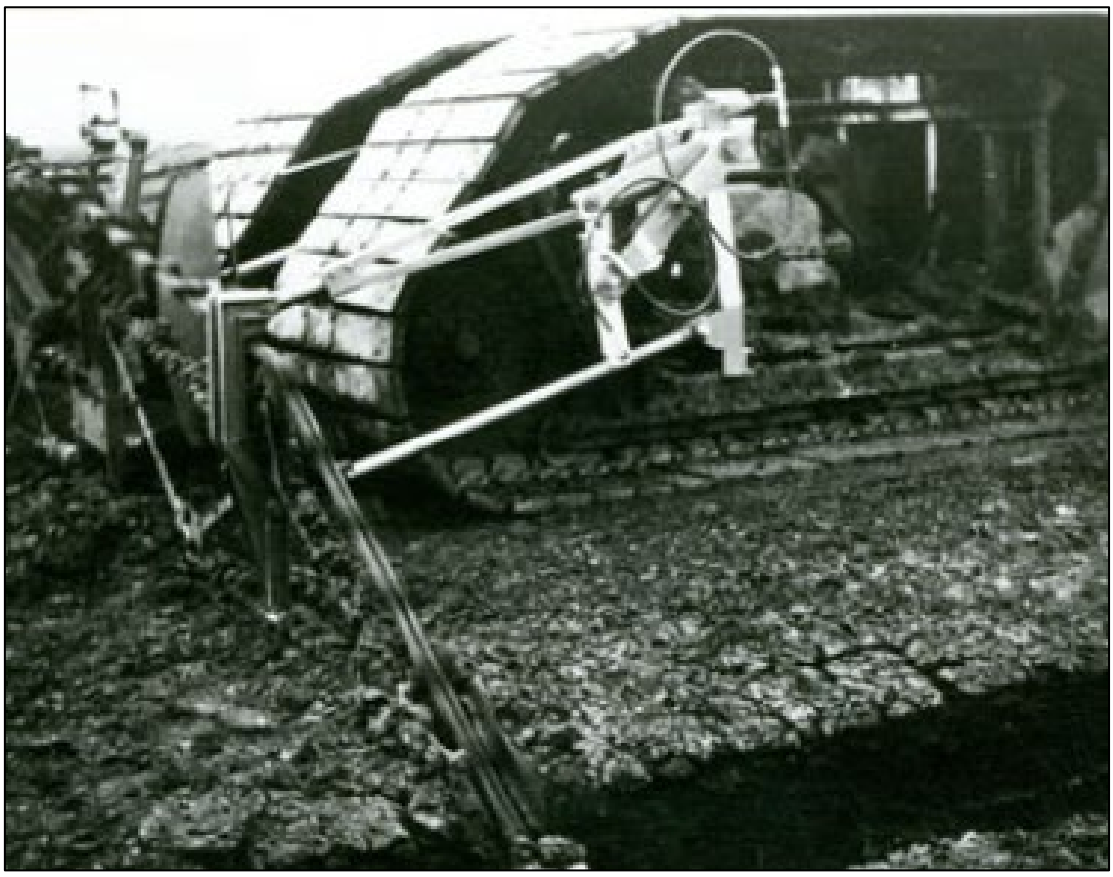


Plate 4-4: Drain Cutting Attachment – Cross Drain.
Source: https://www.bordnamonalivinghistory.ie/equipment-detail/drain-cutting-attachment-cross-drain/

Drain Cleaner – Screw

This attachment was used to remove slurry from the bottom of milled peat field ditches and dispose of it by spreading it on the adjacent field. The attachment was a screw elevator with radial blades fitted at the top to eject the spoil through an outlet in the casing in a predetermined direction. The attachment was mounted on a cantilevered bracket from the tractor on a pivot arrangement so that the screw casing could be lifted and lowered as required by winch rope. In the working position the screw elevator is lowered into the ditch and scoops the slurry from the bottom of the ditch as the tractor advances. As the tractor progresses along the ditch or drain it accumulates the slurry; the screw elevates it into the discharge chamber and the radial blades eject it through the outlet onto the peat field. Plate 4-5 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-5: Drain Cleaner Screw. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/drain-cleaner-screw/)

Stripping Machine Type – I & II

The purpose of this machine was to cut away the top layer of bog from the section which was to be cut. This layer varied in depth from 305 mm to 762 mm and was deposited at the bottom of the face bank prior to reuse on the adjacent spread grounds. The machine had a lightly constructed main frame mounted on caterpillar type tracks and the spiral cutting/conveyor unit was carried in an off-set position at the rear. The spiral cutter/conveyor unit was pivoted to the main frame and suspended on an overhung mast on which it was raised or lowered as required. A separate trimming control, in the form of a hydraulic ram, was fitted at the cutting end.

The Type I machine was powered by diesel engine and transmission of standard manufacture incorporating a differential brake/gear steering arrangement as used on a levelling machine. There were 8 forward speeds and 4 reverse speeds available through gearbox and change sprockets.

The Type II machine was powered by a diesel engine driving through an over-centre type clutch, a 'V' rope drive special worm and spur gear reduction box, and chain drives. The machine was steered by coil clutches on the track final drives. There were 6 forward speeds available using change sprockets. Plate 4-6 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-6: Stripping Machine. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/stripping-machine/)

Levelling Machine Type – Scraper

The purpose of this machine was to prepare the surface of the high bog and cutaway for the efficient operation of all other machines, by levelling it. The machine consisted of a large tractor unit carrying a leveller boom in front. As the machine advanced on its long tracks, the boom cut away the high areas, losing the spoil in the hollows. The tractor unit had a rigid main frame supported on caterpillar type power driven tracks and was powered by diesel engine and gear transmission of standard manufacture. The boom had a light framework made up of standard steel sections, around which was driven two conveyor-type chains running on sprockets at each end and in guides along the bottom and top. Across these two chains, arms were fitted, projecting beyond the front of the boom. The projecting portion of the arm had a cutting knife and scraper palm. The boom was controlled for height and level by hydraulic rams. Plate 4-7 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-7: Levelling Machine Type – Scraper. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/levelling-machine/)

4.2.1.2 Peat Extraction Process

Two distinct peat products were extracted at the Application Site: sod peat and milled peat. The methods by which these products were extracted varied, and each process is described in detail in the sections below. A description of the machinery used for peat extraction and ancillary activities at the Application Site is provided in Section 4.2.1.3.

4.2.1.2.1 Sod Peat Extraction

Sod peat was extracted at the Application Site from 1952 to 1984.

Sod peat, also sometimes referred to as 'machine turf' or 'turf', was extracted utilising technologies which were initially developed between 1910 and 1920. Once the drainage was installed and the bog sufficiently dry for machinery, the surface was prepared using levelling and stripping machines such as those described in Section 4.4.2. Sod peat extraction was subsequently carried out by a range of different bagger/sod peat excavator machines. The German word for both excavator and dredger is '*Bagger*' and this was the word adopted in Ireland for machines which mixed the peat from different depths of the bog and then macerated it. Baggers are shown in Plates 4-20 and 4-21.

In the case of sod peat extraction, large open drainage ditches known as "trenches" were opened at widths of approximately every 240 metres across the entire width of the extraction area. These trenches served as the beginning of the face bank from which sod peat was ultimately extracted. Baggers cut a trench with a width of 2 meters and a depth of 3 to 4 meters. A chain of buckets on the bagger was then inserted into the trench which extracted peat from all strata of peat in the trench. The extracted peat was then deposited into a macerator which pulped and mixed it. Maceration improved the quality of the sods of peat produced, as by thoroughly mixing peat from each strata of the bagger trench, the density and uniformity of the sod was increased. The macerated peat pulp was then extruded through a narrow double mouthpiece which formed it into two rows of continuous sods each of approximately 5 inches (approx. 13cm) wide x 3 ¾ inches (approx. 9.5cm) high. As they were extruded, the rows of peat were deposited on to a continuously moving chain of spreader plates, which when the spreader arm was fully loaded, tripped automatically and deposited the rows of turf onto the bog surface. Trailing discs then cut the rows into 15 inch (approx. 38cm) long sods. The standard length of the spread arm was 54 metres. The bagger/sod peat excavator machine spread the sod peat on the large area between the trenches which allowed sufficient room to dry the sod peat.

After about two weeks on the surface of the bog, the sods were turned by a sod turning machine to allow the other side of the sod to dry. When the sods were fully dried, the density and uniform texture resulting from the maceration process made them very impervious to rewetting. The dried sod peat was then collected from the surface of the bog using a sod collector. This machine was used to collect the sod peat from the sod rows into stockpiles which were often referred to as 'ricks'. A permanent 3 ft. gauge railway serviced all bog areas and facilitated connectivity to the various works centres, workshops, and fuel depots across the Bord na Móna landbank. When it was decided to move a stockpile, a temporary railway track was laid alongside from the permanent railway line. On completion of loading, the temporary track was lifted and re-laid along another stockpile as required. Please see Figure 4-2 for a Flow Chart of the Sod Peat Extraction Process produced by Bord na Móna.

Typically, sod peat fields were between 800 to 2,000 yards long (approx. 700m to 1,800m) discharging normally to the end of the large drainage trenches. Small, piped outfalls were installed perpendicular to the drains where needed to drain low areas that formed along the sod peat field. The pipes used were either concrete or clay pipes with a small diameter of between 150mm to 300mm.

These bogs utilised pumps where levels did not allow for gravity drainage. As the sod peat machine (bagger) was electrically powered a power supply for the pumps was easily obtained from the existing internal distribution network.

The large drainage trenches were continuously developed and have a width of between 3 to 8 metres typically and a depth of around 2-5 metres. They were maintained using mechanical excavators or draglines and were continuously deepened as sod peat was extracted from the bog to lower the drainage level.

Please see Figure 4-2 for a Flow Chart of the Sod and Milled Peat Extraction Process, produced by Bord na Móna.

4.2.1.2.2 Milled Peat Extraction

Milled peat was extracted at the Application Site from 1978. Between 1984 and 2017, milled peat was the only form of peat extracted at the Application Site, and this was transported to Littleton Briquette Factory via the bog railway. The methods by which milled peat was extracted are described in detail below.

In the case of milled peat extraction, parallel open drains were cut at 50 ft. (approx. 15.2m) centres which divided the peat extraction area into fields 45 ft. (13.7m) wide. Typically, the field drains were from 800 to 2,000 yards (approx. 700 to 1,800m) long, discharging at either end into piped outfalls which ran at 90° to the open drains and which themselves discharged into the nearest natural outfall. Beyond the piped outfall was left a headland or turning ground 70 to 100 ft. (21 to 30m) wide which ran parallel to the piped outfall to enable extraction machines to turn from one field into another. When fully developed, the open field drains had a depth of approx. 4' 6" (approx. 1.4m) and a top width of approx. 5' 0" (approx. 1.52m). The field drains were excavated and initially maintained by machines called disc ditchers. The disc ditcher consisted of a cutting disc. which was mounted on an arm offset from a tractor unit. Tractors were powered by a diesel engine, and they were mounted with timber and swamp shoes and front rollers.

Drainage channels were maintained using mechanical excavators or draglines and were continuously deepened as milled peat was extracted from the bog to lower the drainage level.

Milled peat extraction requires good solar/wind drying conditions and so commenced any time from mid-April onwards, and usually ran until mid-August, once suitable drying conditions prevailed. Following drainage, there were four stages to the extraction of milled peat outlined as follows:

Milling - During the milling process, the top 10-15mm of the surface of each field was broken into peat crumbs by powered milling drums towed behind agricultural tractors (Plate 4-9). This layer of crumbed or milled peat/moss is called a crop and would have had a moisture content of about 80% when milled;

Harrowing - After milling, the peat crop was dried. To assist in this drying, the loose peat was harrowed, or turned over. The harrow consisted of a series of spoons which were towed behind an agricultural tractor (Plate 4-9). The spoons on the harrow were fitted with special base plates which prevented the scraping of wet particles from below the milled peat layer. Harrowing was usually required 2 to 5 times per peat crop, depending on drying conditions, the water table level in the peat extraction fields, the initial moisture content of the peat at milling, and peat quality. If rain interrupted the drying process, more harrowing may have been needed;

Ridging - When the milled material was dried to a moisture content of between 45% and 55%, it was gathered into ridges in the centre of each peat extraction field. The ridger consisted of a pair of blades towed in an open V behind an agricultural tractor. The open V blades rest on the bog and channel the loose crop into a triangular ridge in the centre of each peat extraction field. (Plate 4-10 and 4-11);

Harvesting - Harvesting was the final stage of the extraction process. Each individual ridge was lifted mechanically, by a machine called a harvester, transferred and dropped on top of the adjoining field's ridge, until five ridges had been accumulated into a single large ridge. This large ridge formed the final lift into the peat storage stockpile (Plate 4-12 and 4-13).

Typically, every 11th field was used to stockpile the peat from the output of five fields either side; this is referred to as the 'Peco' method and the peat in these stockpiles was removed by rail. The Peco method was used at the Application Site. Weather permitting, the miller followed the harvester and the production cycle recommenced in the emptied fields. The extraction stockpiling cycle is referred to as a 'harvest' and each group of eleven fields generally produced 12 No. harvests per year. When the extraction season was over, the stockpiles were covered to keep the peat dry unless the peat was scheduled for immediate transportation from the site. Peat was stored in these stockpiles (up to 25 m wide, 10-15 m high) until required for use. Once stockpiles of milled peat were established, they were rolled and covered with polythene sheeting. The purpose of the polythene covering was to keep stock dry, to protect it against wind erosion, and to inhibit spontaneous combustion in certain types of peat by the exclusion of as much air as possible. A reel of polythene sheeting would be mounted on a single bale spike-type attachment on an excavator. The excavator would drive alongside the stockpile, and the polythene would be unrolled across it. There were generally 8 no. workers on the ground outside the excavator to undertake the work of unrolling the polythene and laying it across the stockpile (4 no. workers each side of the stockpile). Once the polythene sheet was laid in place, a layer of high-moisture-content milled peat was distributed over the polythene to fix it in place. This was done in three passes along a stockpile by a milled peat harvester; on the first pass, a milled peat harvester which was fitted with a split cowl at the end of the jib distributed an even layer of peat across the top and sides of the stockpile (the split cowl allowed for both faces of the surface of the stockpile to be covered in the one pass). The second and third passes of the milled peat harvester facilitated the deposition of peat along the bottom edges of the stockpile, effectively anchoring the polythene sheeting to the ground, preventing the lifting of the edges in the wind. (see Plate 4-14 and 4-15 below).

When it was decided to move a milled peat stockpile, the polythene sheet covering the stockpile was removed. A trained staff member would walk along the apex of the milled peat stockpile and bisect the polythene sheet at the peak of the apex with a blade. Starting at the end of the stockpile, one side of the bisected polythene sheet was fed into the eye of an implement known as a polywrapper, which was mounted on the three-point linkage of a tractor. The eye of the polywrapper was attached to a pendulous swivel arm, which, as the tractor moved forward, oscillated from left to right to ensure that the polythene being collected was being dispensed evenly across a metal shaft on the polywrapper. This ensured an even spool of polythene was collected. Once the spool was at capacity, one side of the polywrapper was opened, which allowed the metal shaft to be removed and replaced with a plastic one. The entire spool was then removed, and sent for appropriate disposal/recycling. The metal shaft was reinserted into the polywrapper, the side closed, and the process began again until the stockpile was fully uncovered and all polythene collected.

A permanent 3 ft. gauge railway serviced all bog areas and facilitated connectivity to the various works centres, workshops, and fuel depots across the Bord na Móna landbank. As in the case of sod peat stockpiles, when it was decided to move a stockpile of milled peat, a temporary railway track was laid alongside from the permanent railway line. On completion of loading, the temporary track was lifted and re-laid along another stockpile as required.

Please see Plate 4-8 for a Flow Chart of the Sod and Milled Peat Extraction Process, produced by Bord na Móna.

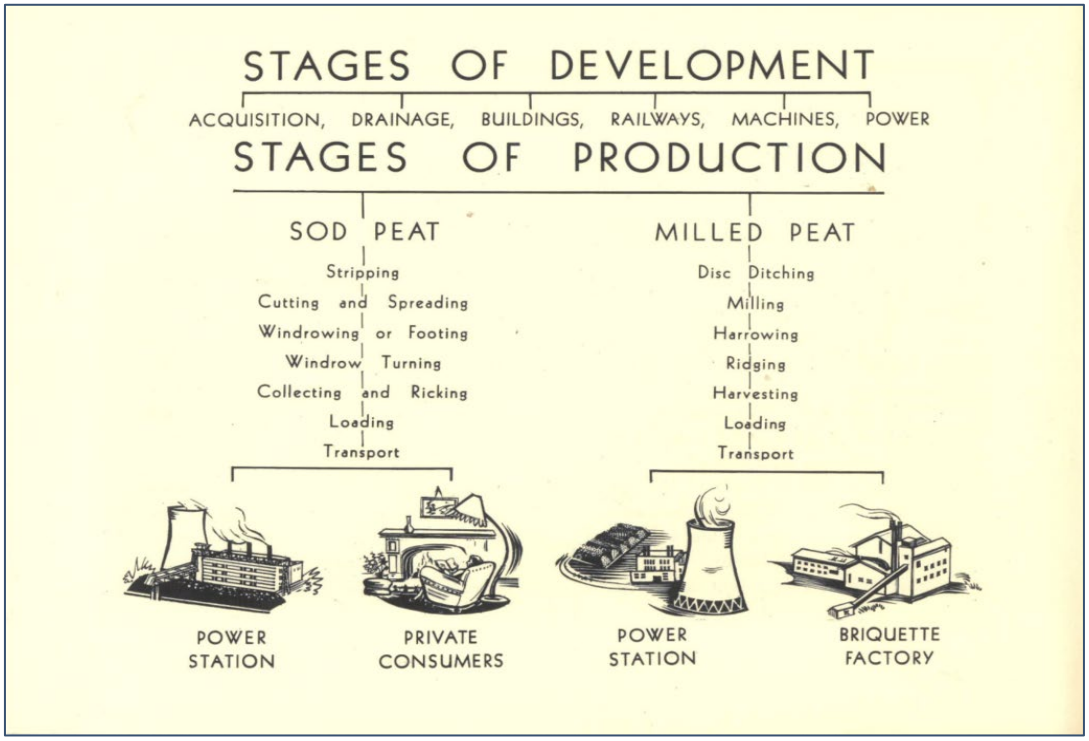


Plate 4-8: Flow Chart of the Sod and Milled Peat Extraction Process produced by Bord na Móna in 1954



Plate 4-9: Milling process. Image: Bord na Móna



Plate 4-10: Ridging process. Image: Bord na Móna



Plate 4-11: Ridging process. Image: Bord na Móna



Plate 4-12: Harvesting – Peco method. Image: Bord na Móna



Plate 4-13: Harvesting – Peco method. Image: Bord na Móna



Plate 4-14: Polythene covering of stockpiles



Plate 4-15: Process of Stock Protection, showing a layer of milled peat being spread over polythene sheeting to anchor the sheeting in place (source: Bord na Móna)

4.2.1.3 Peat Extraction Machinery

The following machinery was used in the extraction process once the bogs had been cleared of vegetation and drains inserted. The type of machinery used at any given time would vary depending on machine availability, bog conditions, the type of peat being extracted (i.e. milled or sod,) and operator preference.

4.2.1.3.1 Tractors

A variety of tractors have been used throughout the history of peat extraction and ancillary activities on the Application Site. As with all machinery used during peat extraction activities and all ancillary works, the choice of tractor used for any given activity would have been based on availability, bog conditions, and activity type (which would dictate the mechanical requirements of the tractor in terms of power output drivetrain, weight, wheelbase dimensions, tyre type, PTO specifications, hydraulic requirements etc.). Throughout the decades as improvements in tractor design were made, newer, more powerful and efficient tractors were employed on the Application Site. A non-exhaustive overview of the types of tractors used is provided below.

H.D. Tractor II

The H.D. Tractor II was a half-track tractor specially designed for harvesting and ditching operations in the Peco system of milled peat. The machine consisted of a robust main frame supported on caterpillar type tracks, which are exceptionally high to accommodate the attachments within them, and on large steering rollers in front. The tractor was powered by a diesel engine fitted with automotive-type clutch. The transmission consisted of a main gearbox, an auxiliary gearbox, a worm drive bevel gear differential unit and a spur gear reduction final drive contained within the back axle casting. The tracks comprised a special cast steel link type chain, with swamp shoes or sleepers bolted on, which ran on track rollers suitably spaced on the track frame. The driving sprockets were built up from steel plate discs with steel rollers between, to register with the track chain. The idler sprocket had the steel disc, with distance pieces, allowing the track link driving spuds to pass between them. Both the driver and idler sprockets are fitted with wear resisting cast steel pads where the track link driving spuds make contact with the sprocket plates. The front rollers were steel rimmed with spokes from a central cast hub. A circumferential steel angle section was fitted to obtain steering adhesion. The rollers were mounted on a swinging axle. The steering was manual through a wormbox, operating winding drums with wire ropes to the axle. The driver's platform was spacious, located at a high level over the main gearbox. For ditching operations, a protective cab was fitted over this platform to protect the driver from ditching spray and the elements. On some tractors on ditching operation, a simple hydraulic steering system was fitted. Plate 4-16 is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-16: H.D. Tractor II. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/h-d-tractor-ii-2/)

LHT Tractor II

This tractor was designed to operate miller and ridger attachments in accordance with the Peco system of winning milled peat. This machine consisted of a simple main frame with caterpillar-type tracks and front steering rollers. It was powered by a diesel engine fitted with an automotive type clutch. The transmission was a special speed change gearbox with P.T.O. shaft, and a worm-driven bevel gear differential unit housed in a conventional back axle. The half shafts from the differential unit are coupled to the track drive sprockets direct.

The main frame accommodated either of two engines, the size depending on the attachment to be used with the tractor. Steering was manual by hand wheel through a worm reduction gearbox, draglink and track rod. The front axle swung in the vertical plane to avoid undue distortion of the tractor frame. The front rollers were fitted with a circumferential ring of steel angle section to obtain steering adhesion. Plate 4-17 is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-17: LHT Tractor II. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/lht-tractor/)

LHT Tractor III

This tractor, fitted with attachment, is used for ridging the milled peat into the centre of the field. The tractor is the half-track type with front steering rollers. The main frame is fabricated from standard steel angle and channel sections. The tracks are single chain cast link type with timber swamp shoes bolted on and runs on cast sprockets and intermediate supporting rollers. The front steering rollers are spoked with fabricated steel rims and cast-iron hub and are mounted on stub axles on a pivoted axle beam which swings in the vertical plane. Steering is effected manually through worm reduction gearbox, drag link and track rod. The tractor is powered by a water-cooled diesel engine fitted with automotive type clutch. The transmission consists of a speed step-up primary gearbox of special design, a standard agricultural tractor change speed gearbox and differential assembly with a chain reduction final drive between the standard transmission unit half shaft and the track sprockets. Since this tractor is used only for ridging operations during daylight hours no electric generator is fitted and the engine is hand started. A hydraulic pump assembly is incorporated in the standard agricultural transmission unit and this is used to actuate the attachment hydraulic system.

Ridger Tractor (LHT IV)

A tractor specially designed to perform the milled peat ridging operation at more than twice the speed of the L.H.T. II & III. The chassis is fabricated from standard rolled steel sections mounted on half-tracks which incorporate our manganese track links and sprockets with intermediate support rollers. Timber swamp shoes are bolted to the track links. The power unit is a diesel engine with automotive type clutch, and it drives through a heavy-duty automotive type gear box and cardan shaft – the differential unit of a standard heavy duty truck back axle with epicyclic gear reduction between half shaft and wheel hubs. The track sprockets are bolted directly to the axle hubs. The tractor is carried on front rollers of generous proportions carried on stub axles and steering is powered by hydraulics. The engine is fitted with two hydraulic pumps, one for power steering and the other for the attachment hydraulic system. The attachment consists of double blades similar to the single ridger attachment, one blade on either side of the tractor converging at the rear. The blades are supported by sturdy spars which radiate from the tractor chassis. Adjustment of the sole-plate of the blade relative to these spars is provided. The attachment is lifted and lowered hydraulically through a multi-guy rope system over the top of a central mast on the tractor. Plate 4-18 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-18: Ridger Tractor. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/ridger-tractor/)

Massey Ferguson 35

The Massey Ferguson (MF) 35 would have been used from the 1960s and 1970s. It has a rated engine power of approx. 37 horsepower (hp). The tractor is powered by a diesel engine. It is commonly equipped with a 6-speed or 12-speed gearbox, depending on the model and design. It has a hydraulic system with a variable capacity. The tractor's weight is approx. 1,500kg.

Ford TW15

The Ford TW15 was used from the 1980s. It has a rated engine power of approx. 140hp, with a PTO output of approx. 120hp. The TW15 was available in both 2WD and 4WD configurations. The tractor is powered by a diesel engine. It has a hydraulic system with a variable capacity. The tractor's weight is approx. 5,000kg.

Landini 5830

The Landini 5830 was used from the 1980s. It has a rated engine power of approx. 50hp, with a PTO output of approx. 42hp. The 5830 was available in both 2WD and 4WD configurations. The tractor is powered by a diesel engine. It has a hydraulic system with a variable capacity. The tractor's weight is approx. 2,500kg.

Ford F4630

The Ford F4630 was used from the 1990s. It has a rated engine power of approx. 60hp, with a PTO output of approx. 56hp. The F4630 was available in both 2WD and 4WD configurations. The tractor is powered by a diesel engine. It has a hydraulic system with a variable capacity. The tractor's weight is between 2,350kg and 2,750kg, depending on the drivetrain.

New Holland TL70/TL70a

The New Holland TL70 was used from the late 1990s. It has a rated engine power of approx. 65hp, with a PTO output of approx. 56hp. The TL70 was available in both 2WD and 4WD configurations. The tractor is powered by a diesel engine. It has a hydraulic system with a variable capacity. The tractor's weight is between 2,700kg and 3,200kg, depending on the drivetrain and cab specifications. The New Holland TL70a was a variation of the TL70 which was used from the early 2000s. It had a higher rated engine power than the TL70, of approx. 70hp. Powered by a diesel engine, it weighed between 3,550kg and 3,850kg, depending on the drivetrain.

New Holland TM150

The New Holland TM150 was used from the late 1990s/early 2000s. It has a rated engine power of approx. 150hp, with a PTO output of approx. 120hp. The TM150 was available in both 2WD and 4WD configurations. The tractor is powered by a diesel engine. It has a hydraulic system with a variable capacity. The tractor's weight is between 4,750kg and 5,250kg, depending on the drivetrain.

New Holland TM165

The New Holland TM165 was used from the late 1990s/early 2000s. It has a rated engine power of approx. 165hp, with a PTO output of approx. 135hp. The TM165 was available in both 2WD and 4WD configurations. The tractor is powered by a diesel engine. It has a hydraulic system with a variable capacity. The tractor's weight is between 5,000kg and 5,500kg, depending on the drivetrain.

New Holland TM140

The New Holland TM140 was used from the early 2000s. It has a rated engine power of approx. 140hp, with a PTO output of approx. 115hp. The TM140 was available in both 2WD and 4WD configurations. The tractor is powered by a diesel engine. It has a hydraulic system with a variable capacity. The tractor's weight is between 5,150kg and 5,410kg, depending on the drivetrain.

John Deere 5070M

The John Deere 5070M was used from approx. 2010. It has a rated engine power of approx. 140hp, with an independent PTO. The 5070M was available in both 2WD and 4WD. The tractor is powered by a diesel engine. It has a hydraulic system with a variable capacity. The tractor's weight is approx. 3,700kg.

John Deere 6830

The John Deere 6830 was used from approx. 2010. It is a 4-wheel drive tractor manufactured by John Deere from 2006 to 2012. It has a weight of 5.7 tons and is powered by an engine with a power output of 125 kW. The tractor has a transport length of 4.76 meters and can travel at a speed of 40 km/h.

4.2.1.3.2 Sod Peat Machinery

Windrow Machine

The purpose of the machine is to pick up the partly dried sods from the spread ground and form them into windrows to accelerate drying. The machine consists of a tractor unit propelling large diameter spiked drums in front of it and carrying chain/bar conveyors extending from the pick-up drums to the rear of the tractor unit. The tractor unit is supported on caterpillar type, power driven tracks and steered by coil clutch and brake arrangement. The power unit is an air cooled diesel engine. The pick-up drums (8off) are independently supported and free to follow the bog surface. As they pass over the spread, the spikes penetrate the sods and lift them to the level of the conveyors, where fingers force them off the spikes and are carried away by the conveyors. The sods are discharged at the rear of the machine in windrow form, ½ metres apart.

Sod Turning Machine

This machine does the same work as the Single Turning Machine but has greater output. The elevator mechanism is exactly the same as the single machine and the components are interchangeable. These elevator units are located in front of the tractor tracks and they discharge either into a cross conveyor, rubber belt type, or two return conveyors, rubber belt type, positioned over the tracks. The cross conveyor is reversible and moveable to either side of the machine. The tractor unit consists of a strong main frame mounted on caterpillar type tracks suitable for high idle travel speeds. It is powered by a standard diesel engine and transmission gearbox which is fitted with a proprietary clutch and brake steering equipment. A standard hydraulic pump is also built into this transmission and is used to operate the hydraulic lift of the elevators for idle travel. A special chain reduction drive is inserted between the half shaft of the standard tractor transmission and the track drive sprocket. The drive to the elevators and conveyors are taken off from the standard power take-off shaft of the transmission unit. Plate 4-19 is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-19: Sod turning machine. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/sod-turning-machine/)

Sod Peat Bagger/Excavator

The purpose of the machine, and the various versions of it, is to excavate, macerate and spread turf for the production of sod peat. This is necessary as the high spread ground area diminishes to the point where it will not take a full spread. The machine consists of a sturdy main frame, supported on power driven caterpillar tracks, which carries the various units and their transmission drives, and to which is attached a spreader arm. The turf is excavated by a multi-bucket type digger boom which is retractable to facilitate operation at varying depths and is pivoted on the main machine so that it can be stowed for idle travel. The boom cuts a face bank at 600 to the horizontal. The turf is discharged from boom buckets into a scraper conveyor, and in turn, into a screw conveyor and twin-screw macerator. The macerator extrudes the turf onto the spreader plate chain which carries the extrusion for a distance of 54 metres, when it is discharged to the bog surface. Cutting discs trailing behind the spreader arm, marks the extrusion into sods as the machine advances. The machine is powered by electricity, and friction clutches are fitted to all motor drives for starting up. All unit drives are protected by shear pins. The machine is fitted with lights for night work and equipped with a short-wave radio transmitting /receiving set. Plate 4-20 and Plate 4-21 show this type of machinery operating on a Bord na Móna bog.



Plate 4-20: Sod Peat Bagger/Excavator. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/sod-peat-baggerexcavator/)



Plate 4-21: Sod Peat Bagger/Excavator. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/sod-peat-baggerexcavator/)

Cutaway Boom Attachment

The attachment comprised a short boom complete with a catchment conveyor overhung from the main machine by wishbone frames.

The boom had a lightweight framework fabricated in square hollow steel sections, within which the motor, gearbox, and chain drive, common to the original boom, were housed. The boom supporting wishbones were fabricated in square hollow steel sections of generous proportions, the pivots of which were arranged to maintain the same angle of the boom relative to the bank for various depths of cut. The upper wishbone frame was supported on a hydraulic ram from the side of the main machine, which was operated by a valve from the driver's cab, providing convenient control of cutting depths and lift for idle travel. The pivots of the lower wishbone frame were carried on arms from the main machine and were hydraulically adjustable to alter the slope of the bank cut.

The catchment conveyor, supported from the boom frame, was a rubber/canvas conveyor belt running on conventional driver, end roller, and troughing idlers. The section of the belt receiving the turf from the buckets was supported on a series of slides of self-lubricating nylon to prevent deflection of the belt and ensure more efficient sealing. The conveyor had an independent motor/gearbox drive. The catchment conveyor discharged into the original scraper conveyor of the main machine.

The attachment could be readily fitted to or removed from the machine by five pins. Plate 4-22 is an image of this type of machinery operation on a Bord na Móna bog.



Plate 4-22: Cutaway Boom Attachment. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/cutaway-boom-attachment/)

Sod Peat Loading Machine

The purpose of this machine was to load sod peat from bog ricks into railway wagons on one side of the rick only. The machine consisted of a lightly constructed mainframe mounted on caterpillar-type power driven tracks and carried a short scraper elevator in front, extending over the width of the tracks, and a low-level cross conveyor which elevated as it projected from the side of the machine. These loading machines were either diesel or electric-powered and would be fitted with either a diesel engine or electric motor as required. Plate 4-23 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-23: Sod Peat Loading Machine. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/loading-machine/)

Fóidín Machine

The fóidín machine originated from an experiment, the 'short cycle harvesting project' conducted at Oweninny bog Co. Mayo in 1965. The aim of the experiment was to produce fast drying peat sods from the surface of milled peat fields that were easy to crush in power stations, this led to the development of the fóidín machine in 1966. It came in two sections: the towing unit, which cut the peat, and the towed unit, which would macerate, extrude and spread the sods. Each of these sections was powered by its own diesel engine. It was steered by coil clutch and all other controls were operable from a cab which overlooked the working parts of the machine. The collection and stockpiling of the sods could be carried out with a combination of existing sod and milled peat machinery, modified in some cases. Fóidín production was suspended in most areas in 1972 and was abruptly terminated in 1973 due to several reasons, mainly that the yield from the fóidín system was small and insignificant compared to that of milled peat, complications arose burning crushed sods at ESB stations due to the higher calorific content of fóidín peat, and the cost of production was high relative to other peat extraction methods. Out of the 25 fóidín machines owned by Bord na Móna, one was sold to the Finnish State Fuel Supply Department, four were retained, and 20 sold as scrap.



Plate 4-24: Sod Peat Loading Machine. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/loading-machine/)

Chain Saw Excavator

A machine of compact, sturdy construction with a high output for its size was used in Bord na Móna primarily for drainage with turf production as a secondary feature. The tractor unit was powered by a diesel engine, had proprietary transmission gearboxes, and final chain drive to caterpillar-type tracks.

The excavator, macerator, and spreading equipment were carried on the rear of the tractor unit, while a guide roller was carried on the front. All this equipment was lifted and lowered by hydraulics. The turf was excavated by a high-speed chain sword carrying cast steel teeth and discharged by centrifugal force at the upper sprocket into a screw/conveyor/macerator unit. This unit extruded the turf through a fan-tail spout, with an adjustable outlet, onto the spread ground. A series of cutting discs and a marking frame divided the layer of turf into the required sod size.

After the first cut was made, using the clutch and brake steering on the tractor unit, the front guide roller could be lowered into the excavation made to steer the machine for subsequent cuts.

A pair of loaded rollers were trailed behind the cutting sword to close the top of the excavation just made, preparing the spread ground for the next run of the machine. In this way, all available bog could be covered with spread turf, leaving only nominal spaces between the extrusions. Plate 4-25 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-25: Chain Saw Extractor. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/chain-saw-excavator/)

4.2.1.3.3 Milled Peat Machinery

Miller Attachment

Miller attachments were used to break the surface of the bog into fine, milled crumbs which were left on the surface of the bog to be dried by the wind and sun. Milling attachments initially comprised single or triple units. Both single and triple units worked in the same way, with the difference between the two being the number of milling drums, and thus the output (which was approximately 2.25 times higher with the triple unit). Miller attachments were mounted on the rear of tractors and drew power from the tractor's PTO. The single and triple miller unit attachments were later replaced by an offset miller attachment known as a 'Type – I'.

Single Miller Attachment

Single miller attachments consisted of a simple but strong tubular steel frame, the main members of which extended to, and were pivoted, at the mid-position of the tractor tracks. Rigidly mounted on the underside of the frame was a pin-type milling drum which was driven from the tractor PTO shaft through a bevel gearbox and chain drive. The single miller attachment was supported by a ground roller, through springs, located immediately in front of the milling drum and by a depth control castor a few feet behind the milling drum. For idle travel, the single miller attachment was lifted by hydraulic ram so that the pin milling drum is clear of the bog surface. This attachment, by virtue of the sprung main supporting roller, caused the milling drum to cut deeper on the hills and shallower in the hollows, thus having a levelling effect on the bog surface. The drive to the milling drum is protected by a tension bolt safety device. Plate 4-26 is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-26: Single miller attachment. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/miller-attachment/)

Triple Miller Attachment

As mentioned above, the triple miller attachment operated in much the same manner as the single miller attachment, but with a higher output.

The triple miller attachment consisted of units similar to the single attachment, ganged together. The front centre unit was attached to the tractor drawbar, while the two side rear units were drawn by brackets from the side of the front centre unit frame. These brackets were pivoted, and the level of the front of the side unit frame was controlled by roller castors running on the bog surface. The drives to the three milling drums were by universal jointed propeller shafts with splined slip sleeves, two bevel gearboxes and final chain drives. The milling drum speed was lower than the single unit, but in all other respects the behaviour of the individual units is the same as the single miller attachment. For idle travel the units were lifted on hydraulic rams incorporated in the rear castor roller assemblies. Depth of cut was also adjusted by these rams from the driving seat. The drive to each of the three units was protected by a tension bolt safety device. Plate 4-27 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-27: Triple miller attachment. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/miller-attachment/)

Offset Miller Attachment (Type-I)

This attachment was used to form a bevel on the edges of milled peat fields, to assist surface drainage. The attachment was a miller drum, projecting from the rear of the tractor unit on a casing arm which is pivoted at a central position on the rear of the tractor main frame and extended to carry a ballast weight. The drive was taken from the tractor PTO shaft, through a bevel gearbox which formed the pivot assembly of the arm and a universally jointed propeller shaft extended to the actual milling drum. The milling drum was set backwards as it extended from the tractor so that the spoil was thrown back towards the centre of the milled peat field, where it could be harvested. A supporting trolley fixed to a projecting bracket at the centre of the tractor track and supported on a roller behind the drum, carried the drum arm on an adjustable suspension. The trolley, complete with extension arm and drum could be lifted by a winch rope passing over a mast frame mounted on the tractor. For bogs in early development a bladed drum was used, while a pin drum was used on production bogs. Plate 4-28 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-28: Offset (Type-I) Miller attachment. (Source: Bord na Móna site personnel)

Harrow

The attachment was made up of four spoon frames, each supported on steel wheels with brass bushings inserted and mounted onto steel shafts held on with a collar and split pin. The main towing frame had 2no. sets of twin steel wheels which pivoted when turning. Each frame behind that had 2no. sets of twin steel wheels fixed. The spoon frames were made of steel tubes and were triangular in shape, with two spars projecting at 45 degrees from the base of the triangle at the rear, each to carry a bank of spoons. The spoon was a curved plate, the base of which was a straight line, set at an angle to the line of travel, and while the front was curved back from its base, the rear was curved forward. The actual spoon was welded to an arm made of spring steel, which was pin jointed to the 45-degree spar to allow movement in the vertical plane. These spoons were pitched to ensure that all the peat was turned.

The four spoon frames were each free to follow the bog surface on their supporting wheels but were connected to each other by a pin-jointed link to facilitate turning. The supporting wheels of the towing frame were located in line with the towing points of the rear frames and were free to move laterally to facilitate turning.

Plate 4-29 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-29: Harrow. (Source: Bord na Móna site personnel)

Harvester

The purpose of this machine is to harvest milled peat from the bog fields in exactly the same way as the Type II harvester attachment on the HD Tractor. The tractor was a full track unit comprising a lightly constructed mainframe mounted on caterpillar-type tracks; on one side of the tracks returned at a high level to accept the harvesting attachment. The track chain was the cast link type running on cast sprockets and intermediate rollers. It was powered by a diesel engine, and the transmission consisted of a primary gearbox of special design, with a PTO shaft, and increased the transmission RPM through a standard automobile change-speed gearbox and a standard agricultural tractor transmission unit. The final drive reduction between the rear transmission half shaft and track sprocket was by a special spur gear reduction box.

The tractor was steered by a clutch and brake system of proprietary manufacture, which was built into the rear transmission unit. A driver's cab of generous proportions was fitted, with sliding doors and safety glass panels all around. Some of these cabs were of fiberglass construction, and others were of steel.

The attachment consisted of a single or double spiral unit and a single belt conveyor, articulated at two points.

The spiral unit was a steel sheet casing suitably stiffened with standard steel sections, capable of housing one or two spirals. The front and rear of the casing were open. The peat ridge was allowed to enter on the front side as the machine advanced, while the rear opening was blanked off by a trailing board, which was raised and lowered in guides as required, and when in the lowered position, was free to move in these guides as the surface of the bog demanded. The spiral or spirals were supported in this rigid casing by a bearing at each end of the shaft. The revolving spiral or spirals conveyed the peat along the bog surface and trailing board and up a sloping plate of the casing, discharging it onto the belt conveyor.

The spiral unit was supported on two inner and two outer rollers, each pair arranged so that each roller was free to follow the surface of the bog while carrying its share of the load.

The drive to the spiral or spirals was by a double universally jointed propeller shaft, and the casing was pin-jointed to a structural frame, which in turn was pin-jointed to the tractor unit, allowing complete flexibility of the spiral unit to follow the contour of the bog.

The belt conveyor was partly constructed on the structural framework connecting the spiral unit and tractor unit, including the conveyor drive pulley, and partly on the tractor unit, and the remainder formed the jib, projecting from the machine. While flat carrying idlers were used for the receiving end of the belt, flexible shaft type troughing idlers were used over the articulated portion, and conventional type troughing idlers on the jib. At the discharge end of the jib, a moveable deflector was fitted to control the trajectory of the peat.

The attachment was carried on the tractor unit, and a mast on the tractor unit was braced back to the spiral casing by a wire rope, while a multiple rope system actuated by a hydraulic ram on the mast was passed over the top of the mast and connected to the projecting conveyor jib. The top of the mast was also controlled relative to the tractor unit by a wire rope and hydraulic ram.

The driver of the machine could raise or lower the jib and the trailing boards and raise the spiral casing completely off the bog surface by hydraulics and control the jib deflector by a simple rope winch. Plate 4-30 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-30: Harvester. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/harvester/)

Milled Peat Loading Machine

The purpose of this machine was to load milled peat from peat stockpiles into railway wagons. The machine consisted of a tractor unit carrying a ground spiral on the front, extending either side of the bottom shaft was a bucket elevator which sloped back over the tractor unit. As the buckets overtopped the top sprockets of the elevator, they discharged onto a rubber belt conveyor which discharged into the railway wagons. Plate 4-31 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-31: Milled Peat Loading Machine. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/loading-machine/)

Polywrapper

A polywrapper was used in the uncovering of milled peat stockpiles. The polywrapper was mounted on the three-point linkage of a tractor (see Plates 4-32 and 4-33 below). The eye of the polywrapper was attached to a pendulous swivel arm, which, as the tractor moved forward, oscillated from left to right to ensure that the polythene being collected was being dispensed evenly across a metal shaft, which was internally fitted with a plastic pipe, on the polywrapper. This ensured an even spool of polythene was collected. Once the spool was at capacity, one side of the polywrapper was opened (see Plate 4-33 below), which allowed the metal shaft to be removed leaving just the plastic pipe in the roll of polythene. The entire spool was then removed, and sent for appropriate disposal/recycling. The metal shaft was reinserted into the polywrapper, fitted with a new plastic pipe internally, the side closed, and the process began again until the stockpile was fully uncovered and all the polythene collected.



Plate 4-32: Polywrapper

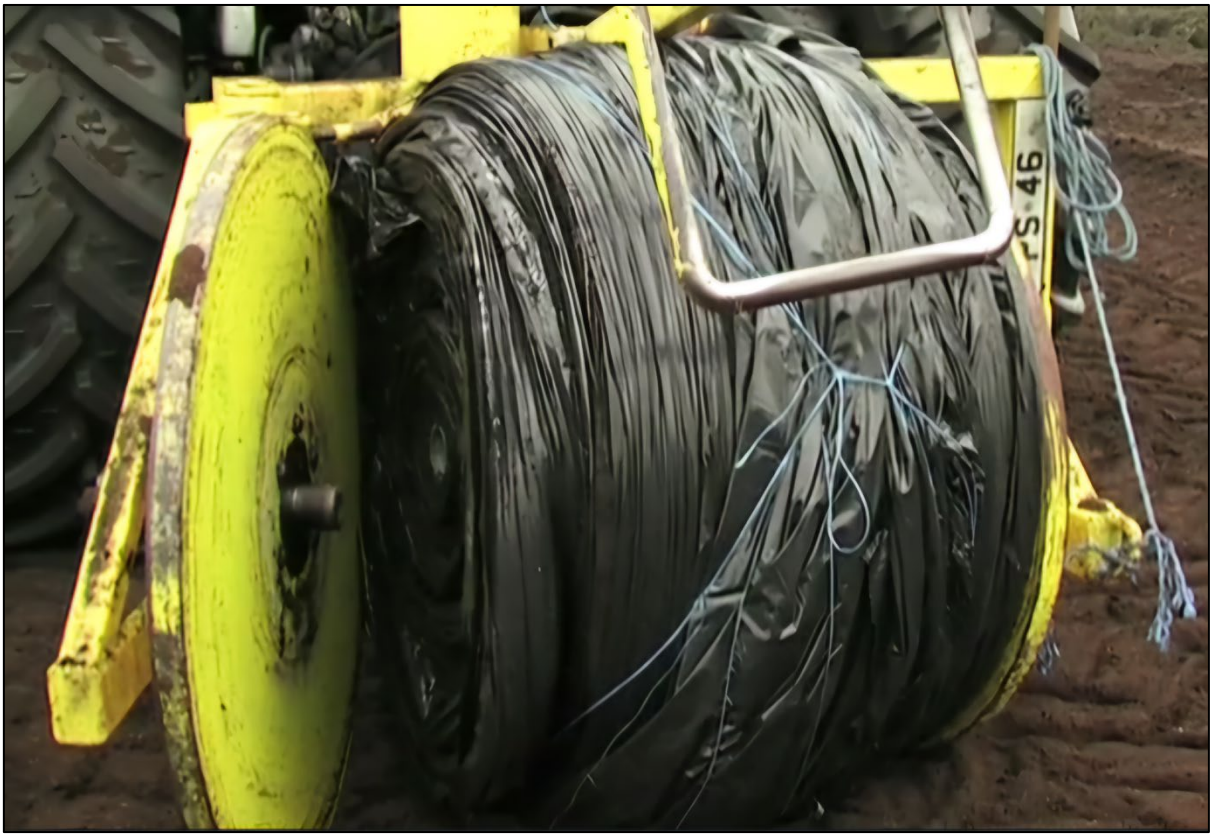


Plate 4-33: Polywrapper with the frame opened to allow access to the collected bale of polythene

4.2.2 Ancillary Services and Infrastructure

There are a number of ancillary structures and infrastructure associated with peat extraction and ancillary activities at the Application Site. These include:

- Littleton Works;
- Works offices;
- Local holding areas; and,
- Railway infrastructure.

Except for railway infrastructure and local holding areas, the remaining ancillary infrastructure has been removed from the Application Site boundary and as such substitute consent is not being sought in respect of this ancillary infrastructure. Nonetheless, in order to provide as detailed a description as possible of the Project, all of the ancillary infrastructure is described below.

4.2.2.1 Littleton Works

Littleton Works, also referred to as 'the Works', is located along the southern boundary of Littleton Bog, on the L2111. Littleton Works provided a central location for support and management services to the Application Site and includes workshops, offices and welfare facilities such as toilets, a canteen, staff parking and the Littleton Briquette Factory. The workshops and offices at Littleton Works were originally constructed prior to the enactment of the *Planning and Development Act 1963* (i.e. 1st of October 1964) as described in Section 4.1 and Chapter 1 - Introduction, Volume 2 of this rEIAR and are not included as part of this Substitute Consent application.

The Works was sold to a third party in 2020, and has not supported activities at the Application Site since its sale.

During the Peat Extraction Phase, bog workers would return to where their machines were parked overnight (e.g. at local holding areas or the Works) and then mobilise out into the peat extraction fields. At the end of the peat extraction season (i.e. from approximately October each year), machinery was brought to the Works for overhaul/service in preparation for the new peat extraction season to commence in the following March. Concrete bunds and oil interceptors were provided to prevent release of fuels to the ground or surface water bodies. All tanks and drums were stored in bunded areas. These standard practices were in place prior to the implementation of the IPC Licence in 2001. The workshops were mainly used to carry out repairs and maintenance on machinery which was brought in from the peat extraction areas.

A machine and wheel wash facility were also located at Littleton Works. Machine washings generated due to the cleaning of various plant machinery (using a power steam wash system when machinery left the bogs) at wash bays drained into the adjacent peatlands drainage system. Please see Plate 4-34 below for the location of Littleton Works.

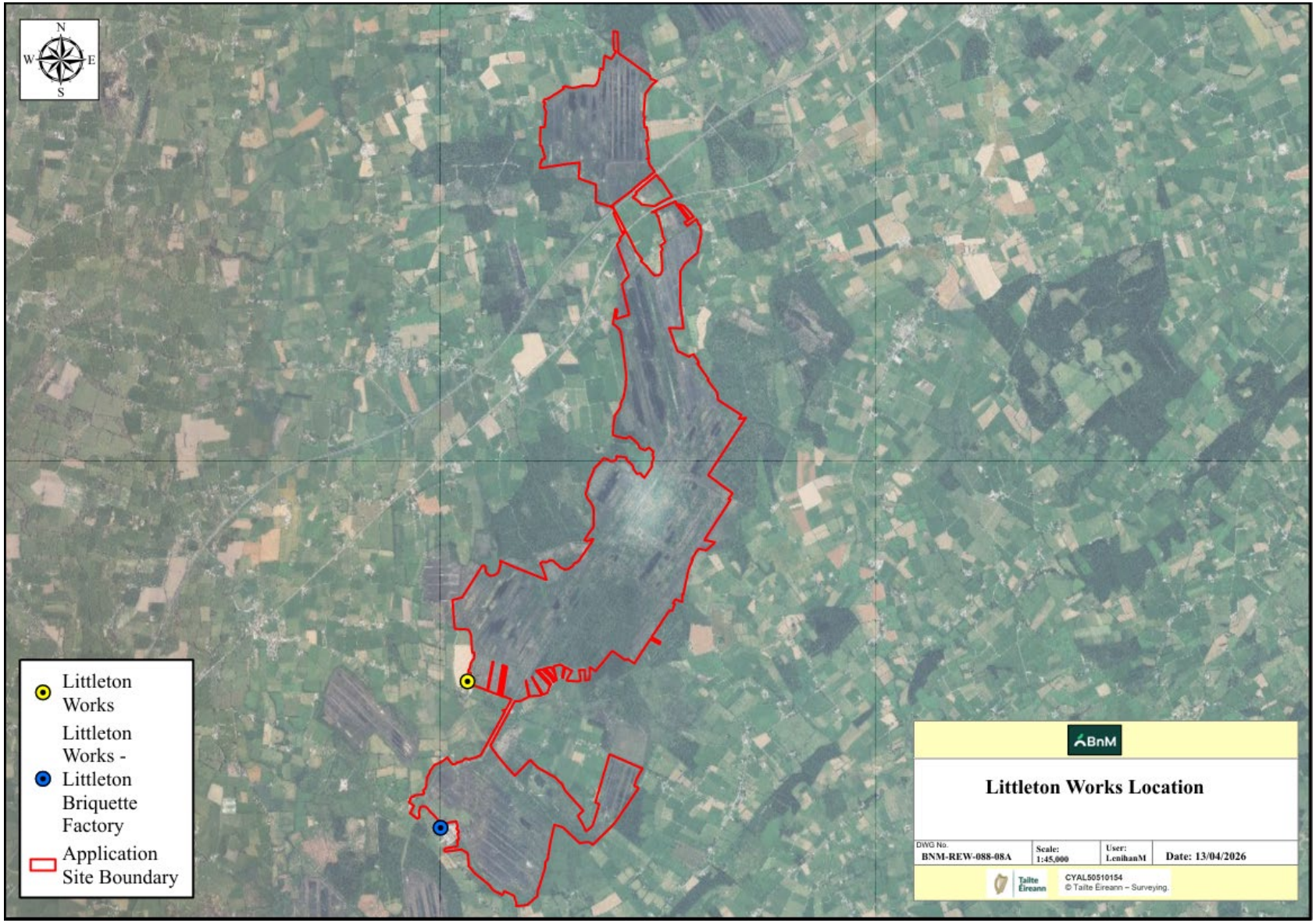


Plate 4-34: Location of Littleton Works

4.2.2.2 Works Offices

The offices at Littleton Works provided an administration centre for the Application Site. Permanent administration staff were employed throughout the Peat Extraction Phase from the time of construction of these buildings.

4.2.2.3 Fuel Storage

Fuel was stored within above ground tanks alongside the main workshop at the Littleton Works. The fuel tanks were bunded to contain any potential fuel spills or leaks. The practice of bunding at the Works and for mobile refuelling units was introduced in the 1970s. Refuelling procedures were subsequently upgraded to standard bunding specifications to comply with IPC Licence requirements in 2001 (refer to Appendix 4.1, Volume 3 for details). Refuelling of vehicles and machinery was primarily carried out at Littleton Works, but in some circumstances where machinery could not be tracked back to the Works buildings, refuelling was also carried out on the bogs at designated areas, away from drains or rivers, as required. Service trains/railcars with a bunded fuel dispensing unit, travelled from the Works to the designated bog area to refuel the machine in question. This occurred at a frequency of up to three times a week during peak times of the Peat Extraction Phase. This frequency was significantly reduced outside peak peat extraction.

The filling of tanks from the fuel supplier took place at the main fixed tanks at Littleton Works. These fixed tanks are now decommissioned. The service trains were filled from the main tanks at Littleton Works and travelled by rail to refill the plant machinery on the bog.

4.2.2.1 Local Holding Areas

There are 3 no. local holding areas associated with peat extraction at the Application Site, 1no. local holding area is located in Longfordpass Bog and 2 no. local holding areas are located in Littleton Bog. The locations of the local holding areas are presented in Planning Drawings P23-035-0101-0001, P23-035-0101-0004 and P23-035-0101-0006 as submitted as part of this Application..

Local holding areas were areas in which peat extraction machinery was parked at the end of the working day. Given the size of the Application Site, it wasn't necessarily sensical to track machinery back to Littleton Works each evening, and back to the active areas of peat extraction in the morning, as this would require significant time, given the speed of the machines, and result in unnecessary fuel use. As such, informal local holding areas were established by workers on the bog. These areas were proximate to road networks to allow staff easy and safe access without tracking over bog, and essentially comprised flat areas which were suitable for machines to park on.

4.2.2.2 Railway Infrastructure

Peat extraction areas were served by a network of permanent and temporary narrow-gauge rail tracks, (approximately 1m in width and with track lengths of approximately 9m), the majority of which was constructed in the 1950s and 1960s. During the early years of peat extraction activities and all ancillary works, the lifting and laying of rail was done by hand before equipment was designed for that purpose.

As discussed in Section 4.2.2.7, the track sleepers were approx. 1.8m in length and 0.76m apart. The total length of permanent track at the Application Site is 9.5km approximately, see Figure 4-1, Volume 4.

There are 4. no rail underpasses proximate to the Application Site. The first rail underpass is located between Longfordpass Bog and Littleton Bog. It is located on the R639 between Littleton and Urlingford, (Tipperary Planning Ref. 6586). The second rail underpass bridge for a double-line railway is located in Longfordpass North at the M8, (Tipperary Planning Ref. 6848). There is a third rail underpass located within Littleton Bog on a local road which cuts through the northern section of Littleton Bog, approximately 500m to the southeast of the underpass on the R639. There is a fourth rail underpass located along the southern boundary of Littleton Bog on the L2111 in proximity to the location of the former Littleton Works.

The Bord na Móna railway infrastructure was designed to be moveable, supporting infrastructure that was laid to facilitate the transportation of peat off the bog. Once peat stocks were exhausted from one area, the temporary tracks were taken up and re-laid in new areas of bog which had entered production. Thus, over the decades the railway line layout changed shape regularly. Furthermore, as areas fell out of permanent production, some railway lines were taken up completely.

The railway wagons were pulled by diesel powered locomotives, examples of which are shown in Plate 4-35.



Plate 4-35: Example of railway locomotive and wagons hauling milled peat to the power plant (source: Bord na Móna)



Plate 4-36: Railway Network at the Application Site

Railway Equipment

The equipment which facilitated the installation and maintenance of the railway tracks, as well as the equipment used to transport peat on the railway lines, are described below. A map of the railway network at the Application Site is presented in Figure 4-2, Volume 4 above.

Rail Shifter

A rail shifter was an attachment fitted on to tractors which was used to lift temporary railway tracks in sections and build them onto bolster bogies for transport to a new area. The rail lifter consisted of a lightly constructed main frame supported on two bogies and an overhead lattice work beam supported from the main frame to allow the passage of the rail sections through the machine. When seven sections were built on the bolster bogies, they were hauled away by a locomotive. Plate 4-37 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-37: Rail Shifter. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/rail-shifter/)

Rail Moving Attachment

The purpose of the rail moving attachment was to lift and lay temporary railway track along sod peat ricks and milled peat piles. The attachment was fitted to a tractor and consisted of an A-frame jib pivoted on a bracket secured to the track frame of the tractor and braced back at the top by wire rope to a projected ballast box on the other side of the tractor. A short jib was used for sod peat operations while a longer and a longer jib was used for milled peat operations. Plate 4-38 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-38: Rail Moving Attachment to lift and lay temporary railway track, along Sod Peat ricks and milled peat piles. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/rail-moving-attachment/)

Locomotive 80HP (Wagonmaster)

The locomotive hauled peat from the stockpiles across the Application Site to the Littleton Works for processing. The locomotive was powered by a water-cooled diesel engine driving through a fluid coupling, automotive type clutch, standard automobile change speed gearbox, a special reversing bevel/spur reduction gearbox and drive and coupling rods to the wheels. The main frame was fabricated steel plate. The axles ran in self-aligning double row roller bearings in cast steel housings sliding in horn guides with manganese steel wearing faces. A cab of generous size was included, with a tumbling-type seat to facilitate driving in both directions. The clutch control pedal was duplicated for the two driving positions. The braking system was mechanical hand operated. The locomotive was fitted with beam lighting, electric windscreen wipers and driving mirrors for both directions of travel. Plate 4-39 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-39: Locomotive with wagons. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/diesel-locomotive/)

Wagons

Wagons had a capacity of 16 cubic metres and were designed with two diamond bogies for sod and milled peat haulage. One bogie of each wagon was free to float 152mm in any direction to prevent derailment on uneven temporary track. The diamond bogie with its centre springs gave great flexibility and prevented axle failures. The wagon bearings were taper roller bearings which were grease-packed and fitted in the wheel hubs.

The use of aluminium to fabricate the sides and floor of milled peat wagons reduced the unladen weight of the wagon when compared to heavier materials such as wood and steel, and therefore facilitated a greater payload (i.e. a greater amount of peat) to be transported per train. Furthermore, the use of aluminium resulted in considerable reduction in the maintenance and painting costs.

Rail Car

Rail cars were used by the Manager or authorised members of his staff, to make inspection tours of the bog. Rail cars were equipped with first-aid equipment and also worked as a bog ambulance if needed. Rail cars were fitted with a water-cooled petrol engine, the power from which was transferred through an automotive clutch to a gearbox, and then transferred to each axle via a chain drive. Beam lights and electric windscreen wipers were fitted at each end of the rail car and a short-wave radio transmitting and receiving set enabled the occupants to keep contact with the Works and the larger machines that were fitted with radio units on the bog. Plate 4-40 below is an image of this type of machinery operating on a Bord na Móna bog.



Plate 4-40: Rail Car. (Source: https://www.bordnamonalivinghistory.ie/equipment-detail/rail-car/)

4.2.3 Site Services

Water consumption across the Application Site is primarily at the Littleton Works for domestic use. The potable water supply at Littleton Works is from a local authority water supply mains located on the L4101. Water supply to the Briquette Factory sited at the Works was from the River Breagagh, located south of the Works and outside the Application Site boundary. Water from the river was supplied to the Briquette Factory via a pump house.

Wastewater from the welfare facilities at Littleton Works receives primary treatment in one of three septic tanks at the Works, with the effluent discharging to ground via soakpits. The septic tanks are visually inspected and cleaned bi-annually by a licenced waste permit holder to ensure the treatment system is working optimally.

Electricity supply to Littleton Works buildings and workshops, and also to the drainage pump stations, are powered by mains electricity from the national grid connected to overhead electrical power lines.

Compressed air (oxygen and acetylene) was used mainly at the Littleton Works for welding and cutting purposes to maintain plant and equipment.

In addition to the above, other materials consumed as part of the historical peat extraction and ancillary activities would have been polythene sheeting for covering stockpiled peat, timber and steel for the rail lines, gravel for the rail beds etc.

4.3 1941 to 1988 – Initial Development & Peat Extraction (Pre EIA-Directive)

4.3.1 Site Description 1941 (Pre-Extraction)

Prior to the commencement of drainage, which first occurred on the Application Site in 1941, the Application Site was covered by an active raised bog, with the surface being wet, acidic and deficient in plant nutrients, with open Sphagnum-dominated vegetation. Raised bogs are accumulations of deep acid peat where peat can range from 3-12m deep. The "raised bog" name is derived from the elevated dome which develops as the bog grows due to the accumulation of peat. Pre-development topographies would have been higher (in the ranges of 123-133mOD) than those observed today, with the remnant areas of high bog located along the western boundary of the Application Site.

Water in a raised bog is continuously circulating, and pre-development, the Application Site would have been nutrient-poor and waterlogged on the surface. The principal supply of water to the Application Site would have been from rainfall. Water would have been lost from the Application Site from surface water runoff particularly during the winter months when the storage capacity of the bog would have been fulfilled due to higher levels of seasonal precipitation. Water may also have been lost through the lower levels of the peat deposits, especially where the bog is underlain by gravels or sands without underlying low permeability lacustrine deposits (i.e., clay layer). The pre-development water table at the Application Site was likely very stable with only minor fluctuations and remaining within a few centimetres of the bog's surface.

The primary land-use change associated with peat extraction and ancillary activities occurs during the initial drainage of the bog in advance of peat extraction. Constructed drainage ditches drain the upper surface of the bog by lowering the local peat water table. After the Application Site was drained, vegetation was removed from the bog surface, leaving only bare peat fields between the drains. Around this time and in the years that followed, ancillary features were also constructed including railway lines, and workshops..

Prior to 1988, all four bogs within the Application Site (i.e. Longfordpass, Littleton,– Lanespark, and Derryvella) were fully drained and all four bogs were subject to peat extraction.

During the Peat Extraction Phase of the Project, only minimal land-use change occurred which predominantly related to minor annual topographic changes caused by ongoing peat extraction and ancillary activities. While peat extraction was ongoing it was not possible to rehabilitate the underlying peatland.

4.3.2 Drainage and Peat Extraction

The timing of the installation of drainage and initiation of peat extraction varied across the Application Site. Littleton Bog was the first bog to commence clearance and drainage in 1941 and would have experienced a relatively abrupt change in land cover with the commencement of peat extraction in 1952. Sod peat extraction commenced in Littleton Bog in 1952, which assisted with the overall drainage of the bog by removing the acrotelm (see Section 4.4.1 above for description on process of removal of acrotelm/top layer of bog). Clearance and drainage works on Longfordpass bog commenced in 1947 and Lanespark, and Derryvella bogs commenced in 1968 respectively.

The earliest aerial imagery available (1973) confirms that at that time, drainage to facilitate peat extraction was already inserted at Longfordpass, Littleton, Lanespark and Derryvella bogs. The Application Site was mapped as potential industrial areas/machine turf in the Peatland Map of Ireland produced by the National Soil Survey in 1978[4]. Plate 4-40 below presents the extent of peat extraction at the Application Site in 1973, which has been deduced from the earliest available aerial imagery for the Application Site (i.e. 1973). All aerial imagery available for the Application Site is included in Appendix 4.4, Volume 3.

As outlined above, the Application Site commenced clearance and drainage in 1941 and would have experienced a relatively abrupt change in land cover with the commencement of peat extraction in 1952.

[4] https://www.teagasc.ie/media/website/environment/soil/Peatlands-of-Ireland-Map.pdf

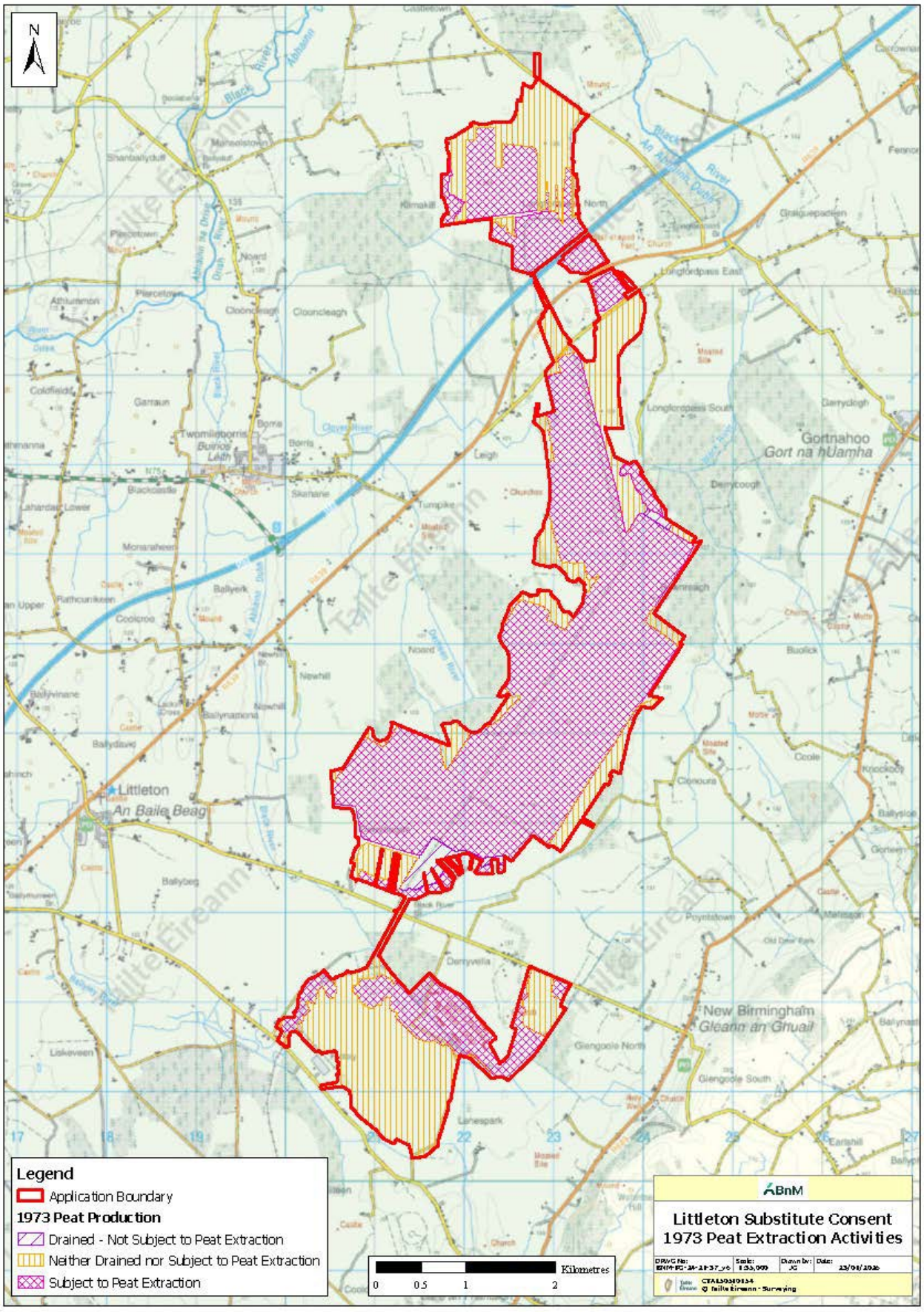


Plate 4-41: 1973 Peat Extraction Activities at the Application Site

As discussed above, drainage ditches to drain the upper surface of the bogs by lowering the local water table were inserted across the Application Site at different stages throughout the decades (please see Table 4-2 below and Section 4.2.2 for details on drainage construction methods practiced at the Application Site). After the bogs were drained, vegetation clearance was undertaken. It is estimated that in 1973, approximately 1,052ha across the Application Site were cleared, drained and subjected to peat extraction. In 1988 this increased to approximately 1,353ha across the Application Site being cleared, drained, and subject to peat extraction, and a total of approximately 110ha were drained but not subject to peat extraction. Approximately 144 hectares were out of peat extraction in 1988.

The topography of the Application Site prior to the commencement of peat extraction and ancillary activities is estimated to have been 123-133 mOD. This is deduced from the relatively uniform low-lying nature of the Application Site and surrounding landscape, and the presence of benchmarks noted on historical 25" OSI mapping (1897-1913 and) Cassini 6" (1940s) of the area. It is assumed that prior to the installation of drainage to facilitate peat extraction, the Application Site was virgin bog and was therefore an active raised bog.

The primary and greatest land-use change associated with peat extraction and ancillary activities on the Application Site occurred during the initial drainage and vegetation removal of the bogs in advance of peat extraction. This impact would have predominantly occurred in advance of 1988 at the Application Site. A photographic accompaniment illustrating the types of activities described below can be found in Appendix 4-10 *Bord na Móna: Peat Development in Ireland 1954*.

Table 4-2: Operational history of the Application Site (Source: Bord na Móna Annual Reports and sources listed in Section 4.1.2

Bog Unit	Commencement of Site Preparation Works (vegetation clearance and drainage insertion)	Extraction Commenced	Extraction Ceased
Longfordpass Bog	1947	1952	2017
Littleton Bog	1941	1952	2017
Lanespark Bog	1968	1973*	2017
Derryvella Bog	1968	1973*	2017

*Aerial imagery of the Application Site shows peat extraction had commenced by 1973.

The following table describes the general activities within the Application Site over a calendar year during each of the four quarters from 1952 when peat extraction commenced to July 1988. Some drain maintenance was carried out during the full year, but it was mainly restricted to outside the peat extraction season. Fuel handling and refuelling would have increased significantly during the peat extraction season due to the increased activity of the peat extraction machinery.

Table 4-3: Annual Peat Extraction Activities 1952 - 1988

Calendar Quarter	Activities
January to March	Drain/Machinery/Pump/Silt Pond maintenance, Stockpile removal, peat transportation
April to June	Peat extraction, Stockpile development/removal, peat transportation
July to September	Peat extraction, Stockpile development/protection/removal, peat transportation
October to December	Drain/Machinery/Pump/Silt Pond maintenance, Stockpile removal, peat transportation

4.3.3 Drainage Design

As part of the development of the Application Site for peat extraction, parallel surface water drains as per the methodology outlined in Section 4.2.2 were created by machine excavators at specific intervals, depending on whether milled or sod peat was being extracted. The strips of bog between these drains were retained to form peat extraction 'fields'. By 1988 drainage channels, silt ponds, outfalls and pumps were extant at the Application Site. The Planning Drawing Pack shows the detailed drainage features across the Application Site.

4.3.3.1 Longfordpass Bog

Drainage works first commenced in Longfordpass Bog by 1947. The earliest available aerial imagery dating from 1973 shows sod peat drainage inserted at Longfordpass Bog. By 1988, there was one pump, and 3 no. silt ponds installed on Longfordpass Bog.

4.3.3.2 Littleton Bog

Drainage works first commenced in Littleton Bog by 1941 according to Bord na Móna Annual Reports. The earliest available aerial imagery dating from 1973 shows sod peat drainage inserted at Littleton Bog. By 1988, there were 12no. pumps installed on Littleton Bog.

4.3.3.3 Lanespark Bog

Drainage works first commenced in Lanespark Bog by 1968. The earliest available aerial imagery dating from 1973 shows drainage inserted at the periphery of Lanespark Bog. By 1988 the bog was fully drained for industrial scale peat extraction, and there were no pumps, and 4 no. silt ponds installed on Lanespark Bog.

4.3.3.4 Derryvella Bog

Drainage works first commenced in Derryvella Bog by 1968. The earliest available aerial imagery dating from 1973 shows drainage inserted at the periphery of Derryvella Bog. By 1988 the bog was fully drained for industrial scale peat extraction, and, there were no pumps, and 1 no. silt ponds installed on Derryvella Bog.

4.3.4 Peat Extraction Pre-1988

4.3.4.1 Background

As discussed in the Planning Statement, the Turf Development Board had begun the preliminary development of certain bogs in 1941 with a view to the production of machine-won turf. These bogs included the Application Site and also Attymon (Galway), Barna and Carrigcannon (Kerry), Derraghan (Longford), Derrycashel and Mountdillon (Roscommon), Derryounce and Derrylea (Offaly), and Coolnagun, (Westmeath). In early 1946, the White Paper was issued by the Government, later known as the First Development Programme, setting out 'a comprehensive plan for the development of the country's peat resources by mechanical methods' which entailed the development of 24 no. bogs, including the Application Site. Peat extraction commenced in the form of sod peat extraction at the Application Site in 1952.

4.3.4.2 Sod Peat Extraction 1952 to 1984

As noted in Section 4.5.2, sod peat extraction began at the Application Site in Littleton and Longfordpass Bog in 1952 in the form of sod peat. Sod peat was extracted for domestic sale and to supply fuel to the Southern Health Board for use in hospitals and other public health facilities. The processes and machinery associated with sod peat extraction are described in Section 4.2.2.2.1

Sod peat extraction at the Application Site ceased in 1984. Following the cessation of sod peat extraction, the areas of sod peat extraction were converted to milled peat extraction (i.e. the drainage infrastructure was amended to facilitate milled peat extraction).

4.3.4.3 Milled Peat Extraction 1978 to 1988

Milled peat extraction commenced at the Application Site in 1978. From 1978 to 1984 milled peat was stockpiled on site for future use in the Littleton Briquette Factory. From 1984, milled peat from the Application Site was sent to the Briquette Factory. The processes and machinery associated with milled peat extraction are described in Section 4.2.2.2.2.

In 1984 sod peat extraction ceased at the Application Site and during the period from 1984 to the July 1988 baseline milled peat was the only form of peat extraction ongoing throughout the Application Site. Figure 4-9 shows a map of the peat extraction areas at the Application Site in 1988, illustrating areas that were subject to peat extraction and areas where peat extraction had not yet commenced.

Appendix 4.4, Volume 3 includes available aerial imagery from 1973, 1988, 1995, 2004, and 2018. Labels are added to the imagery to identify the three bogs within the Application Site as well as neighbouring bogs.

4.3.3 Peat Extraction Volumes 1952 – June 1988

An estimate of the volumes extracted during the period 1952— end of June 1988 was determined based on extraction volumes taken from the Bord na Móna Annual Reports and an average calculated from available records of extraction tonnages over the period from 1963 - 1972 and the period from 1978 – 1988.

The volumes of peat removed from the Application Site varied from year to year with a general and gradual increase with time as more of the Application Site was developed and became available for peat extraction. Fluctuations in peat extraction volumes are generally attributable to weather conditions in any given year, with wetter weather resulting in lower volumes of peat extraction due to poorer ground conditions for operating machinery, and poorer peat drying conditions; conversely, drier weather usually resulted in higher volumes of peat extraction due to better ground and drying conditions.

From 1952 to 1978, the volume of peat extracted was an average of 50,000 – 60,000 tonnes per year. Preparation for the extraction of milled peat began in 1975 and extraction of milled peat commenced in 1978.

From 1978 to 1984, both sod and milled peat extraction were being carried out at the Application Site where an average of 179,543 tonnes of peat was extracted per year during this period. The extraction of milled peat increased from c. 5,317 tonnes in 1979 to c. 246,833 tonnes in 1987. As part of Bord na Móna's Third Development Programme (see Chapter 2), plans were made to construct a briquette factory at Littleton. Littleton Briquette Factory received planning consent in July 1977 (Tipperary Reg Ref. 4576) and was opened in 1982 to meet the national growing demand for briquettes. Littleton Briquette Factory produced peat briquettes from milled peat received from a number of bogs, including the Application Site, as well as other consumer retail products such as firelighters.

Table 4-4 below and Plate 4-41 show the annual peat extraction volumes over the period 1952 to June 1988.

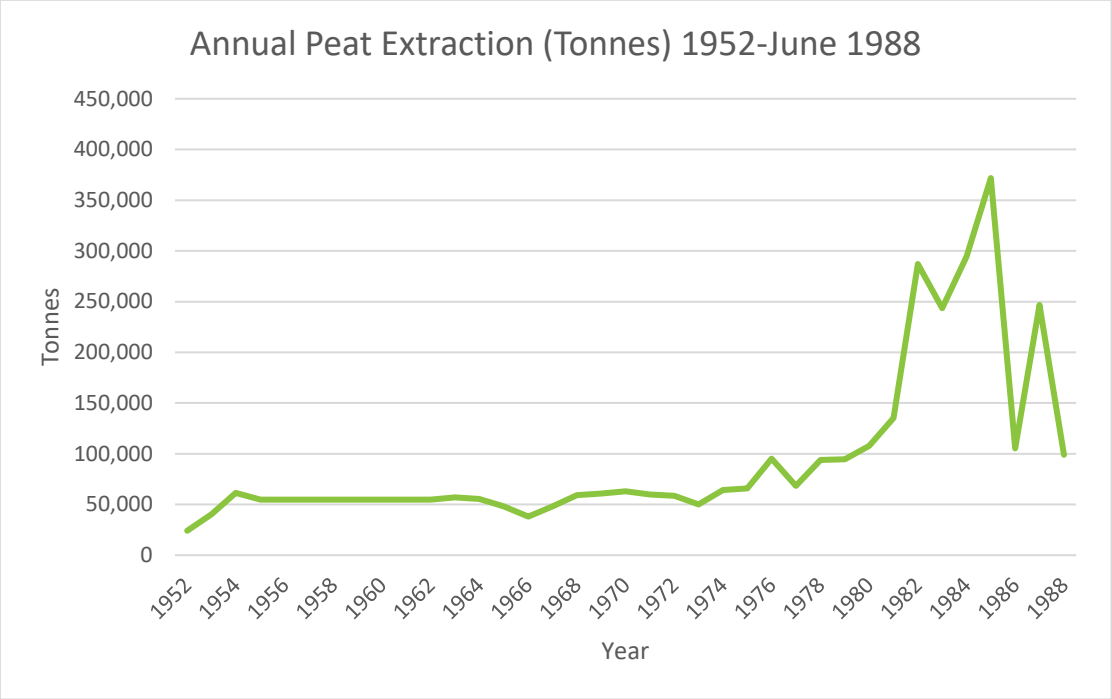


Plate 4-42: Annual Peat Extraction (Tonnes) 1952 to June 1988

Table 4-4: Peat Extraction (Tonnes) 1952 to June 1988

Year	Tonnes (c.)	Year	Tonnes (c.)
1952	24,083	**1971**	59,804
1953	40,400	**1972**	58,448
1954	61,284	**1973**	49,892
1955	54,757*	**1974**	64,114
1956	54,757*	**1975**	65,853
1957	54,757*	**1976**	95,030
1958	54,757*	**1977**	68,436
1959	54,757*	**1978**	93,957
1960	54,757*	**1979**	94,537
1961	54,757*	**1980**	107,738
1962	54,757*	**1981**	135,274
1963	56,920	**1982**	287,186
1964	55,257	**1983**	243,681
1965	48,251	**1984**	294,430
1966	37,900	**1985**	371,839
1967	48,174	**1986**	105,129
1968	59,070	**1987**	246,833
1969	60,689	**January – June 1988**	99,030**
1970	63,060		

* average of peat extraction volumes from 1963-1972

** average of peat extraction volumes from 1988-1997 (half of 1988 presented in above table)

Before the commencement of milled peat extraction in 1978, sod peat was supplied to hauliers for distribution to customers for domestic use, and to a variety of large-scale end users, including hospitals. From 1982, milled peat extracted at the Application Site was delivered to Littleton Briquette Factory to facilitate the manufacture of peat briquettes up to the closure of the Briquette Factory in 2018. Peat extraction ceased at the Application Site in 2017. Following the cessation of peat extraction, any remaining peat stockpiles were delivered to Shannonbridge Power Station and Derrinlough Briquette Factory with the last stockpile being sent here in mid 2019.

4.3.5 Control Measures pre-1988

With the exception of silt control (which from 1974 was subject to a formal management program as discussed in Section 4.3.5.9 below), formal documentation outlining dedicated measures referred to as control measures practised on site from 1941 - July 1988 are not available. However, based on personal communication with a retired Bord na Móna personnel, the following measures below were enacted at all Bord na Móna bogs, and thus the Application Site, as part of daily, monthly, and annual bog management and operations and were outlined in the 2001 IPC licence.

4.3.5.1 Peat Extraction Machinery – Maintenance Programmes and Storage

1. All peat extraction machinery listed above in Section 4.2.2 were stored at Littleton Works or at local storage areas at the end of the workday;
2. All machinery were regularly inspected serviced and maintained;
3. All machinery was regularly cleaned via power steam wash system at a wash bay and drained into an interceptor tank and associated gravel soak pit. The interceptor unit facilitated the removal of any floatable oil/grease components. This was done to minimise dust and particle release; and,
4. Self-contained machine parts washer was located at the Works.

4.3.5.2 Refuelling Facilities

Refuelling and maintenance of all vehicles were undertaken at Littleton Works, or at local holding areas in Longfordpass and Littleton bogs. When machinery required refuelling on the Application Site, it was carried out by a mobile (rail or tractor-transported) fuelling unit which travelled out from Littleton Works to the bogs where the machinery was located. Refuelling procedures were upgraded to standard bunding specifications to comply with IPC Licence requirements in 2001 (refer to Section 4.6 & 4.7 for details)

The following emergency action procedure was implemented at the Application Site prior to IPC licencing (pre-2001) and was recorded as part of the IPC Licence process:

1. When a spill occurred, the General Manager was immediately informed of the incident;
2. The spill was required to be assessed by the General Manager for potential risk to the health and safety of employees and the potential environmental consequences;
3. If there was a risk of explosion, all personnel in the area were required to be evacuated from the area;
4. The spill was sourced, isolated and contained with polystyrene booms or dry peat (moisture content of 10%);
5. All effort was made to prevent the spill from entering a storm drain or nearest outfall;
6. Once the spill had been contained, a suitable absorbent (dry peat) was to be used to soak the spillage;
7. All possible ignition sources such as electoral equipment, naked lights, machinery were removed from the area. Any combustibles in the spill area were removed;
8. Follow up action measures taken includes the implementation of appropriate remedial work to prevent such a spillage recurring in the future; and,
9. In the event of a significant spillage, the General Manager was required to notify the local authority.

4.3.5.3 Fire Safety

1. Annual training provided for bog fires crew and factory personnel and all general staff was provided with a minimum of 2 hours training in fire prevention;
2. All fire exits were designated. These doors were required to be fitted with push-bar mechanisms only and lighted from independent sources. They were required to be unobstructed inside and outside at all times and open outwards;
3. Each canteen/office were required to be equipped with a fire blanket and fire extinguisher;
4. There were required to be at least 1 fire point at all office premises;
5. Petrol and other oils were required to be stored in designated oil stores;
6. Batteries were not charged in working areas unless suitable protection was provided;
7. Training was provided for Oxygen cylinder storage and use;
8. Fire Wagons: wagons were provided for fire prevention which contain: hoses, shovels, fire beaters, baskets, buckets, breathing apparatus, first aid kit, drums of foam and foam making machine, Floatation Pumps also extinguishers etc.;
9. Stockpiles were covered with polythene film gauge sheets and secured in position by spreading an even layer of high moisture content milled peat. This prevented spontaneous combustion of certain peat types by excluding air as much as possible; and,
10. Fire Safety Audits undertaken at six monthly intervals along with random audits. Yearly assessments were undertaken of all audits completed.

4.3.5.4 Dust Management at Bog Boundaries and Headlands

Dust emissions were higher from the milled peat extraction process than the sod peat extraction process. Tree cover along the fringes of bogs minimised the amount of dust that would travel off-site. In 1976 Bord na Móna established a policy to preserve the vegetation and tree cover on all bog fringes and on any mineral islands[5]. In addition, the following measures were undertaken at a minimum to minimise dust emissions and later expanded under IPC licence.

1. Stockpiles were compacted on either side by large rollers drawn by tractors;
2. Stockpiles were covered with polythene film gauge sheets and secured in position by spreading an even layer of high moisture content milled peat;
3. Peat extraction during windy weather was to be avoided;
4. The headlands were to be kept clean and loose peat removed;;
5. Drivers were required to drive slow along dusty headlands; and,
6. All road crossing points were to be maintained clean.

4.3.5.5 Internal Rail Network Maintenance

Railway tracks and railway locomotives underwent continuous inspection and maintenance to prevent de-railments, fires, accidents and fuel leaks. The locomotives were fitted with beam lighting and electric windscreen wipers for both directions of travel.

[5] 4 Brown Gold 'A History of Bord na Móna and the Irish Peat Industry', 2010 Clarke, Donal, Chapter 10 Pg 206

4.3.5.6 Surface Water Management

Surface water run-off from Littleton Works and hard standing areas drained via onsite surface water drainage systems, which were installed as part of the construction of buildings and hardstand areas over the decades, into the adjacent peatland surface water drainage network.

All machinery was regularly inspected and serviced. All machinery was cleaned at the end of the season via a compressed air wash system at a wash bay located at Littleton Works. There are two interceptor units which facilitated the removal of any oil/grease components at the Works. This was done to minimise dust and particle release. Formal silt control measures adopted in 1974 are outlined in Section 4.7 below.

4.3.5.7 Maintenance Programme for Internal Drains

The internal drains were cleaned on a regular basis in suitable weather, mainly prior to and post the peat extraction season (i.e. between October and March). This was necessary to remove sludge from the bottom of drains and dispose of it by spreading it on the adjacent field. Drain maintenance was carried out using ditchers. These works were programmed to ensure that the drains servicing the peat extraction areas were fit for purpose. Drain maintenance was carried out mainly prior to and post the peat extraction season (i.e. between October and March).

4.3.5.8 Maintenance of Onsite Surface Water Pumps

The following procedure was followed with respect to ensuring that the onsite pumps were maintained in good working order:

1. Visual inspection of pumps daily;
2. Operational check of pumps biweekly; and,
3. Service of pumps monthly.

4.3.5.9 Silt Management

As part of the Third Development Programme in the 1970s (which is discussed in further detail in Chapter 2), Bord na Móna decided in 1974 to control all effluent by means of specially designed and constructed silt ponds, thereby trapping more than 90% of the suspended solids present in the drainage water. A silt committee was set up in October 1975 to study the feasibility of removing silt from the bog effluents. Recommendations of an interim report prepared by the committee in 1975/1976 were as follows:

1. Provision of silt ponds should be a basic feature of new bog development for milled peat and their construction should be planned for all outlet systems;
2. Ideally, silt ponds should be located in cutaway bog;
3. Sufficient area should be acquired at the initial stage to provide for silt ponds;
4. In production bogs, existing large catchments should be broken up into manageable proportions and ponds constructed to accord with local topography;
5. Revision of drainage techniques should be considered such as arranging flatter gradients in external and internal outfalls and extending their width and length in the lower reaches to encourage settlement of silt;

6. Initial drainage effluent should be allowed to spill over face banks (where practicable) until adequate silt ponds have been provided. This should be applied to all new bog development immediately. Similarly, growth and vegetation should not be removed from external outfalls until interference with drainage and/or complaints force us [Bord na Móna] to act;
7. It is recommended that catchments to be protected by silt ponds should not be greater than 500 acres;
8. Ponds should be designed for maximum run-off of 1 cubic foot per minute per acre and run-off controlled by provision of small diameter culverts, weirs or sluices;
9. For milled peat, 50 square foot of pond per acre of catchment. For 500 acres, 45-foot wide x 555-foot long x 7-foot deep, i.e., 6-foot maximum of silt and 1 foot minimum of water;
10. Ponds should be provided in pairs each sufficient for the catchment protected;
11. Ponds should be cleaned out at regular intervals as required but at least four times a year using dragline or Hymac retained permanently for this purpose. Investigations to be made into the suitability of pumping units; and,
12. Second parallel pond should be used during excessively large water flow (storm water).

A copy of a memo sent to Littleton Works from the Bord na Móna Production Manager in March 1976 setting out the recommendations of the silt committee is included in Appendix 4.9. It is understood that this memo was sent to the Managers of all Bord na Móna Works sites including Littleton Works as the memo directs that "*At all milled peat bogs in production, works should carry out surveys and select sites for silt ponds as recommended*". On the basis of this direction, staff at Littleton Works would have commenced the selection of sites for the establishment of silt ponds at the Application Site around this time. Further Bord na Móna records show that silt pond measures were introduced across all Bord na Móna bogs in the early to mid-1980s in response to the 1977 Water Pollution Act. A number of silt ponds were installed at the Application Site pre-1988 to reduce sediment discharge from the extraction works. Silt ponds were installed to trap and reduce the emission of suspended solids to surface water bodies originating from activities associated with peat extraction, such as suspended peat particles generated from the extraction fields and collected in the bog drainage network as well as run-off from workshop areas.

Silt ponds were designed and constructed, primarily, with a width of 8m, however, in some cases, silt ponds of up to 12m in width were constructed. The larger silt ponds up to 12m wide are only provided in areas where access is available to both sides of the silt ponds for cleaning. The length of the silt pond varies depending on the capacity required (i.e., the length is proportional to the area of catchment being drained). In some locations, baffles (i.e., obstructing panels or vanes) have been installed within the ponds to reduce the energy in the flow and elongate the pond thereby increasing residence time and aiding settlement. Silt ponds are generally excavated to a depth of 1.5m below the pipe invert level, however in some locations, due to restricted space, the silt pond depth is greater than this. Low-velocity flow through the silt pond is generally controlled by inlet and outlet pipes at the silt ponds or upstream of the silt pond. These pipes control the velocity of the flow into and out of the silt ponds so that the velocity within the silt pond itself is less than 0.1 m/sec. This slow flow through the pond allows suspended sediment (mainly peat) particles to fall out of suspension and build up on the base of the pond, thereby reducing the sediment loading of the outflow from the pond. The principle behind the design of the silt ponds is an application of Stoke's Law. Stokes' Law describes how small solid particles move through a viscous fluid, stating that the drag force on these particles is directly proportional to their size, velocity, and the fluid's viscosity. The silt ponds are cleaned twice a year and are all located hydraulically upgradient of discharge/outfall points to the adjacent surface watercourse. Access to the silt ponds is via headlands and machine passes which were created to facilitate vehicle movements within the Application Site. The silt pond design, as submitted to the EPA with the IPC Licence Application in 1999, is shown in Plate 4-43.

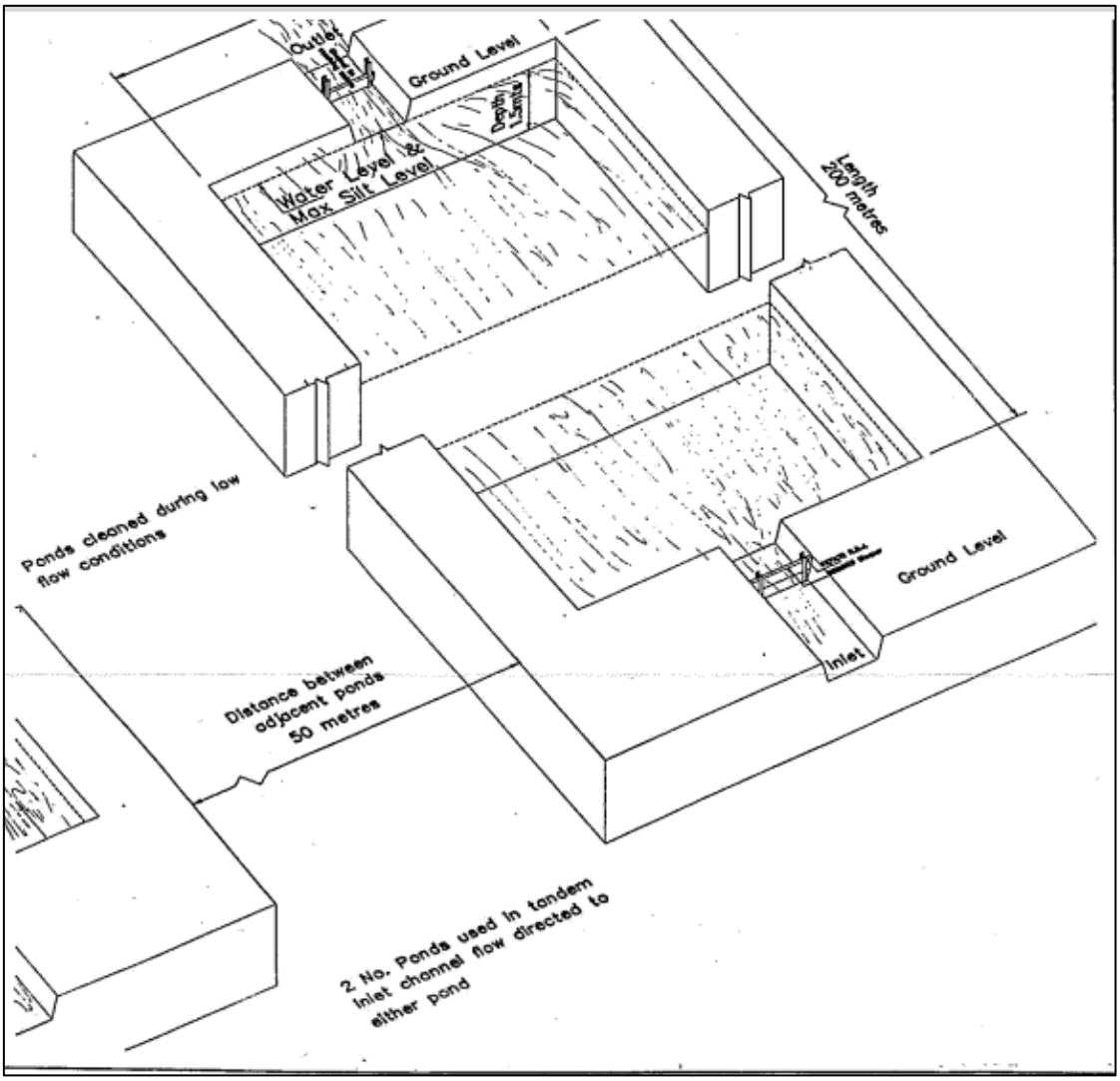


Plate 4-43: Typical Silt Pond Design Implemented at the Application Site.

Other records of Silt Committee meetings in April 1984 (which are included in Appendix 4-8, Volume 3) set out acceptable standards of effluent and note a decision from ACP on a licence for effluent from the Littleton Briquette Factory in County Tipperary, which set an upper limit of 100mg/l for suspended solids. The records note that *"although the legalities regarding obligation to treat bog effluent and briquette factory effluent may be dissimilar the waste involved is similar. It would, therefore, seem reasonable to assume that a target value of 100mg/l in the case of bog effluent would satisfy potential complainants whose complaints are based on genuine dissatisfaction with the present standard of our* [Bord na Móna] *effluents"*.

These records are evidence of early control measures implemented across the Bord na Móna landbank, including the Application Site, to control sediment levels in effluent.

4.3.5.10 Waste Management

The following measures were carried out with respect to management of waste:

1. Waste oils and brake fluids drained from machinery during servicing were collected in drums and emptied to a designated waste oil storage tank;
2. Waste oil storage tank contents transported off-site by a licenced waste disposal contractor;
3. Oil and fuel filters changed at vehicle service intervals;

4. Spent filters collected and disposed of through a waste disposal contractor;
5. Used batteries are collected by battery collection contractor;
6. Off-washings form the self-contained machine parts washer was collected within a sludge tank at the Works;
7. Ash from the onsite boiler was stored in a skip onsite and collected by a licenced contractor and taken to landfill;
8. Waste polythene removed from stockpiles was collected at the roadside by a plastic recycling company; and,
9. Workshop waste and general refuse from canteens/offices was historically burned on site or disposed into waste disposal areas at the Works. This practice changed to the use of skips which were then collected by licenced contractors.

4.3.5.11 Archaeological Disturbance

As part of peat extraction training, all employees hired to work on the bogs were required to read and adhere to the recommendations set out in the Department of Education publication entitled, Ancient Objects in Irish Bogs and Farmlands: A Guide for Finders (1942).

Workers were required to stop all works and report to the Bog Manager if archaeological finds were encountered. If materials thought to be of archaeological interest were encountered, the Bog Manager was required to report the findings to the Garda Síochána within seven days. The Gardai would then contact the Commissioner of Public Works. A record of archaeological finds and observations within the Application Site can be found in Chapter 12: Cultural Heritage of this rEIAR.

4.4 July 1988 - rEIAR Baseline

As described in Chapter 1 - Introduction, Volume 2 and in Section 4.1, the application for substitute consent, and therefore this rEIAR covers the period from July 1988, the timeframe for when the EIA Directive was required to be transposed into Irish Law, to present day.

As such the activities carried out as of July 1988 form the initial baseline date for the description of the existing Application Site and combined with the activities from July 1988 onwards form the Project. The remedial environmental impact assessments are presented in the subsequent specialist chapters.

Table 4-5 details the operations and activities carried out on the Application Site in each quarter of the 1988 calendar year. Plate 4-44 (and Figure 4-9, Volume 4) below illustrates the areas drained, undrained and undergoing peat extraction in 1988.

Between 1952 and 1988, approximately 3,534,355 tonnes of sod and milled peat were extracted at the Application Site, while the exact tonnage of peat extracted in 1988 is unknown, the average from the period of 1978 to 1987 (i.e. approximately 198,060 tonnes per annum) has been applied to determine the 1988 baseline for the purposes of this assessment.

The estimated topography of the Application Site in July 1988 is based on an average depth of milled peat extraction of 0.1m per year over a 29-year period, which has been worked back from the 2017 topography. As the Application Site was subject to milled peat extraction, this approach is considered to be the most robust in determining the peat height in 1988.

4.4.1 Site and Activity Description –1988 rEIAR Baseline

By July 1988, the land use at the Application Site was well established as industrial peat extraction. The Application Site was fully drained, milled peat extraction was underway throughout the site and railway infrastructure was in place. The main access point to the Application Site was via the local road the L2201 running from southeast to northwest adjacent to Lanespark Bog, into Briquette Factory, which was built in 1981. Littleton Works, which comprised a canteen, storage sheds, maintenance buildings and the Briquette Factory was located in the south of the Application Site. The following ancillary infrastructure was established at the Application Site by 3rd July 1988:

- Railway infrastructure; and,
- Silt ponds, pumps and drains.

4.4.1.1 Longfordpass Bog

Investigation of satellite imagery and annual reports indicate that by 1988, approximately 226ha of Longfordpass Bog was subject to peat extraction. Thus, the main landcover type at this time was cutover peat. Drainage was already installed, predominantly in a north-south orientation as described above. Railway infrastructure was laid in the bog. In 1988, there was one pump, and 3 no. silt ponds installed on Longfordpass Bog.

4.4.1.2 Littleton Bog

Investigation of satellite imagery and annual reports indicate that by 1988, approximately 795ha of Littleton Bog was subject to peat extraction. Thus, the main landcover type at this time was cutover peat. In 1988, there were 12no. pumps installed on Littleton Bog.

4.4.1.3 Lanespark Bog

Investigation of satellite imagery and annual reports indicate that by 1988, approximately 239ha of Lanespark Bog were subject to peat extraction. Thus, the main landcover type at this time was cutover peat. Drainage was already installed, predominantly in a north-south orientation as describe above Railway infrastructure was laid in the bog. In 1988, there were no pumps, and 4 no. silt ponds installed on Lanespark Bog.

4.4.1.4 Derryvella Bog

Investigation of satellite imagery and annual reports indicate that by 1988, approximately 92ha of Derryvella Bog were subject to peat extraction. Thus, the main landcover type at this time was cutover peat. Drainage was already installed, predominantly in a north-south orientation as describe above. Railway infrastructure was laid in the bog. In 1988, there were no pumps, and 1 no. silt ponds installed on Derryvella Bog.

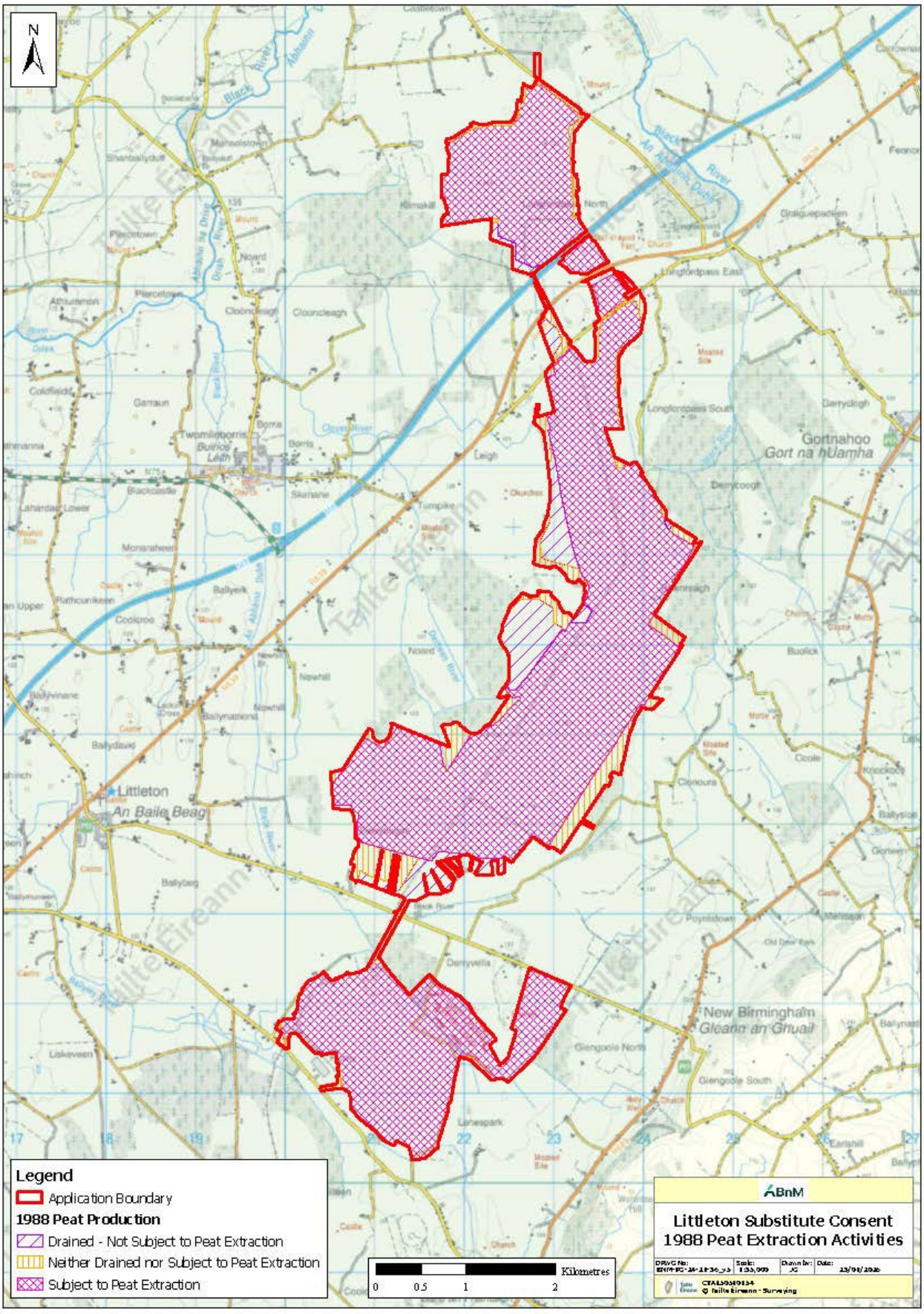


Plate 4-44: 1988 Peat Extraction Map

4.4.2 1988 Peat Extraction Activities

Table 4-5 below describes the general activities within the Application Site over a calendar year during each of the four quarters in 1988. Some drain maintenance was carried out during the full year, but it was mainly restricted to outside the peat extraction season (i.e. from October to March). Fuel handling and refuelling would have increased significantly during the peat extraction season due the activity of the peat extraction machinery. Rail network maintenance continued in 1988 with temporary rail tracks added and removed alongside peat stockpiles as required.

Table 4-5: 1988 Peat Extraction Activities

Calendar Quarter	Activities
January to March	Drain/Machinery/Pump maintenance, stockpile removal, peat transportation, silt pond maintenance
April to June	Peat extraction, stockpile development/removal, peat transportation
July to September	Peat extraction, stockpile development/removal, peat transportation
October to December	Drain/Machinery/Pump maintenance, stockpile removal, peat transportation, silt pond maintenance

4.5 Peat Extraction Phase 1988 to 2017 (Drainage, Peat Extraction & Associated Activities)

As demonstrated above, by 1988 peat extraction was well established at the Application Site. Drainage was installed in all bogs and railway infrastructure was laid on all bogs as required.

Drainage construction methodologies are described above in Section 4.2.2.1.1.

4.5.1 Drainage Design

After 1988, peat extraction and ancillary activities were well underway at the Application Site. The deepening and maintenance of the drains continued beyond 1988, up until the cessation of peat extraction in 2017. As the areas subject to peat extraction from 1988 to 2017 reduced in their extent (refer to Figures 4-9 to 4-13) and the depth of peat available was reduced after each harvest, the extent and number of drains requiring deepening and maintenance reduced accordingly.

Machinery used for drainage works would have been largely the same as that described in Section 4.2.2 with ever-improving engine efficiency in tractors and excavators.

4.5.1.1 Longfordpass Bog

In 1988, peat extraction was at its peak across the Longfordpass bog i.e. c. 226ha were subject to peat extraction. Between 1988 and 2017, the extent of peat extraction gradually decreased. In 1995, c. 173ha were subject to peat extraction. Cessation of peat extraction had occurred by 2017.

4.5.1.2 Littleton Bog

In 1988, peat extraction was being carried out across the majority of Littleton Bog. c.795ha were subject to peat extraction, while c.99ha were drained (but not subject to peat extraction).

In 1995, there was a significant reduction in peat extraction at Littleton Bog. c.134ha were subject to peat extraction, c.760ha were drained (but not subject to peat extraction). A gradual and consistent reduction in peat extraction activity can be seen in both Littleton North and Littleton South from 2004 onwards. Cessation of all peat extraction activity had occurred by 2017.

There is 1 no. silt pond on the western boundary of Littleton Bog. There are 4no. pump sites at Littleton bog. None of the 4no. pumps are active today.

4.5.1.3 Lanespark Bog

In 1988, peat extraction was at its peak across Lanespark bog (c.239ha was subject to peat extraction), occupying the majority of the central portion with some undeveloped land along the northeastern and southwestern boundaries. Between 1988 and 2017, the extent of peat extraction reduced. In 1995, c.201ha were subject to peat extraction. In 2004, c.65ha were subject to peat extraction. Cessation of all peat extraction occurred by 2017.

There are no pumps in Lanespark bog. There are 4no. silt ponds i.e. 2no. along the northern boundary of Lanespark bog and 2no. along the southern boundary.

4.5.1.4 Derryvella

In 1988, peat extraction was at its peak across Derryvella bog (c.92ha in subject to peat extraction). Between 1988 and 2017, the extent of peat extraction reduced. In 1995, c.44ha were subject to peat extraction. In 2004, c.30ha were subject to peat extraction. Cessation of all peat extraction occurred by 2017.

There are no pumps in Derryvella bog. There is 1no. silt ponds. along the western boundary.

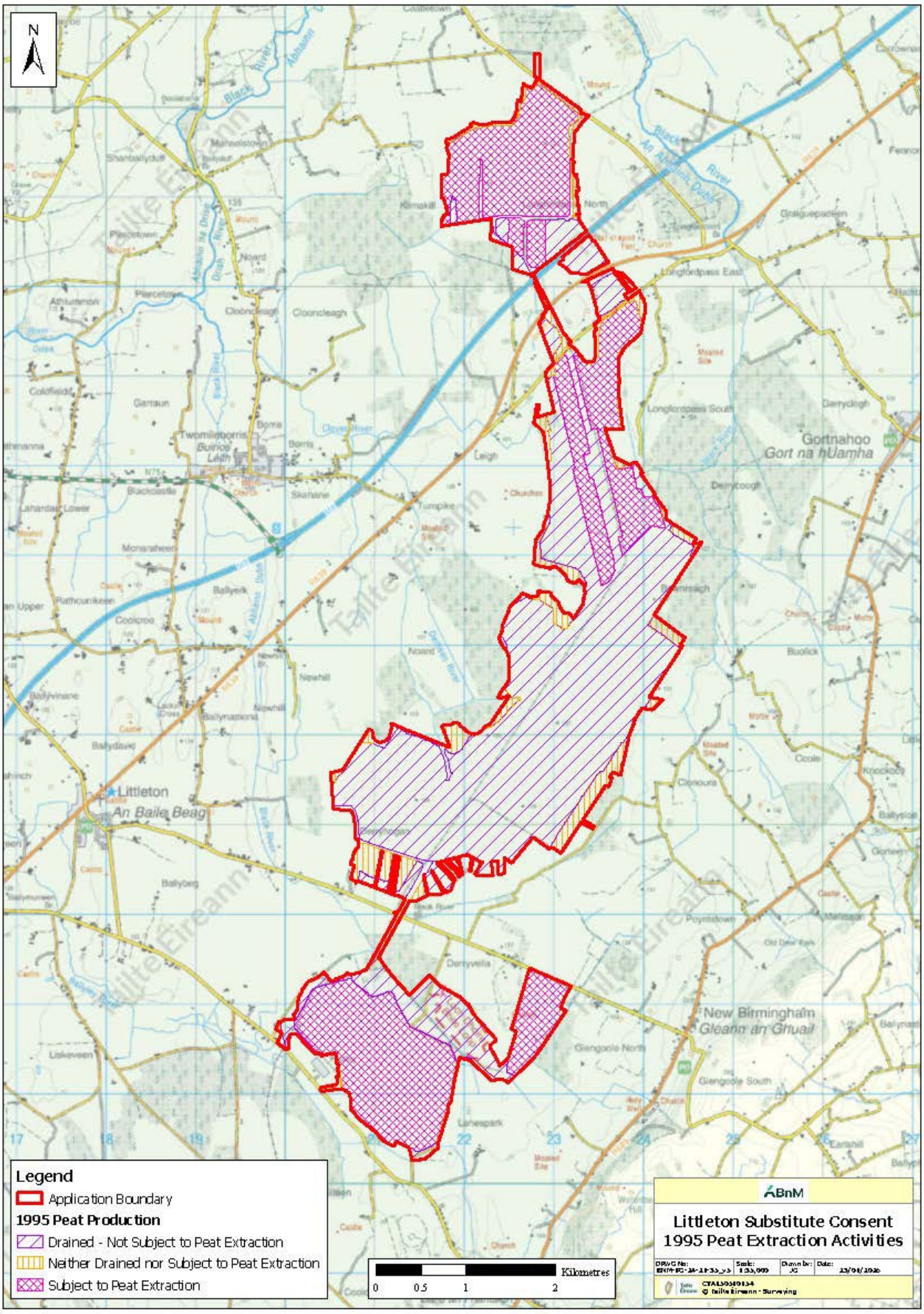


Plate 4-45: Peat Extraction Map 1995

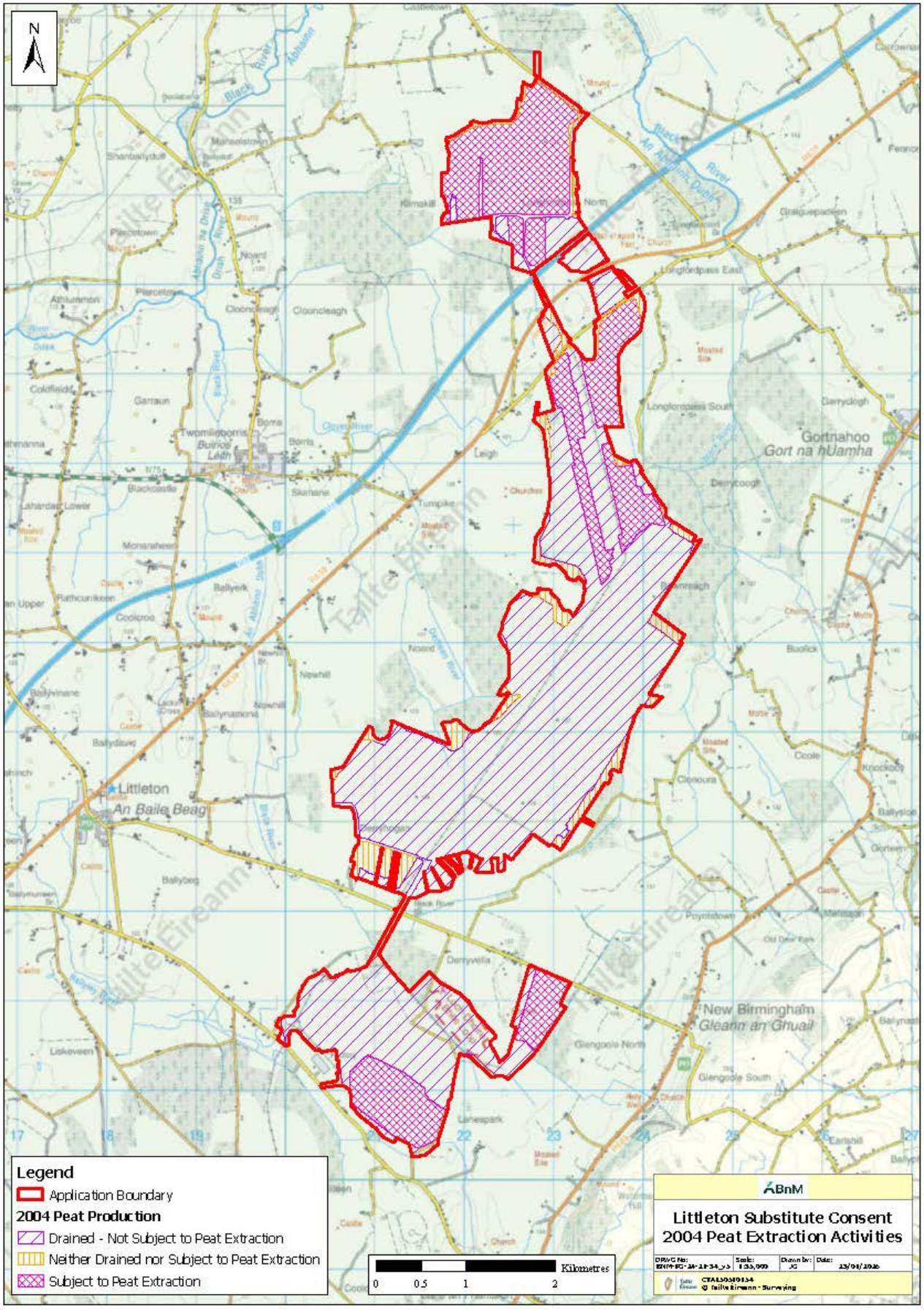


Plate 4-46: Peat Extraction Map 2004

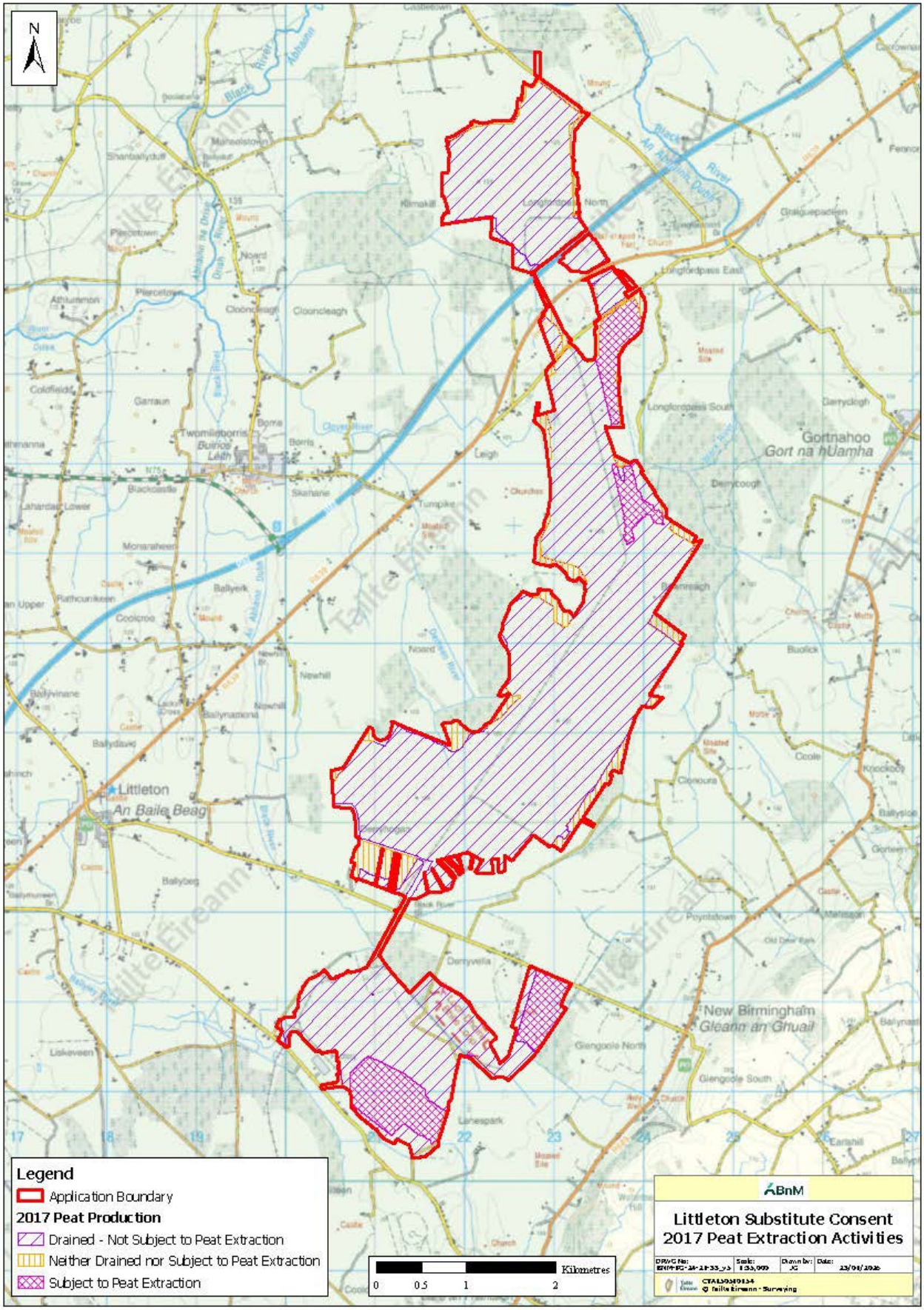


Plate 4-47: Peat Extraction Map 2017

4.5.2 Peat Extraction

Milled peat extraction, under the same processes described in Section 4.2.2 and 4.3.3 above, continued at the Application Site from 1988 until 2017 when peat extraction permanently ceased across the Application Site. Improvements and modernisation of machinery occurred between 1988 and 2017 which increased the efficiency and speed of operations over this time period. There were significant developments in diesel-powered engines which would have resulted in the use of more fuel-efficient tractors on the bogs with significantly cleaner exhaust emissions compared to the baseline year of 1988 or pre-1988.

During the latter part of the 1988 to 2017 period (i.e., from late 1990s/2000 onwards) peat extraction gradually slowed down and then ceased permanently in 2017 across the Application Site with the related reduction in fuel handling/refuelling, machinery maintenance and stockpile development.

Peat extraction maps for the years 1995, 2004 and 2017 are presented in Plates 4-44 to 4-48 and illustrate the activity on the Application Site over time and the increasing areas of lands which were no longer subject to peat extraction. Aerial images for the years 1995, 2004, and 2018 are included in Figures 4-3 to 4-7 of Volume 4.

4.5.3 Extraction Volumes July 1988- 2017

Between July 1988 and 2017, an average of 170,593 tonnes of peat were extracted each year, with a total of approximately 5,117,798 tonnes extracted between July 1988 and the cessation of peat extraction in 2017.

The volumes of peat removed from the Application Site varied from year to year and were mainly influenced by weather conditions. The tonnages of peat extracted are outlined in Figure 4-9 and Table 4-6 below.

An estimate of the volumes produced during the period July 1988—2017 was determined based on production volumes taken from the Bord na Móna Annual Reports and Accounts, site production records and an average of production tonnages over the period from 1978 – 1987 when annual quantities were unavailable.

The volumes of peat removed from the Application Site varied from year to year with a general and gradual decrease with time as more of the Application Site became exhausted thus reducing the area available for peat extraction. Fluctuations in peat extraction volumes are generally attributable to weather conditions in any given year, with wetter weather resulting in lower volumes of peat extraction due to poorer ground conditions for operating machinery, and poorer peat drying conditions; conversely, drier weather usually resulted in higher volumes of peat extraction due to better ground and drying conditions.

By July 1988, the extraction of sod peat had ceased and milled peat production had increased significantly e.g. from c. 5,317 tonnes in 1978 to c.246,833 tonnes in 1987. The average volume of milled peat extracted per year during the period July 1988—2017 was approximately 170,593 tonnes. The milled peat was supplied to Littleton Briquette Factory from the year it opened i.e. 1982 to the year in which the factory closed i.e. 21st of March 2018.

Table 4-6 below and Plate 4-48 show the annual peat extraction volumes over the period July 1988 to 2017.

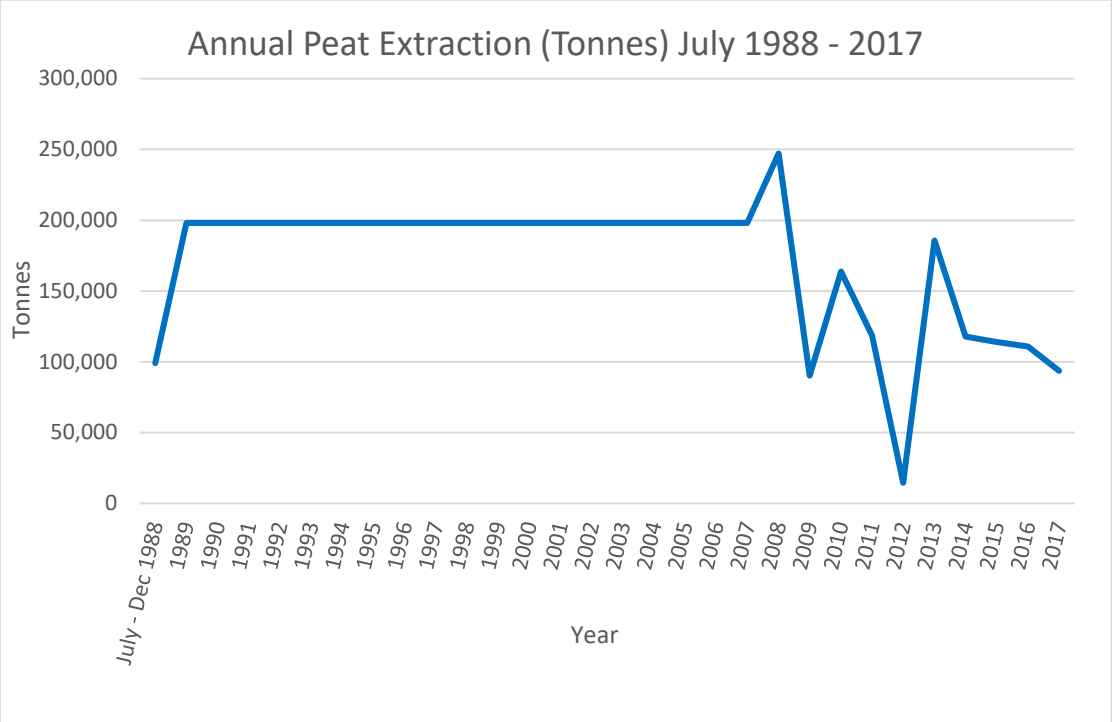


Plate 4-48: Annual Peat Extraction (Tonnes) July 1988 to 2017

Table 4-6: Peat Extraction July 1988—2017 (Tonnes)

Year	Tonnes	Year	Tonnes
July - December 1988	99,030*	**2003**	198,060*
1989	198,060*	**2004**	198,060*
1990	198,060*	**2005**	198,060*
1991	198,060*	**2006**	198,060*
1992	198,060*	**2007**	198,060*
1993	198,060*	**2008**	247,123
1994	198,060*	**2009**	90,113
1995	198,060*	**2010**	163,810
1996	198,060*	**2011**	118,471
1997	198,060*	**2012**	14,510
1998	198,060*	**2013**	185,547
1999	198,060*	**2014**	117,710
2000	198,060*	**2015**	114,003

Year	Tonnes	Year	Tonnes
2001	198,060*	**2016**	110,730
2002	198,060*	**2017**	93,603

* average of peat extraction volumes from 1978-87

4.5.4 Annual Peat Extraction Activities 1988- 2017

The following table describes the primary activities within the Application Site over a calendar year during each of the four quarters.

Table 4-7: Annual Peat Extraction Activities 1988 - 2017

Calendar Quarter	Activities
January to March	Drain/Machinery/Pump/Silt Pond maintenance, Stockpile removal, peat transportation
April to June	Peat extraction, Stockpile development/removal, peat transportation
July to September	Peat extraction, Stockpile development/removal, peat transportation
October to December	Drain/Machinery/Pump/Silt Pond maintenance, Stockpile removal, peat transportation

The above table outlines the main or key activities that occurred during each quarter. Some drain maintenance was carried out during the full year, but it was mainly restricted to outside the peat extraction season. Fuel handling and refuelling would have increased significantly during the peat extraction season due the increased activity of the peat extraction machinery. During the Peat Extraction Phase, peat extraction volumes gradually reduced across the Application Site, before ceasing in 2017. During the period of gradual decline in peat extraction volumes, a corresponding decline in fuel handling/refuelling, machinery maintenance and stockpile development was observed. Stockpile removal was completed in 2019 with the maintenance of drainage infrastructure ongoing at present. Further detail on this is provided in Section 4.8 below which details the Current Phase of the Project.

4.5.5 Third-Party Peat Extraction Activities

With the establishment of the Turf Development Act of 1981 (which amended and extended the rights of the Turf Development Act 1946-1980), Bord na Móna oversaw a private turf development scheme which provided grants to private bog developers. At the Application Site, minor third-party works occurred. Third party extraction was undertaken in turbary plots along the periphery of the Application Site and as such exact locations and peat extraction volumes are not available.

4.5.6 Ancillary Services and Infrastructure

4.5.6.1 Railway Infrastructure

As discussed above, peat extraction areas were served by a network of narrow-gauge rail tracks, laid down in the 1950s and 1960s in the Application Site. The temporary railway infrastructure was moved around using the methods described in Section 4.2.2.2.1 as areas of bog came in and out of production.

Most of the railway infrastructure across the entire Application Site is still present today. The railway lines are regularly maintained. As discussed, the Application Site activities fell under IPC Licence from August 2001 onwards. Condition 9.1.15 of this IPC Licence requires biannual inspection and maintenance of the railcars to ensure no damage, leaks, or flaws in that could result in accidental fuel spillage.

4.5.6.2 Machine/Wheel Wash Facilities

Machine washings generated due to the cleaning of various plant machinery (using a power steam wash system when machinery left the bogs) at wash bays drained into the adjacent peatlands drainage system.

4.5.6.3 Refuelling Activities

The two refuelling methods described in Section 4.3.5.2 continued throughout the lifetime of the peat extraction phase. However, all tank and drum storage areas have been removed from site,

4.5.5.4 Environmental Monitoring

Since August 2001, control and monitoring measures (such as noise, dust, surface water), have been in operation at the Application Site in accordance with the IPC Licence conditions. These conditions are discussed further in Section 4.6.1 below. A copy of the IPC Licence is provided in Appendix 4-1, Volume 3. Background to the IPC application and implementation at the Application Site can be found in Chapter 2 Background, Volume 2.

4.5.7 Non-Peat Related Activities

4.5.7.1 Commercial Forestry Activities

Bord na Móna landholdings at Littleton Bog include approximately 800 acres of coniferous forestry that is managed exclusively by Coillte.

4.6 Control Measures 1988 to 2001

Post-1988 but prior to the implementation of the IPC Licence at the Application Site in 2001, the environmental management measures set out in Section 4.6.1 were in place across the Application Site. In addition, as evidenced in the 1991 Harkins Report (Appendix 4-9, Volume 3), silt control measures in the form of silt ponds were in place prior to 1988, with Bord na Móna carrying out further studies and surveys throughout the 1980s and 1990s to make improvements to how silt ponds operated so that suspended solids emissions in surface run-off were reduced. This included the construction of new ponds (as described in Section 4.3.5.9) to maintain treatment of run-off while cleaning of existing ponds was in progress.

4.6.1 Archaeological Code of Practice

Bord na Móna has a long history of co-operation with the National Museum of Ireland, the National Monuments Service and the relevant governmental departments overseeing heritage at the time, in relation to the cultural and archaeological importance of wetlands as well as the potential for, and handling of, archaeology discovered in bogs. After the discovery and subsequent preservation of trackways at Corlea Bog, Co. Longford by Bord na Móna employees in the 1980s, a new programme for peatland archaeology was established. Since 1991 an annual programme of archaeological survey, initially funded by the National Monuments Service, has been conducted in Bord na Móna Bogs, with the results being forwarded for inclusion in the Sites and Monuments Record.

Since 1998, Bord na Móna has a statutory duty under the Turf Development Act 1998 (Section 56) to afford appropriate protection for the environment and the archaeological heritage.

> Section 56.- *The Company and each subsidiary shall ensure that its activities are so conducted as to afford appropriate protection for the environment and the archaeological heritage.*

The 1998 Act was in accord with the development of an *Agreed Principles for the Protection of Wetlands Archaeology in Bord na Móna Bogs* (1998) between the Minister for Arts, Heritage and the Gaeltacht, the National Museum of Ireland and Bord na Móna. The Agreed Principles set out 10 standards within which archaeology in the Bord na Móna peatlands were managed. Five Archaeological Liaison Officers were spread across the Bord na Móna Bog Groups and received training on how to deal with and report finds. Since 1998, all archaeological surveys were funded by Bord na Móna. The surveys have been accompanied by an annual programme of selective archaeological excavation and paleo-environmental analysis. By 2013, 64,000 of the c. 80,000-hectare land holdings of Bord na Móna had been subject to archaeological survey.[6]

A Code of Practice between the Department of Arts, Heritage and the Gaeltacht, the National Museum of Ireland and Bord na Móna was established in 2012. This Code superseded the Agreed Principles. The Code provided a framework within existing legislation, policy and practice to enable Bord na Móna to progress with peat extraction and ancillary activities and simultaneously ensure archaeological control measures are in place. The measures Bord na Móna are responsible for are listed below:

Bord na Móna will

10. Engage a Project Archaeologist
11. Maintain the network of Archaeological Liaison Officers.
12. Disseminate a set of Archaeological Protection Procedures
13. Ensure that any monuments or archaeological objects discovered during peat extraction are protected in an appropriate manner by following the Archaeological Protection Procedures.
14. Ensure that any newly discovered monuments on Bord na Móna lands are reported in a timely manner to the National Monuments Service of the Department of Arts, Heritage and the Gaeltacht.
15. Ensure that any archaeological objects discovered on Bord na Móna lands are reported immediately to the Duty Officer of the National Museum of Ireland.
16. Prioritise monuments for investigation taking account of monument vulnerability, contractual obligations and peat production targets.

[6] Department of the Arts, Heritage and the Gaeltacht 2013 Review of Archaeological Survey and Mitigation Policy relating to Bord na Móna Peatlands since 1990. https://www.archaeology.ie/sites/default/files/media/pdf/bnm-peatland-review-final-report-20-06-2013.pdf

17. Prepare tenders for archaeological mitigation of impacts on monuments, to include excavation and recording, in consultation with the Project Archaeologist and the Minister.
18. Engage professional Consultant Archaeologists to carry out mitigation of monuments, including the required palaeo-environmental assessment and post-excavation studies.
19. Provide the necessary finance to fulfil the post-excavation requirements of the Minister and the Director including the conservation of archaeological objects and the provision of scientific analyses and dating, as well as the production of reports on all archaeological work, to a standard which will meet the approval of the Minister.

4.7 Control Measures 2001 to Present Day (Post-IPC Licence)

4.7.1 Environmental Monitoring and Conditions under IPC Licence

Bord na Móna was granted an IPC Licence (P0499-01) for the Littleton Bog Group (which encompasses the Application Site) in August 2001. Following this grant, the control measures listed in Section 4.6 above have been updated and expanded. The background to the IPC application and implementation at the Application Site can be found in Chapter 2 - Background, Volume 2 and a copy of the licence is provided in Appendix 4-1, Volume 3. The licence application is publicly available and can be viewed on request at EPA headquarters PO Box 3000 Johnstown Castle Estate County Wexford Y35 W821.

Following the grant of the IPC Licence in 2001, Bord na Móna staff underwent an EPA IPC Licence Compliance training programme, which resulted in the development of an environmental management system. This system addresses emissions to water and air, noise, vibration and odour emissions, waste management, use of natural resources, visual effects and the natural environment and eco-system. Please see Appendix 4-5, Volume 3 for the Bord na Móna IPC training programme.

The conditions of the IPC Licence are intended for the protection of the environment and apply from the time of grant of the IPC Licence. The EPA has undertaken Technical Amendments of the IPC Licence for the purpose of aligning the conditions of the IPC Licence to the objectives of national and European environmental protection legislation enacted over the lifetime of the IPC Licence. The IPC Licence was subject to a Technical Amendment for the purpose of the European Communities Environmental Objectives (Surface Water) Regulations, 2009 and it now contains an objective to 'maintain' or 'restore' the surface water quality to the defined 'Good Status'. With the implementation of conditions listed in the IPC Licence, the potential environmental effects of peat extraction and ancillary activities on water quality (such as the release of elevated concentrations of suspended sediments, and by association on aquatic ecosystems and protected species), have and continue to reduce through the implementation of IPC Licence conditions. Please see Chapter 8 - Hydrology ,Hydrogeology and Water Quality, Volume 2 of this rEIAR and the Annual Environmental Reports (AER) included as Appendix 4-3, Volume 3 for details.

The IPC Licence is subject to 14. No. conditions pertaining to the ongoing monitoring and maintenance to ensure any emissions from site activities will comply with and not contravene, any of the requirements of Section 83(3) of the Environmental Protection Agency Act, 1992 outlined below:

(3) The Agency shall not grant a licence or revised licence for an activity unless it is satisfied that—

> *(a) any emissions from the activity will not result in the contravention of any relevant air quality standard specified under section 50 of the Air Pollution Act, 1987, and will comply with any relevant emission limit value specified under section 51 of the Air Pollution Act, 1987,*

(b) any emissions from the activity will comply with, or will not result in the contravention of, any relevant quality standard for waters, trade effluents and sewage effluents and standards in relation to treatment of such effluents prescribed under section 26 of the Local Government (Water Pollution) Act, 1977,

(c) any emissions from the activity or any premises, plant, methods, processes, operating procedures or other factors which affect such emissions will comply with, or will not result in the contravention of, any relevant standard including any standard for an environmental medium prescribed under regulations made under the European Communities Act, 1972, or under any other enactment,

(d) any noise from the activity will comply with, or will not result in the contravention of, any regulations under section 106,

(e) any emissions from the activity will not cause significant environmental pollution, and

(f) the best available technology not entailing excessive costs will be used to prevent or eliminate or, where that is not practicable, to limit, abate or reduce an emission from the activity, and, where appropriate, the Agency shall attach conditions relating to the matters specified in the foregoing paragraphs to the licence or revised licence.

Conditions 1-4 of the licence outlined the Scope, Management, Interpretation and Notification procedures required by the Applicant, respectively. Conditions 11 to 14 detail the Monitoring(equipment use), Recording and Reporting, Emergency Response and Financial Provisions duties of the Applicant. Conditions 5 to 10 pertain to environmental monitoring and management:

- Condition 5 Emissions to Atmosphere
- Condition 6 Emissions to Water
- Condition 7 Waste Management
- Condition 8 Noise
- Condition 9 Water Protection
- Condition 10 Decommissioning and Cutaway Bog Rehabilitation

In compliance with Condition 5, the Applicant must undertake annual tests on boiler combustion efficiency and dust monitoring. Please see Chapter 9- Air Quality, Volume 2 for further details. Condition 6 ensures the Applicant establishes a surface water discharge monitoring programme which is reviewed annually and a report submitted to the EPA quarterly. The Applicant is also required to submit water sample results annually, implement and maintain silt ponds. Condition 9 pertains to the 'Water Protection' and outlines the weekly, monthly, quarterly, and annual inspections Bord na Móna must carry out to provide for the protection of surface and groundwater. There are currently silt pond inspections and maintenance including quarterly grab sampling ongoing at the Application Site. Please see Chapter 8 - Hydrology,Hydrogeology, and Water Quality, Volume 2 for further details. Condition 7 compels the Applicant to correctly dispose of waste to licenced facilities. Please see Chapter 13 - Material Assets (including Traffic and Transport), Volume 2 for details. Condition 8 ensures that any on site activities do not give rise to noise exceedances at noise sensitive locations. Please see Chapter 10 - Noise and Vibration, Volume 2 for further details. Condition 10 pertains to site decommissioning followed by peatland rehabilitation and is detailed in section 4.8 below, which details the Remedial Phase, and Chapter 6 - Biodiversity, Volume 2. It is the intention of the Applicant to continue implementing and practising the mitigation and monitoring measures as listed in the Licence after the site is decommissioned, where applicable.

4.7.2 Standard Operation Procedures

To facilitate the production of AERs, Bord na Móna produced an *Environmental and Operational Procedures for Protection of Surface Water* document which comprises a suite of Standard Operation Procedures (SOPs) which have the overall aim of promoting and maintaining environmental integrity throughout all Bord na Móna activities. The document includes SOPs for drainage planning and implementation, silt pond and outfall maintenance, waste management, peat extraction methods, and general bog housekeeping. The SOPs also set out emergency preparedness and response procedures, how to deal with complains, effective communication with Bord na Móna operatives, the local community and local authorities. Please see Appendix 4-11, Volume 3 Environmental and Operational Procedures for Protection of Surface Water for details.

4.8 Current Phase – 2017 to Present Day

4.8.1 Decommissioning Process

In January 2021, Bord na Móna formally announced that peat extraction across all bogs within its landholding had ceased, although peat extraction activities had ceased at the Application Site prior to this in 2017. The Application Site still operates under the requirements of IPC Licence P0499-01, and any decommissioning works undertaken with respect to peat extraction are in accordance with Condition 10 of the IPC Licence, which states that:

> *'**10.1** following termination of use or involvement of all or part of the site in the licenced activity, the licensee shall:*
>
> ***10.1.1** Decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution*.

In compliance with Condition 10.1 of the IPC Licence, it is a requirement to decommission the Application Site by removing/disposing/recovering buildings, equipment, waste etc from the Application Site. The main success criteria pertaining to successfully complying with this condition is ensuring that no environmental liability remains from this infrastructure and material and that the bog can be deemed suitable for surrender of the license under Section 95 of the EPA Act. This is achieved by Bord na Móna identifying and quantifying any mechanical and infrastructural resources that were installed in the bog to enable the development and production operation at the Application Site. This list is then refined to identify any items that would be deemed as possibly resulting in environmental pollution, should they not be removed.

Typically, these items/infrastructures would be any remaining, unconsolidated plant, equipment and attachments, waste materials, unused raw materials such as drainage pipes, remaining peat stockpiles, stockpile covering, pumps, septic tanks and fuel tanks. To date, the only decommissioning underway at the Application Site was the removal of remaining peat stockpiles from the bogs. This was completed by mid-2019. The removal of rail infrastructure in Lanespark and Derryvella was completed in 2024. Infrastructure to be decommissioned at the Application Site is listed in Table 4-8 below. It should be noted that no extant buildings will be demolished as part of the decommissioning programme.

Table 4-8: Infrastructure Decommissioning List for the Application Site. Sourced from the Cutaway Bog Decommissioning and Rehabilitation Plan 2024 for Littleton Bog

Item	Description	Application Site Decommissioning Plan
1	Clean-up of remaining or unconsolidated waste or materials located in Bogs, Yards, Buildings and Offices	Where relevant
2	Clean Silt Ponds	Cleaning Silt Ponds
3	Decommission Peat Stockpiles	Where relevant
4	Decommission or Removal of Buildings and Compounds	Where relevant
5	Decommission Fuel Tanks and associated facilities	Where relevant
6	Decommissioning and Removal of Bog Pump Sites	Not relevant
7	Decommissioning or Removal of Septic Tanks	Where required

In relation to waste management, Condition 7 of the IPC Licence requires these now defined waste items to be disposed of or recovered as follows:

"Condition 7.1: Disposal or recovery of waste shall take place only as specified in Schedule 2(i) Hazardous Wastes for Disposal/Recovery and Schedule 2(ii) Other Wastes for Disposal/Recovery of this licence and in accordance with the appropriate National and European legislation and protocols. No other waste shall be disposed of/recovered either on-site or off-site without prior notice to, and prior written agreement of, the Agency.

Condition 7.2: Waste sent off-site for recovery or disposal shall only be conveyed to a waste contractor, as agreed by the Agency, and only transported from the site of the activity to the site of recovery/disposal in a manner which will not adversely affect the environment.

Condition 7.3: A full record, which shall be open to inspection by authorized persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall as a minimum contain details of the following:

7.3.1: The names of the agent and transporter of the waste.
7.3.2: The name of the persons responsible for the ultimate disposal/recovery of the waste.
7.3.3: The ultimate destination of the waste.
Condition 7.3.4: Written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site.
7.3.5: The tonnages and EWC Code for the waste materials listed in Schedule 2(i) Hazardous Wastes for Disposal/Recovery and Schedule 2(ii) Other Wastes for Disposal/Recovery sent off-site for disposal/recovery.
7.3.6: Details of any rejected consignments.

A copy of this Waste Management record shall be submitted to the Agency as part of the AER for the site."

As required by the IPC Licence, waste items are and will continue to be removed for recycling or disposal, using external contractors with the required waste collection permits, approved under Condition 7.2, and waste records are and will continue to be maintained as required under Condition 7.3.

Where possible, Bord na Móna will target preferred waste treatment methods from the waste hierarchy to identify waste that can reused or recycled in lieu of recovery or disposal.

The validation of the success of compliance with Condition 10.1 of the IPC Licence is carried out through an Independent Closure Audit (ICA) which is followed by an EPA Exit Audit (EA) and the eventual partial or full surrender of the licence.

4.8.2 Peatland Rehabilitation Plans (Rehabilitation Phase 1)

It is also a requirement of '*Condition 10 Cutaway Bog Rehabilitation'* of the IPC Licence that following the above decommissioning of use of all or part of their bogs, Bord na Móna, prepares (to the satisfaction of the EPA) and implements a Cutaway Bog Rehabilitation Plan.

*'**10.2** Cutaway Bog Rehabilitation Plan:*

> ***10.2.1** The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of the cutaway boglands within the licensed area. This plan shall be submitted to the Agency for agreement within eighteen months of the date of grant of this licence.*
> ***10.2.2** The plan shall be reviewed every two years and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the written agreement of the Agency.*

***10.3** The Rehabilitation Plan shall include as a minimum, the following:*

> ***10.3.1** A scope statement for the plan, to include outcome of consultations with relevant Agencies, Authorities and affected parties (to be identified by the licensee).*
> ***10.3.2** The criteria which define the successful rehabilitation of the activity or part thereof, which ensures minimum impact to the environment.*
> ***10.3.3** A programme to achieve the stated criteria.*
> ***10.3.4** Where relevant, a test programme to demonstrate the successful implementation of the rehabilitation plan.*
> ***10.3.5** A programme for aftercare and maintenance.*

***10.4** A final validation report to include a certificate of completion for the Rehabilitation Plan, for all or part of the site as necessary, shall be submitted to the Agency within six months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.*

Reason: To make provision for the proper closure of the activity ensuring protection of the environment.'

In 2018, Bord na Móna produced Cutaway Bog Decommissioning and Rehabilitation Plans for the Longfordpass, Littleton, Lanespark and Derryvella bogs located within the Application Site. Bord na Mona has prepared an updated Cutaway Bog Decommissioning and Rehabilitation Plan for Littleton and Longfordpass in 2026. These plans have been submitted to the EPA (please see Appendix 4.2, Volume 3 for all Cutaway Bog Rehabilitation Plans).

An updated Cutaway Bog Decommissioning and Rehabilitation Plan for Ballybeg, Lanespark and Derryella was prepared in 2025 to include Phase 2 measures (See section 4.9 below for further details). Bord na Móna rehabilitated the bogs in a phased approach under the requirements of the IPC Licence and in strict accordance with the criteria outlined in Condition 10.3 as stated above. Please see Appendix 4-2, Volume 3 for copies of each of the Cutaway Bog Decommissioning and Rehabilitation Plans.

The plans are bog-specific, and outline:

- Criteria which define successful rehabilitation;
- Consultation undertaken with relevant parties;
- Main issues for rehabilitation;
- Proposed rehabilitation programme;
- Proposed timeframe to implement the rehabilitation programme; and,
- Associated aftercare, maintenance and monitoring.

Decommissioning and rehabilitation plans have been developed from a combination of the following:

- Experience of 40 years of research on the after-use development and rehabilitation of
- the Bord na Móna cutaway bogs (Clarke, 2010; Bord na Móna, 2018);
- Significant international engagement during this period with other countries in relation
- to best-practice regarding peatland rehabilitation and after-use through the
- International Peat Society and the Society for Ecological Restoration (Joosten & Clarke, 2002; Clarke & Rieley, 2010; Gann et al., 2019);
- Ongoing consultation and engagement with internal and external stakeholders regarding rehabilitation, biodiversity and other general issues over the years about the Littleton Bog Group;
- Geographical Information System (GIS) Mapping;
- Bord na Móna drainage surveys;
- Bog topography and LIDAR data;
- Previous research studies on site; and,
- Hydrological modelling.

The plans and review plans take cognisance of the EPA Guidance on the Process of Preparing and Implementing a Bog Rehabilitation Plan (2020). Each plan contains within a detailed ecological report and GIS mapping pack. The key objective of Bord na Móna peatland rehabilitation is environmental stabilisation. The rehabilitation of the bogs supports biodiversity e.g., plants, insects, bird and mammals, and the formation of wetland peatland and woodland habitats. In addition, peatland rehabilitation will bring a range of benefits to the local community via improvements in the local landscape and it is also complying with national policies and strategies regarding the reduction of carbon emissions, supporting biodiversity and enhancing water quality. It is anticipated it will take up to 30 years for naturally functioning wetland and peatland ecosystems to fully re-establish.

To inform the rehabilitation plans for each bog, both national and local stakeholders, including neighbours whose land adjoins the relevant bog units and local representatives of national bodies (such as Regional National Parks and Wildlife Service staff) and relevant offices in County Councils (such as the Heritage or Environmental Offices) were contacted. Any identified local interest groups were also informed of the opportunity to engage with this rehabilitation plan, and when identified invited to submit their comments or observations in relation to the proposed rehabilitation. All correspondence received has been acknowledged and evaluated against the rehabilitation work proposed and the each of the plans contain a review of the consultation.

Prior to the submission of the Cutaway Bog Decommissioning and Rehabilitation Plans to the EPA for agreement, a baseline ecology survey was be carried out to determine the status of natural colonisation, the potential for targeted revegetation and/or rewetting and the future development at the Application Site to ensure stabilisation of the future cutaway. The measures associated with each of the rehabilitation plans and their statuses have been detailed below. A timeline for the stages of the measures included in the Cutaway Bog Decommissioning and Rehabilitation Plans is provided in Table 4.9 below. Further details can be found in the Cutaway Bog Decommissioning and Rehabilitation Plans provided in Appendix 4-2, Volume 3.

4.8.3 Description of Rehabilitation Measures

Rehabilitation Phase 1 works commenced in Littleton, Longfordpass, Lanespark and Derryvella in 2018 with extensive drain-blocking and hydrological management. The key objective of peatland rehabilitation is environmental stabilisation. The rehabilitation works that have been completed and commenced in Phase 1 are described in the Cutaway Bog Decommissioning and Rehabilitation Plans (Appendix 4.2, Volume 3) and in Table 4-9 below. The Cutaway Bog Decommissioning and Rehabilitation Plans included in Appendix 4-2, Volume 3 provides a description of the four bogs of the Application Site and their ecology. It also provides a framework and outlines the typical works that is undertaken to achieve the aims of successful rehabilitation (the criteria for which are defined in the plan) and a timescale for when the various elements of the plans have been implemented or will likely be implemented. The remedial measures to be undertaken follow proven and standard procedures that have been successfully applied by Bord na Móna and are known to be effective as detailed below.

Drain Blocking

Drains have been blocked at the Application Site using a number of methods depending on the size and type of drain. These methods will include the following:

- Peat dams within small drainage channels on the cutover bog; and,
- Removal or blocking of drainage pipes, or modification of drainage levels, where required.

These methods are fully described in the Irish Wildlife Manual, Best Practice in Raised Bog Restoration in Ireland (Mackin et al, 2017).

Monitoring

As per the Cutaway Bog Decommissioning and Rehabilitation Plans, a programme of monitoring, aftercare and maintenance was implemented at the Application Site to validate the efficacy of the rehabilitation measures in achieving environmental stabilisation. These measures are detailed in the Cutaway Bog Decommissioning and Rehabilitation Plans as submitted to the EPA (Appendix 4-2, Volume 3). All surface and ground water monitoring has been submitted to the EPA as per licence requirements. Monitoring carried out at the Application Site assessed the general status of the site, the condition of the silt ponds, assess the condition of the rehabilitation work, monitoring of any potential impacts on neighbours land, general land security, boundary management, dumping and littering. Monitoring visits also considered any requirements for further practical rehabilitation measures. The baseline condition of the site has been established post-rehabilitation implementation by using an aerial survey to take an up-to-date aerial photos and this evaluation is presented in the Cutaway Bog Decommissioning and Rehabilitation Plans. These have been used to verify completion of rehabilitation measures.

Rehabilitation Phase 1 at Littleton, Longfordpass, Lanespark and Derryvella was completed between 2018-2021. Please see Table 4-9 which details the timeline and all the rehabilitation measures completed. (see Appendix 4-2, Volume 3 for further details regarding all Cutaway Bog Decommissioning and Rehabilitation Plans).

Table 4-9: Application Site Rehabilitation Programme Rehabilitation Phase 1 Summary (Littleton, Longfordpass,). Please see Appendix 4-2 for more details.

	Longfordpass (2026 Plan)	Littleton (2026 Plan)
Completed Rehabilitation Measures	• A rehabilitation programme was carried out in Longfordpass between 2018-2021 (Rehabilitation Phase 1). These measures varied in intensity, were targeted in places and reflected the existing environmental conditions. • Some areas of bare peat had regular drain-blocking (Drain-blocking). • Some areas were subject to reducing or ceasing pumping (Hydrological management). • Some areas had minimal intervention as there were already re-vegetated and developing a mosaic of wetland, woodland and peatland habitats (Minimal intervention). • Some areas were allowed to continue to develop as wetland due to the natural breakdown of drainage and ceasing drain maintenance (Wetland). • Cutaway habitats are continuing to develop across Longfordpass Bog. Birch scrub and woodland has significantly expanded across the site on some of the drier, more elevated ground on the western side. • Pioneer vegetation is continuing to develop across the site and the bare peat cover is rapidly shrinking.	• A rehabilitation programme was carried out in Littleton between 2018-2021 (Rehabilitation Phase 1). These measures varied in intensity, were targeted in places and reflected the existing environmental conditions. • Some areas of bare peat had regular drain-blocking (Drain-blocking). • Some areas were subject to reducing or ceasing pumping (Hydrological management). • Some areas had minimal intervention as there were already re-vegetated and developing a mosaic of wetland, woodland and peatland habitats (Minimal intervention). • Some areas were allowed to continue to develop as wetland due to the natural breakdown of drainage and ceasing drain maintenance (Wetland). • The majority of Littleton Bog is now vegetated or re-vegetating. Some sections have been developing as secondary habitats for a significant period of time (40 years). Birch woodland and scrub has significantly expanded across the site on some of the drier ground. • In general, cutaway habitats are developing according to the underlying environmental conditions and reflect the varying topography, hydrology and peat depths.

	Longfordpass (2026 Plan)	Littleton (2026 Plan)
	• In general, cutaway habitats are developing according to the underlying environmental conditions and reflect the varying topography, hydrology and peat depths. • Part of the site north of the M8 has already re-vegetated, with pioneer vegetation maturing and developing a mosaic of typical cutaway habitats with Birch woodland predominating. Bare peat areas within the cutaway areas is limited. Natural re-colonisation of the cutaway so far has been effective. • All stock-piles have been removed from the site as part of the decommissioning phase of industrial peat production operations. • Other parts of the site (younger cutaway) are naturally colonising for > 10 years and are developing a mosaic of cutaway habitats. Natural re-colonisation of the cutaway so far has been quite effective. Bare peat areas within the cutaway parts of the site are shrinking as vegetation develops and consolidates.	• A significant part of the site has already re-vegetated, with pioneer vegetation maturing and developing a mosaic of typical cutaway peatland habitats with Birch woodland predominating. Bare peat areas within the older cutaway areas are limited. Natural re-colonisation of the cutaway so far has been quite effective.. • A portion of the site has already been developed as a conifer plantation by Coillte. • All stock-piles have been removed from the site as part of the decommissioning phase of industrial peat production operations. • Other parts of the site (younger cutaway) are naturally colonising for > 10 years and are developing a mosaic of cutaway habitats. Natural re-colonisation of the cutaway so far has been quite effective. Bare peat areas within the cutaway parts of the site are shrinking as vegetation develops and consolidates.
Short-term Rehabilitation Measures 0-2 years (Ongoing)	• There will be ongoing monitoring of the site and appropriate rehabilitation planning related to any changes in land-use or proposed developments in the future at Longfordpass. • Silt-ponds will be monitored during this period and there will be continued maintenance and cleaning (if required) to prevent silt run-off from the site during the rehabilitation phase. Ongoing.	• There will be ongoing monitoring of the site and appropriate rehabilitation planning related to any changes in land-use or proposed developments in the future at Littleton. • Silt-ponds will be monitored during this period and there will be continued maintenance and cleaning (if required) to prevent silt run-off from the site during the rehabilitation phase. Ongoing.

	Longfordpass (2026 Plan)	Littleton (2026 Plan)
Long-term Rehabilitation Measures (>5 years) (Ongoing)	• The effect of any targeted active management will be monitored and further work determined if required. • Monitoring of the site to ensure stabilisation and complete re-vegetation. • Evaluate success of short-term rehabilitation measures outlined above and enhance where necessary (to be determined by selected short-term management above). • Decommissioning of silt-ponds will be assessed. Ongoing. • Reporting to the EPA will continue until the site is deemed environmentally stable. • IPC License surrender process begins. To be commenced.	• The effect of any targeted active management will be monitored and further work determined if required. Ongoing. • Monitoring of the site to ensure stabilisation and complete re-vegetation. Ongoing. • Evaluate success of short-term rehabilitation measures outlined above and enhance where necessary (to be determined by selected short-term management above). Completed. • Decommissioning of silt-ponds will be assessed. Ongoing. • Reporting to the EPA will continue until the site is deemed environmentally stable. Ongoing. • IPC License surrender process begins. To be commenced.

Table 4-10: Application Site Rehabilitation Phase 1 Summary (Lanespark &Derryvella bog). Please see Appendix 4-2 for more details.

	Lanespark, Ballybeg, Derryvella (2025 Plan)
Completed & Ongoing Rehabilitation Measures (Phase 1)	• Previous rehabilitation was carried out in Ballybeg, Lanespark and Derryvella in 2018-2021 (Rehabilitation Phase 1), see Figure BNM-DR-26-07-30: Previous Rehabilitation in the accompanying mapbook. • Measures included wide-spread drain-blocking, berms, and hydrological management. A pump in Lanespark Bog was decommissioned. There was some fertiliser treatment in Derryvella Bog. • A significant part of the site has already re-vegetated, with significant cover of pioneer vegetation developing a mosaic of typical cutaway peatland and wetland habitats. The 2000 aerial photo shows that this side of the site was in peat extraction, with some emerging gravel mounds and ridges. By 2006 some areas were cutaway and peat extraction had stopped on a phased basis. Now there is a mosaic of pioneer habitats and the area has also been re-wetted, with wetlands developing in basins. • Natural re-colonisation of the cutaway so far has been effective. Bare peat areas within the cutaway are reducing as vegetation develops and consolidates. Areas of bare peat treated with fertiliser in Derryvella have also revegetated quite well.

4.9 Remedial Phase

For Rehabilitation Phase 2 works, Bord na Móna are proposing to carry out additional rehabilitation in Derryvella Bog in 2026. No additional Rehabilitation works are proposed at Littleton, Longfordpass and Lanespark outside of the ongoing measures presented in Tables 4-9 and 4-10 in the previous section (and as detailed in the Rehabilitation Plans presented in Appendix 4-2). Rehabilitation measures for Phase 2 works proposed in Derryvella are detailed in Table 4-11 below (see Appendix 4-2, Volume 3 for further details regarding all Cutaway Bog Decommissioning and Rehabilitation Plans).

Table 4-11: Application Site Rehabilitation Programme (Lanespark & Derryvella bogs). Please see Appendix 4-2 for more details.

	Lanespark, Ballybeg, Derryvella 2025 Plan
Short-term planning actions (Phase 2) (0-1 years)	• Seek formal approval of the enhanced plan, noting the alternative standard plan should funding from the Scheme not materialise from the EPA. • Agree an ex ante budget of eligible costs (based on the approved enhanced plan) with the Scheme regulator. • Develop a detailed site plan with engineering drawings outlining how the various rehabilitation methodologies will be applied to Ballybeg/Lanespark/Derryvella Bog. This will take account of peat depths, topography, drainage, and hydrological modelling (see map for an indicative view of the application of different rehabilitation methodologies). • A drainage management assessment of the proposed enhanced rehabilitation measures will be carried out and any issues identified resolved and the rehabilitation plan adapted. • A review of known archaeology and an archaeological impact appraisal of the proposed rehabilitation will be carried out. The results of this assessment will be incorporated into the rehabilitation plan to minimise known archaeological disturbance, where possible. • A review of issues that may constrain rehabilitation such as known rights of way and existing land agreements is to be carried out. • An ecological appraisal of the potential impacts of the planned rehabilitation on the presence of sensitive ground-nesting bird breeding species (e.g. breeding waders) is to be carried out. The scheduling of rehabilitation operations will be adapted, where required. • Ensure all activities comply with the environmental protection requirements of the IPC Licence. • Carry out Appropriate Assessment of the Rehabilitation Plan. Track implementation and enforcement of the relevant IPC Licence conditions, the mitigation measures (AA) and other environmental control measures during the implementation of the rehabilitation plan.

	Lanespark, Ballybeg, Derryvella 2025 Plan
Short-term practical actions (0-2 years) (Phase 2)	• Carry out proposed measures as per the Phase 2 rehabilitation. This will include targeted drain-blocking, along with fertiliser application targeting bare peat areas of headlands, high fields and other areas(where required) and hydrological management. All rehabilitation measures will be carried out with regard to best practice environmental control measures (Appendix IV). • Monitor the success of rehabilitation measures. • Carry out the proposed monitoring, as outlined. • Silt ponds will be monitored during this period and there will be continued maintenance and cleaning to prevent potential run-off of suspended solids from the site during the rehabilitation phase. Submit an ex-post report to the Scheme regulator to verify the eligible measures to be carried out in year 1 of the Scheme, and an ex-ante estimate for year 2 of the Scheme; and so on for each year of the Scheme.
Long-term (>3 years) (Phase 2)	• Evaluate success of short-term rehabilitation measures outlined above and remediate where necessary. • Delivery of a monitoring, aftercare and maintenance programme (See section 10.2 of Appendix 4-2). • Decommissioning of silt-ponds will be assessed and carried out, where required. Reporting to the EPA will continue until the IPC Licence is surrendered.

4.10 Potential Future Land Use

4.10.1 Proposed Littleton Wind Farm

The Application Site is an important natural asset and has the potential to play a strategic role in meeting national climate action targets, which have become all the more significant in light of the Climate Action and Low Carbon Development (Amendment) Act 2021, the Climate Action Plan 2024, the Climate Change Performance Index 2024, and the Change Advisory Council's Annual Report 2024. These reports provide an updated assessment of both global climate change and climate change in the context of Ireland and identify the increasingly discernible impacts climate change is having on both the environment and society. In line with the Applicant's vision to assist in achieving a climate neutral Ireland by 2050, it is intended to utilise the Application Site for both peatland remediation and wind energy infrastructure and to facilitate environmental stabilisation of the Application Site and the optimisation of climate action benefits.

The future use of the lands within the Application Site will be a separate and standalone Application, therefore, they are considered cumulatively for the purpose of this Application. It is intended to develop lands at the Application Site in the future for a renewable energy development and to carry out rehabilitation on the bogs where relevant. As outlined above, it is intended to use lands at the Application Site for a renewable energy development. Littleton Wind Farm DAC (a joint venture between SSE and Bord na Moná) intends to submit an Application for, inter alia, an 11 no. turbine wind farm. This will be a standalone SID Application, submitted directly to An Coimisiún Pleanála and will be accompanied by an EIAR which will include an assessment of the implementation of the rehabilitation measures at the Application Site in conjunction with the construction, operation, and decommissioning of the Proposed Wind Farm.

The key objectives of environmental stabilisation and re-wetting of the cutaway areas will occur between and surrounding the proposed windfarm infrastructure. The EIAR for the proposed Littleton Wind Farm will detail issues related to peat management during wind farm construction. This has proven successful during construction of Mountlucas and Cloncreen Wind Farms. In the event that natural re-vegetation was unsuccessful, then other measures such as re-seeding would be considered.

The Cutaway Bog Decommissioning and Rehabilitation Plans, which will accompany the planning application for the proposed Littleton Wind Farm, detail how the Application Site will be rehabilitated alongside the construction and operation of the proposed wind farm, should the proposed Littleton Wind Farm be consented. Further details of this proposed wind farm development can be obtained at the project website (https://www.littletonwindfarm.ie/). A separate planning application for the proposed Littleton Wind Farm will be submitted directly to An Coimisiún Pleanála through the Strategic Infrastructure Development planning process.

Both the remedial measures and the proposed Littleton Wind Farm are cumulatively assessed with the future remedial measures that will be carried at the Substitute Consent Application Site.

4.10.2 Ongoing and Future Enhanced Rehabilitation Measures (PCAS)

As discussed in Section 4.8 part of Condition 10 of the IPC Licence (P0499-01), decommissioning and rehabilitation will be carried out as standard remedial measures associated with peat extraction and ancillary activities at the Application Site. In line with the Applicant's accelerated decarbonisation strategy, and the availability of government funding, the company has also committed to ambitious enhanced peatland decommissioning, rehabilitation and restoration measures, targeting circa 33,000ha in over 80 no. Bord na Móna bogs.

This strategy has been developed to optimise ecosystem service benefits of peatland rehabilitation and restoration, particularly carbon storage and reducing carbon emissions. In addition, this will also benefit biodiversity and water (water quality and catchment management), as well as providing space for local communities and people to enjoy the outdoors.

In the event that future PCAS plans are not implemented or prepared, the Application Site will be rehabilitated in line with the rehabilitation plans outlined in Section 4.8 and Section 4.9 and included in Appendix 4-2.

Both the enhanced rehabilitation measures (PCAS) and the proposed Littleton Wind Farm development are cumulatively assessed in this rEIAR with the future remedial measures (described in Section 4.8, Section 4.9, and Section 4.10) that will be carried out at the Application Site a part of the IPC Licence requirements under Condition 10 of the Licence.

4.11 References

Clarke, Donal, Brown Gold, A History of Bord na Móna and the peat industry in Ireland (2010)

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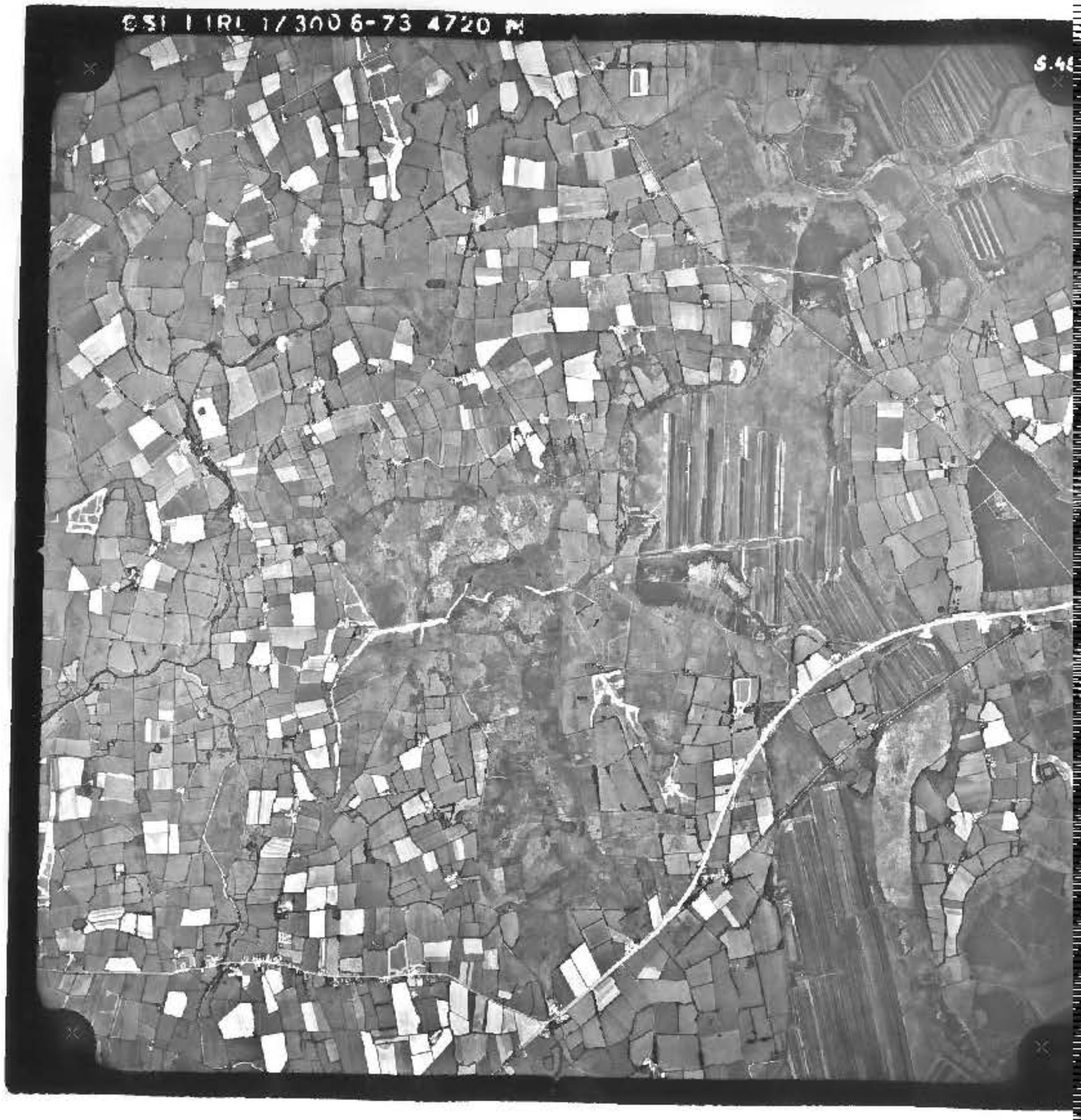
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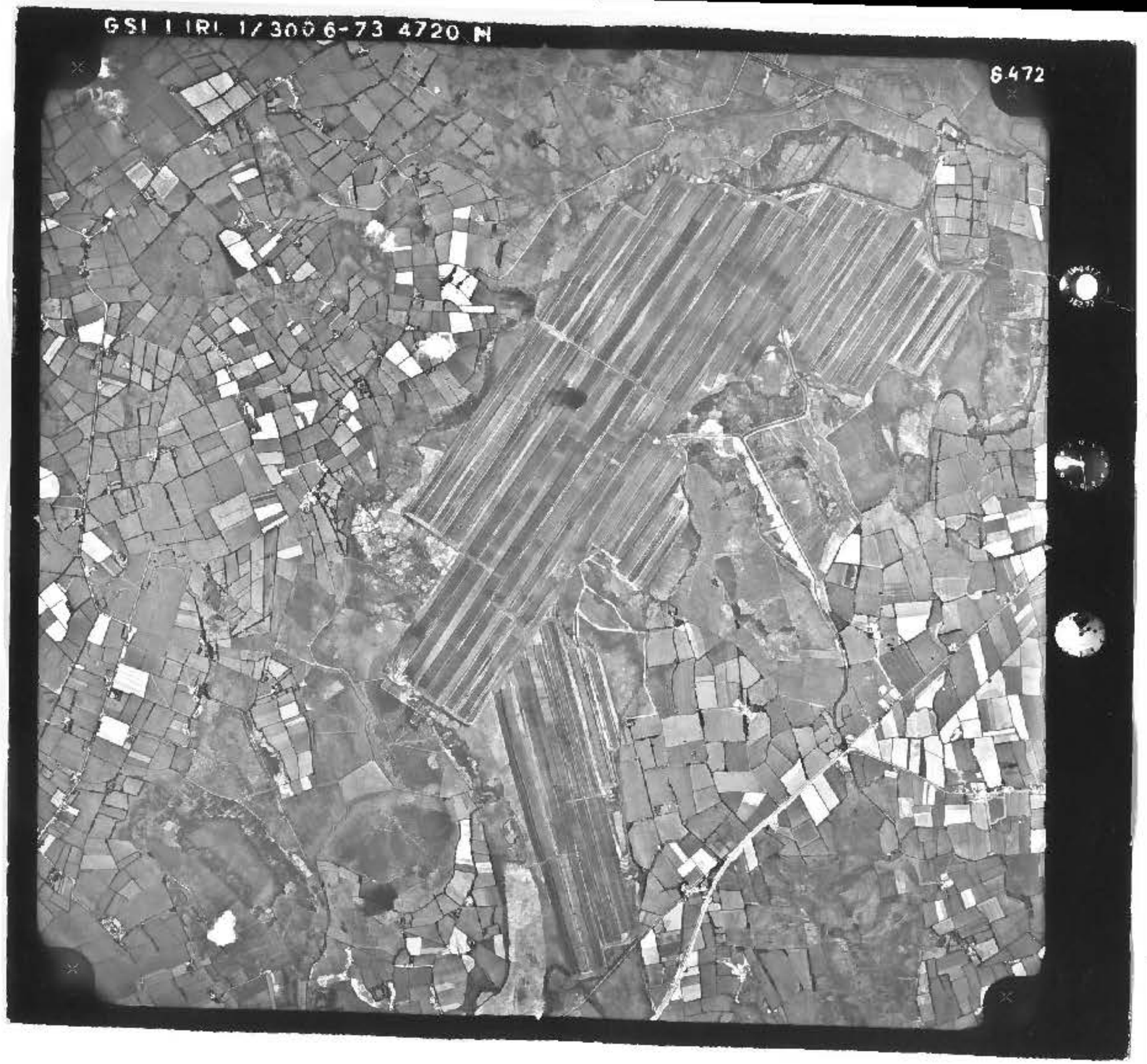
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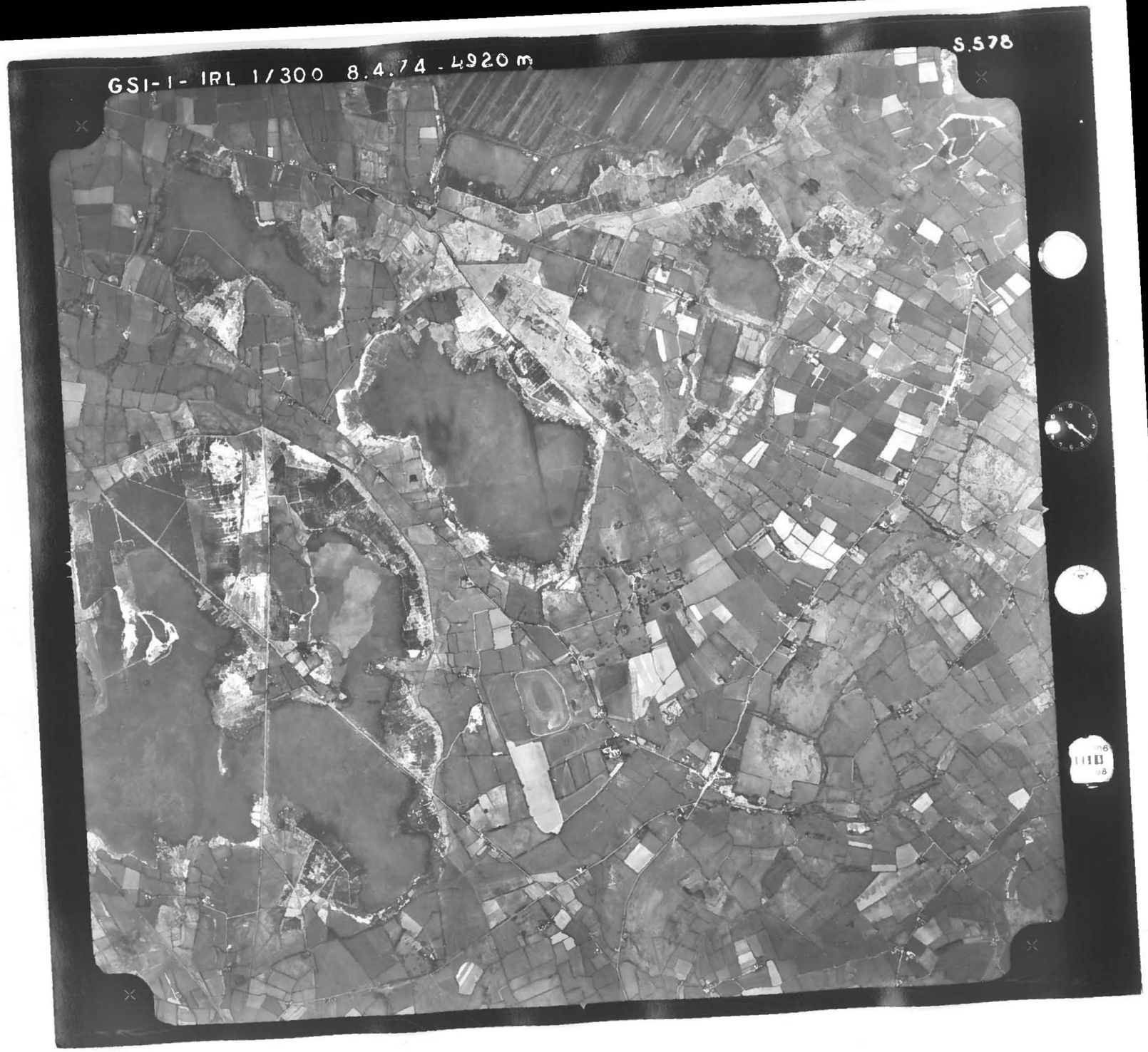
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APPENDIX 3

Aerial Imagery for 1973, 1995, 2001 and 2018


ESI 1 IRL 1/3006-73 4720 M


GSI I IRL 1/3006-73 4720 N
6472


GSI-1- IRL 1/300 8.4.74 - 4920 m
S.578

























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APPENDIX 4

Triturus Aquatic Survey Report 2023

Aquatic baseline report for Littleton wind farm, Co. Tipperary

Prepared by Triturus Environmental Ltd. for Fehily Timoney & Company

March 2023

Please cite as:

Triturus (2023). Aquatic baseline report for Littleton wind farm, Co. Tipperary. Report prepared by Triturus Environmental Ltd. for Fehily Timoney & Company. March 2023.

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1. Introduction

1.1 Background

Triturus Environmental Ltd. were commissioned by Fehily Timoney and Company to conduct baseline aquatic surveys to inform EIAR preparation for the proposed Littleton wind farm project. The following report provides a baseline assessment of the aquatic ecology including fisheries and biological water quality, as well as protected aquatic species and habitats in the vicinity of the proposed project, located near Littleton, Co. Tipperary.

Undertaken on a catchment-wide scale, the baseline surveys focused on the detection of freshwater habitats and species of high conservation value. These included surveys for white-clawed crayfish (*Austropotamobius pallipes*), otter (*Lutra lutra*), macro-invertebrates (biological water quality) and fish of high conservation value, inclusive of supporting nursery and spawning habitat. The surveys also documented macrophyte and aquatic bryophyte communities including Annex I habitat associations in the vicinity of the project (**Figure 2.1**). Aquatic surveys were undertaken in September and October 2021.

1.2 Project description

A full description of the proposed project will be provided in any Environmental Impact Assessment Report (EIAR) used to support consenting applications.

2. Methodology

2.1 Selection of watercourses for assessment

All freshwater watercourses which could be affected directly or indirectly by the proposed wind farm project were considered as part of the current baseline. A total of 20 no. riverine sites were selected for detailed aquatic assessment (see **Table 2.1, Figure 2.1** below). The nomenclature for the watercourses surveyed is as per the Environmental Protection Agency (EPA). Riverine survey sites survey sites were present on the Clover River (EPA code: 16C04), Drish River (16D02), Cooleeny River (16C14), Ballygammane River (16B55), North Glengoole River (16N28), Breegagh River (16B03) and several unnamed watercourses (**Table 2.1**). Additionally, a total of 17 no. lakes/wetlands located within the proposed site boundary at Littleton Bog were also surveyed in October 2021 (**Table 2.1; Figure 2.2**).

The aquatic survey sites were located within the Suir_SC_040 river sub-catchment. The proposed wind farm site boundary did not overlap with any European sites. However, there was potential downstream hydrological connectivity between the proposed project and the Lower River Suir SAC (002137), a site designated for a range of aquatic qualifying interests (NPWS, 2017a).

Please note this aquatic report should be read in conjunction with the Environmental Impact Assessment Report (EIAR) prepared for the proposed project. More specific aquatic methodology is outlined below and in the appendices of this report.

2.2 Aquatic site surveys

Aquatic surveys of the watercourses within the vicinity of the proposed wind farm project were conducted in September 2021. Survey effort focused on both instream and riparian habitats at each aquatic sampling location (**Figure 2.1**). Surveys at each of these sites included a fisheries assessment (electro-fishing and or fisheries habitat appraisal), white-clawed crayfish survey, otter survey (within 150m of the survey site), macrophyte and aquatic bryophyte survey and (at a subset) biological water quality sampling (Q-sampling) (**Figure 2.1**). To help verify site surveys, environmental DNA (eDNA) sampling was undertaken for white-clawed crayfish and crayfish plague (*Aphanomyces astaci*) at 5 no. strategically chosen riverine locations within the vicinity of the project. This holistic approach informed the overall aquatic ecological evaluation of each site in context of the proposed project and ensured that any habitats and species of high conservation value would be detected to best inform mitigation for the wind farm project.

In addition to the ecological characteristics of the site, a broad aquatic and riparian habitat assessment was conducted utilising elements of the methodology given in the Environment Agency's 'River Habitat Survey in Britain and Ireland Field Survey Guidance Manual 2003' (EA, 2003) and the Irish Heritage Council's 'A Guide to Habitats in Ireland' (Fossitt, 2000). This broad characterisation helped define the watercourses' conformity or departure from naturalness. All sites were assessed in terms of:

- Physical watercourse/waterbody characteristics (i.e. width, depth etc.) including associated evidence of historical drainage

- Substrate type, listing substrate fractions in order of dominance (i.e. bedrock, boulder, cobble, gravel, sand, silt etc.)
- Flow type by proportion of riffle, glide and pool in the sampling area
- An appraisal of the macrophyte and aquatic bryophyte community at each site
- Riparian vegetation composition

Table 2.1 Location of 37 no. aquatic survey sites in the vicinity of Littleton wind farm, Co. Tipperary (* indicates eDNA sampling)

Site no.	Watercourse	EPA code	Location	X (ITM)	Y (ITM)
Riverine sites					
A1	Unnamed stream	n/a	Longfordpass North	622853	659892
A2	Unnamed stream	n/a	Longfordpass North	622135	660772
A3	Unnamed stream	n/a	R639 road bridge	622188	658445
A4	Unnamed stream	n/a	Noard	622365	655435
A5	Clover River	16C04	R639 road bridge	621359	657544
A6	Clover River	16C04	Noard	621675	654968
B1	Unnamed stream	n/a	Longfordpass South	624135	658002
B2*	Drish River	16D02	Longfordpass Bridge	624845	660559
B3	Drish River	16D02	Castletown Bridge	621680	663563
B4	Cooleeny River	16C14	Killoran	620898	665459
B5	Drish River	16D02	d/s Ballyduff Bridge	619037	661227
B6	Ballygammane River	16B55	Athlummon	617128	660048
C1	Black River	16B01	Clonoura	623692	654684
C2	Black River	16B01	Derryvella	621096	652818
C3	North Glengoole River	16N28	Derryvella	621512	651948
C4	North Glengoole River	16N28	Derryvella	620969	652602
C5*	Black River	16B01	Derryhogan	619908	653512
C6	Black River	16B01	N75 crossing, Two Mile Borris	619120	657824
D1	Breegagh River	16B03	Killeen	620848	650493
D2*	Breegagh River	16B03	Ballymurreen Bridge	617399	653051
Lacustrine sites					
L1	Lake/wetland	n/a	Longfordpass South	623839	657293
L2	Lake/wetland	n/a	Bawnreagh	624150	657039
L3	Lake/wetland	n/a	Bawnreagh	624200	656995
L4	Lake/wetland	n/a	Bawnreagh	623830	656971
L5	Lake/wetland	n/a	Bawnreagh	623887	656489
L6	Lake/wetland	n/a	Bawnreagh	623764	656277
L7	Lake/wetland	n/a	Bawnreagh	623868	656219
L8	Lake/wetland	n/a	Lanespark	622641	656208
L9	Lake/wetland	n/a	Clonoura	623521	655503
L10	Lake/wetland	n/a	Clonoura	623259	655121
L11	Lake/wetland	n/a	Clonoura	623353	654846

Site no.	Watercourse	EPA code	Location	X (ITM)	Y (ITM)
L12	Lake/wetland	n/a	Noard	622697	655234
L13	Lake/wetland	n/a	Noard	622758	655209
L14	Lake/wetland	n/a	Noard	622163	654688
L15	Lake/wetland	n/a	Noard	621925	654547
L16	Lake/wetland	n/a	Derryhogan	621931	654343
L17	Lake/wetland	n/a	Lanespark	621400	651988

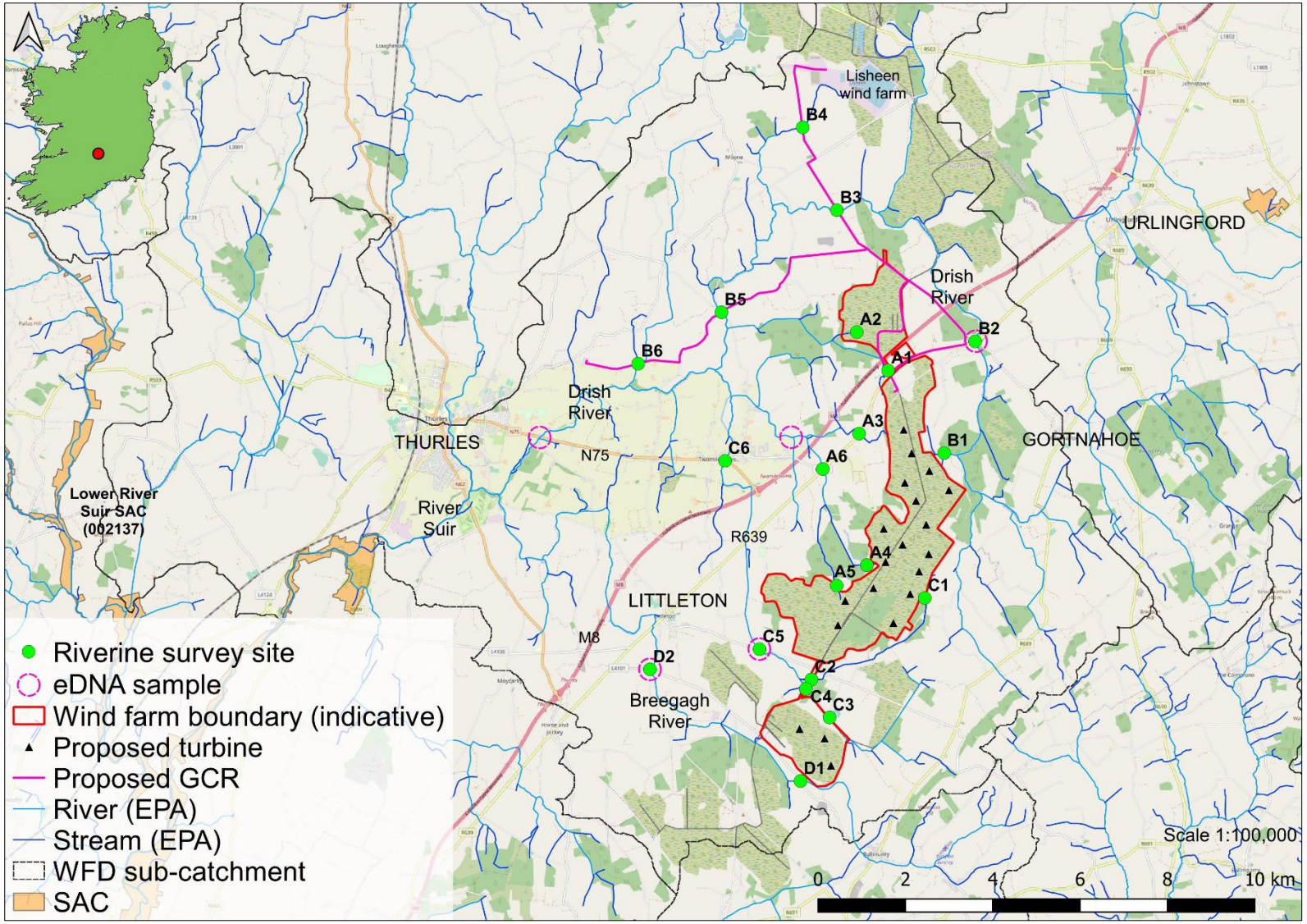


Figure 2.1 Overview of the 20 no. riverine survey sites in vicinity of the proposed Littleton wind farm project, Co. Tipperary

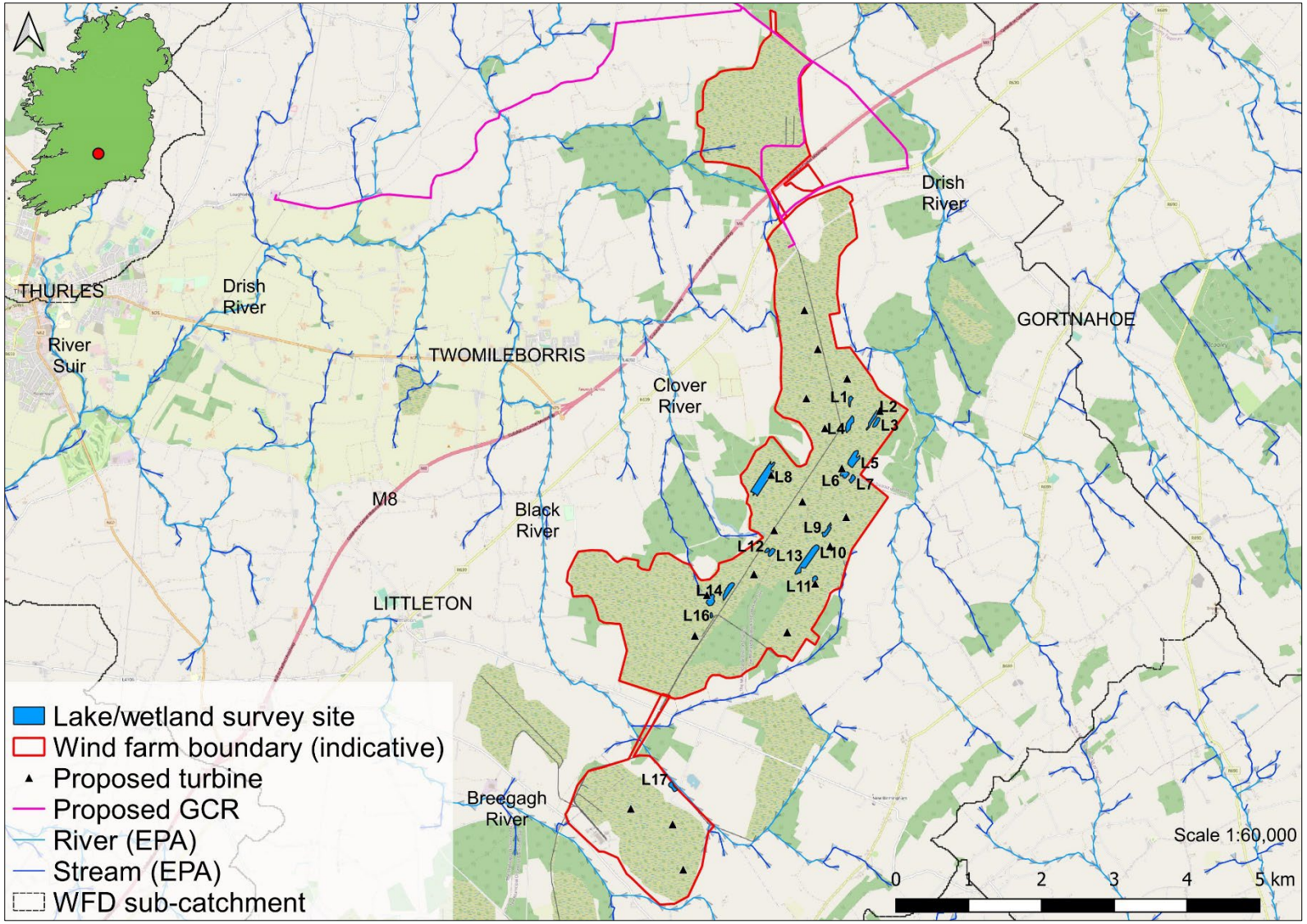


Figure 2.2 Overview of the 17 no. lacustrine survey sites in vicinity of the proposed Littleton wind farm project, Co. Tipperary

2.3 Fisheries assessment (electro-fishing) & appraisal

A single anode Smith-Root LR24 backpack (12V DC input; 300V, 100W DC output) was used to electro-fish sites on riverine watercourses in the vicinity of the proposed Littleton wind farm in September 2021 (**Table 2.1, Figure 2.1; Appendix A**), following notification to Inland Fisheries Ireland, under the conditions of a Department of the Environment, Climate and Communications (DECC) licence. The survey was undertaken in accordance with best practice (CFB, 2008; CEN, 2003) and Section 14 licencing requirements.

Furthermore, a fisheries habitat appraisal of all aquatic survey sites, including 17 no. lake/wetland habitats (**Table 2.1**), was undertaken to establish their importance for salmonid, lamprey, European eel and other fish species. The baseline assessment also considered the quality of spawning, nursery and holding habitat for salmonids and lamprey within the vicinity of the survey sites. For detailed survey methodology, please refer to accompanying fisheries assessment report in **Appendix A.**

2.4 White-clawed crayfish survey

White-clawed crayfish surveys were undertaken at the aquatic survey sites in September 2021 under a National Parks and Wildlife (NPWS) open licence (no. C145/2021), as prescribed by Sections 9, 23 and 34 of the Wildlife Act (1976-2021), to capture and release crayfish to their site of capture, under condition no. 6 of the licence. As per Inland Fisheries Ireland recommendations, the crayfish sampling started at the uppermost site(s) of the wind farm catchment/sub-catchments in the survey area to minimise the risk of transferring invasive propagules (including crayfish plague) in an upstream direction.

Hand-searching of instream refugia and sweep netting was undertaken according to Reynolds et al. (2010). An appraisal of white-clawed crayfish habitat at each site was conducted based on physical channel attributes, water chemistry and incidental records in mustelid spraint. Additionally, a desktop review of crayfish records within the wider Littleton wind farm survey area was completed.

2.5 eDNA analysis

To validate site surveys and to detect potentially cryptically low populations within the study area, 5 no. composite water samples were collected from the Clover River, Drish River (2 sites), Black River and Breegagh River and analysed for white-clawed crayfish and crayfish plague eDNA (**Figure 2.1**). The water samples were collected on 29th September 2021, with the sites strategically chosen to maximise longitudinal (instream) coverage within the catchment (i.e. facilitating a greater likelihood of species detection).

In accordance with best practice, a composite (500ml) water sample was collected from the sampling point, maximising the geographic spread at the site (20 x 25ml samples at each site), thus increasing the chance of detecting the target species' DNA. The composite sample was filtered on-site using a sterile proprietary eDNA sampling kit. The fixed sample was stored at room temperature and sent to the laboratory for analysis within 48 hours of collection. A total of *n*=12 qPCR replicates were analysed for the site. Given the high sensitivity of eDNA analysis, a single positive qPCR replicate is considered as proof of the species' presence (termed qPCR No Threshold, or qPCR NT). Whilst an eDNA approach is not currently quantitative, the detection of the target species' DNA indicates the presence of the

species at and or upstream of the sampling point. Please refer to **Appendix C** for full eDNA laboratory analysis methodology.

2.6 Biological water quality (Q-sampling)

A total of 12 no. riverine survey sites were assessed for biological water quality through Q-sampling in September 2021. All samples were taken with a standard kick sampling hand net (250mm width, 500µm mesh size) from areas of riffle/glide utilising a 2-minute kick sample, as per Environmental Protection Authority (EPA) methodology (Feeley et al., 2020). Large cobble was also washed at each site for 1-minute (where present) to collect attached macro-invertebrates (as per Feeley et al., 2020). Samples were elutriated and fixed in 70% ethanol for subsequent laboratory identification. Samples were converted to Q-ratings as per Toner et al. (2005) and assigned to WFD status classes (**Table 2.2**). Any rare invertebrate species were identified from the NPWS Red List publications for beetles (Foster et al., 2009), mayflies (Kelly-Quinn & Regan, 2012), stoneflies (Feeley et al., 2020) and other relevant taxa (i.e. Byrne et al., 2009; Nelson et al., 2011).

Table 2.2 Reference categories for EPA Q-ratings (Q1 to Q5)

Q value	WFD status	Pollution status	Condition
Q5 or Q4-5	High status	Unpolluted	Satisfactory
Q4	Good status	Unpolluted	Satisfactory
Q3-4	Moderate status	Slightly polluted	Unsatisfactory
Q3 or Q2-3	Poor status	Moderately polluted	Unsatisfactory
Q2, Q1-2 or Q1	Bad status	Seriously polluted	Unsatisfactory

2.7 Lacustrine macro-invertebrate communities

A subset of 10 no. lake/wetland sites were sampled for macro-invertebrates via sweep netting in October 2021. A standard lake net (250mm width, mesh size 500µm) was used to sweep macrophytes to capture macro-invertebrates. The net was also moved along the lake/lake bed to collect epibenthic and epiphytic invertebrates from the substratum (as per Cheal et al., 1993). A 3-minute sampling period was employed. To ensure appropriate habitat coverage, the sampling period was also divided amongst the range of meso-habitats present at the survey site to get a representative sample for sub-habitats.

2.8 Macrophytes and aquatic bryophytes

Surveys of the macrophyte and aquatic bryophyte community were conducted by instream wading at each of the wetted aquatic survey sites, with specimens collected (by hand, sweep nets or via grapnel) for on-site identification. An assessment of the aquatic vegetation community helped to identify any rare macrophyte species (Flora Protection Order or Wyse-Jackson et al., 2016) or habitats corresponding to the Annex I habitats, e.g., 'Water courses of plain to montane levels, with submerged or floating vegetation of the *Ranunculion fluitantis* and *Callitricho-Batrachion* (low water level during summer) or aquatic mosses [3260]' (more commonly referred to as 'floating river vegetation').

2.9 Otter signs

The presence of otter (*Lutra lutra*) at each aquatic survey site was determined through the recording of otter signs within 150m of each survey site. Notes on the age and location (ITM coordinates) were made for each otter sign recorded, in addition to the quantity and visible constituents of spraint (i.e. remains of fish, crustaceans, molluscs etc.).

2.10 Aquatic ecological evaluation

The evaluation of aquatic ecological receptors contained within this report uses the geographic scale and criteria defined in the 'Guidelines for Assessment of Ecological Impacts of National Road Schemes' (NRA, 2009).

2.11 Biosecurity

A strict biosecurity protocol following IFI (2010) and the Check-Clean-Dry approach was adhered to during surveys for all equipment and PPE used. Disinfection of all equipment and PPE before and after use with Virkon™ was conducted to prevent the transfer of pathogens or invasive propagules between survey sites. Specific consideration was given to highly virulent crayfish plague given known historical outbreaks in the connecting downstream catchments. Surveys were undertaken at sites in a downstream order to minimise the risk of upstream propagule mobilisation of pathogens and invasive species. Where feasible, equipment was also thoroughly dried (through UV exposure) between survey areas. Any aquatic invasive species or pathogens recorded within or adjoining the survey areas were geo-referenced. All Triturus staff are certified in 'Good fieldwork practice: slowing the spread of invasive non-native species' by the University of Leeds.

3. Receiving environment

3.1 Littleton wind farm catchment and survey area description

The proposed Littleton wind farm is located in an extensive area of cutover bog within the townlands of Noard, Ballybeg, Kileen, Newhill, Derryhogna, Kilmakill, Lansespark, Derryvella, Leigh, Clonoura, Longfordpass North, Longfordpass South and Bawnreagh approximately 2.5km west of Littleton, County Tipperary (**Figure 2.1**). The proposed wind farm site is within the South Eastern River Basin District and within hydrometric area 16 (Suir). The aquatic survey sites were located within the located in the Suir_SC_040 river sub-catchment. The watercourses and aquatic surveys sites in the vicinity of Littleton wind farm are typically small, historically modified lowland depositing channels (FW2; Fossitt, 2000) which flow over areas of Tournaisian and Visean limestone and calcareous shale (Geological Survey of Ireland data). Land use practices in the wider survey area comprise peat bogs (CORINE 412), transitional woodland scrub (324) with localised coniferous forests (312) and adjoining pastures (231).

3.2 Fisheries asset of the survey area

The Drish River, a tributary of the River Suir, is known to support *Lampetra* sp. (O'Connor, 2007; Kurz & Costello, 1999) as well as Atlantic salmon (*Salmo salar*), brown trout (*Salmo trutta*) and pike (*Esox lucius*) (1993 data presented in AECOM, 2020). The trout and pike in the Drish were found to be fast growing and similar to those in comparable rivers in the Irish midlands (CFB data referenced in AECOM, 2020). The river suffered significant pollution from a zinc and lead mine at Lisheen until the recent past (AECOM, 2020; O'Connor, 2007).

The Black River (Two Mile Borris) and the Breegagh River, both tributaries of the Drish River, are known to support *Lampetra* sp. (O'Connor, 2007)

Atlantic salmon are also known from the Breegagh River (Malone O'Regan, 2020).

Fisheries data for the other watercourses surveyed was not available at the time of survey.

3.3 Protected aquatic species data

A sensitive species data request was submitted to the National Parks and Wildlife Service for the 10km grid squares containing and adjoining the proposed wind farm project (i.e. S04, S05, S15, S16, S25 & S26). Furthermore, additional data held by the EPA and NBDC was also reviewed for these grid squares. Records for a low number of rare or protected aquatic species were available although none overlapped directly with the proposed wind farm.

A very high number of contemporary, white-clawed crayfish (*Austropotamobius pallipes*) records (>100) were available for the respective grid squares in the 2000-2014 period (**Figure 3.1**), with a further 50 approx. historical records. A low number of records were available for the Drish River, Clover River (single record), Black River (including at survey site C6) and Lough Doire Bhile (near lake site L17) (**Figure 3.1**).

A low number of contemporary otter (*lutra lutra*) records (2005-2015) were available for the relevant grid squares, with records from the Black River and Drish River (**Figure 3.1**).

A low number of records for freshwater pearl mussel (*Margaritifera margaritifera*) were available for the 10km grid squares S05 (Clodiagh River) and S04 (Multeen River) in the 1987-2006 period (**Figure 3.1**). However, there is no hydrological connectivity between these populations and the proposed project. No records were available in the vicinity of the proposed Littleton wind farm.

A single historical record (1985) for river lamprey (*Lampetra fluviatilis*) was available for the River Suir (grid square S04). *Lampetra* sp. are also known from a number of watercourses in vicinity of the proposed wind farm (see section 3.2 above).

Two records for Flora (Protection) Order 2022 macrophyte species opposite-leaved pondweed (*Groenlandia densa*) were available from a former pond in the vicinity of Urlingford but these were historical only (i.e. pre-1900).

Records for common frog (*Rana temporaria*) were widespread throughout 10km grid squares S04, S05, S15, S16, S25 & S26, with several records available in the vicinity of the proposed wind farm (data not shown). A single record for smooth newt (*Lissotriton vulgaris*) was available for bog habitat at Derryvella adjacent to the North Glengoole River at survey site C3 from 2010.

3.4 EPA water quality data (existing data)

The following outlines the available water quality data for the watercourses in context of the proposed wind farm project. Only recent water quality is summarised below. Contemporary EPA biological monitoring data was available for the Drish, Clover and Black Rivers only. Please note that biological water quality analysis was undertaken as part of this study, with the results presented in the **section 4** and **Appendix B** of this report.

3.4.1 Drish River

The Drish River (EPA code: 16D02) drains north and then south-west of the proposed wind farm site boundary before joining the River Suir downstream of Thurles. There was a total of 5 no. contemporary EPA biological monitoring stations on the river. The Drish River achieved **Q3** (poor status) at the four uppermost stations (RS16D020040, RS16D020070 (site B3), RS16D020100 & RS16D020200) in 2020. The lowermost station (RS16D020400) achieved **Q3-4 (moderate status)** in 2020.

The Drish_010, _020, _040 & _050 river waterbodies were all of poor status in the 2016-2021 period and were considered 'at risk' of failing to achieve good status (WFD Risk 3rd cycle),. The lower reaches (Drish_060) achieved moderate status in the same period but were also considered 'at risk'. Peat extraction, forestry and agriculture are the primary threats to water quality in these waterbodies (EPA, 2019).

3.4.2 Clover River

There were 2 no. contemporary EPA biological monitoring stations on the Clover River (16C04), a tributary of the Black River. The Clover achieved **Q3 (poor status)** at station RS16C040100 (survey site A2) in 2020 but this elevated to Q3-4 (moderate status) in the lower reaches at station RS16C040300 (also in 2020).

The upper reaches of the Clover River (Clover_010 waterbody) were of poor status in the 2016-2021 period, whilst the lower reaches (Clover_020 waterbody) were of moderate status. Both waterbodies were considered 'at risk' of not achieving good status. Peat extraction and forestry are the significant threats to water quality in these waterbodies (EPA, 2019).

3.4.3 Black River

There were 2 no. contemporary EPA biological monitoring stations on the Black River (16B01), a tributary of the Drish River. At Black River Bridge (station RS16B010030) and station RS16B010100 (near site C6) the river achieved **Q3-4 (moderate status)** in 2020.

The Black (Twomileborris)_010 waterbody (encompassing most of the river) was of moderate WFD status in the 2016-2021 period and was considered 'at risk' of achieving good status. The lower reaches of the Black River are part of the Drish_050 waterbody which was of poor status in the same period and also 'at risk'. (as outlined above). Peat extraction is the primary threat to water quality in these waterbodies (EPA, 2019).

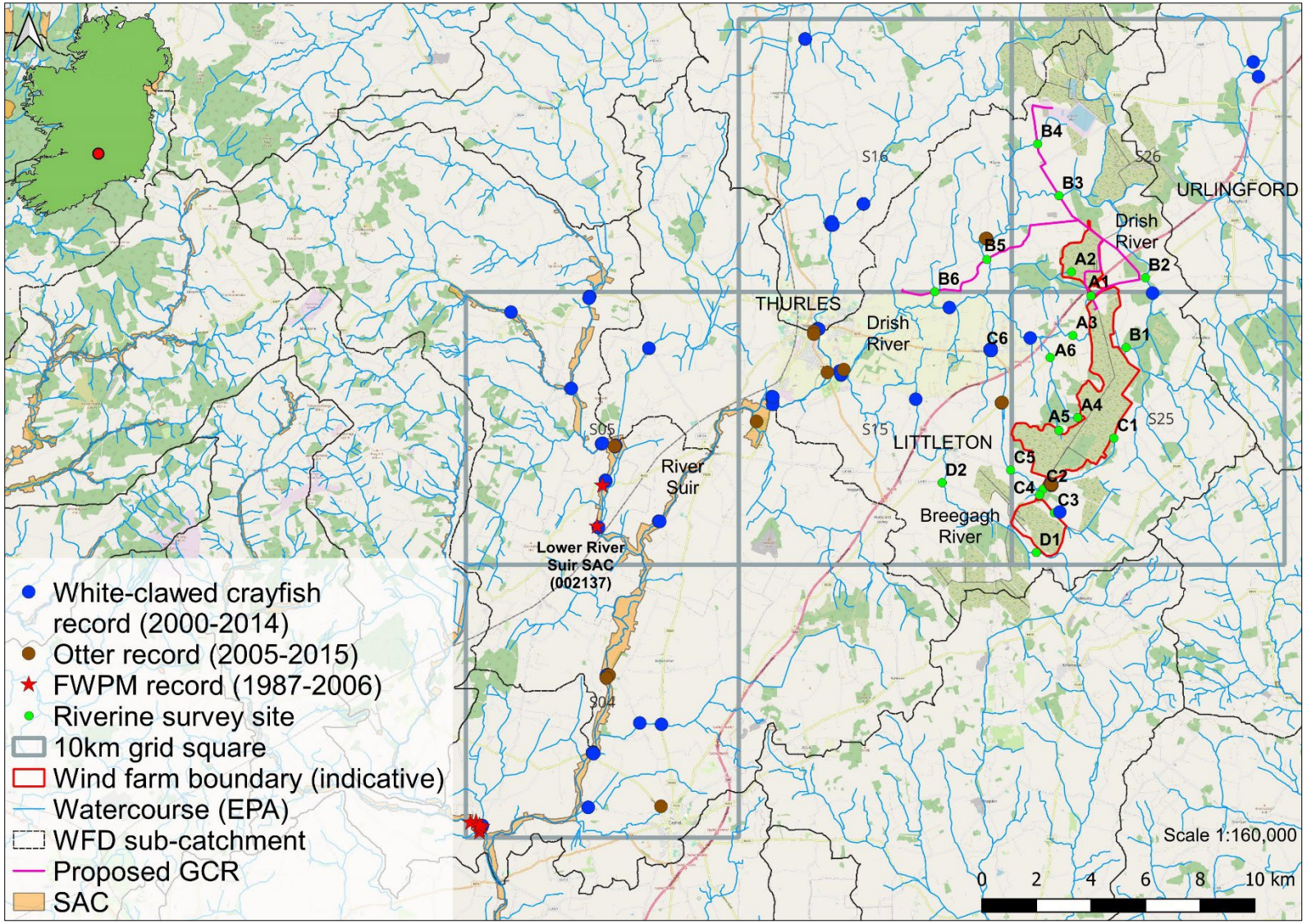


Figure 3.1 Distribution of selected protected species records in the vicinity of the proposed Littleton wind farm (source: NPWS, EPA & NBDC data)

4. Results of aquatic surveys

The following section summarises each of the 20 no. riverine and 17 no. lake/wetland survey sites in terms of aquatic habitats, physical characteristics and overall value for fish, macro-invertebrates and macrophyte/aquatic bryophyte communities. Biological water quality (Q-sample) and macro-invertebrate sweep sample results are summarised for a subset of 12 no. riverine and 10 no. lake/wetland sites, respectively, in **Appendix B**. Habitat codes are according to Fossitt (2000). Scientific names are provided at first mention only. Sites were surveyed in September 2021. Please refer to **Appendix A** (fisheries assessment report) for more detailed fisheries results. A summary of the fish species recorded at each survey site is provided in **Table 4.2**. A summary of the aquatic species and habitats of high conservation concern recorded during the surveys is provided in **Table 4.3**. An evaluation of the aquatic ecological importance of each survey site based on these aquatic surveys is provided and summarised in **Table 4.4**.

4.1 Riverine survey site results

4.1.1 Site A1 – unnamed stream, Longfordpass North

Site A1 was located on the upper reaches of an unnamed stream (no EPA code), approximately 0.4km north of a proposed substation. Although mapped by the EPA, no flowing watercourse was present at this location, situated adjacent to a Bord na Móna rail line. Whilst drainage swales were present along the rail line, these did not support flowing or standing water at the time of survey. No aquatic habitats were recorded in the vicinity of the site.

Site A1 was not of fisheries value given its dry, ephemeral nature and absence of aquatic habitats. No otter signs were recorded in the vicinity of the site.

Given the dry nature of the site, it was not possible to collected a biological water quality sample at the time of survey.

Given the absence of aquatic habitats, the aquatic ecological evaluation of site A1 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.1 Representative image of site A1 on an unnamed Drish River tributary, September 2021 (watercourse mapped by EPA but no channel or water present)

4.1.2 Site A2 – unnamed stream, Longfordpass North

Site A2 was located on the uppermost reaches of an unnamed stream (no EPA code) within the proposed site boundary. Situated in an extensive area of cutover bog (PB4), the Drish River tributary had been extensively straightened and deepened, with V-shaped banks to 4-5m in height. The homogenous channel averaged 1-1.5m wide and <0.1m deep with imperceptible flows at the time of survey (near stagnant glide and pool). The channel had been excavated with a gravel-dominated base. Occasional cobble and bolder was also present. However, these were heavily silted (flocculent deposits from peat escapement). The stream was considered likely ephemeral (seasonal) at this location. Given the low flows and high riparian shading, macrophytes were absent with the exception of very localised water horsetail (*Equisetum fluviatile*) and common reed (*Phragmites australis*) along channel margins. No aquatic bryophytes were recorded. The channel was heavily scrubbed over with high levels of terrestrial encroachment from willow (*Salix* sp.), downy birch (*Betula pubescens*) and bramble (*Rubus fruticosus* agg.). The site was bordered by dry meadow habitat (GS2) and cutover bog habitat in the wider area.

Three-spined stickleback (*Gasterosteus aculeatus*) was the only fish species recorded via electro-fishing at site A1 (**Appendix A**). With the exception of low densities of this species, the site was of very poor fisheries value at the time of survey given observed low seasonal flows (stagnant), very shallow nature, heavy siltation and historical modifications. There was no suitability for salmonids, lamprey, European eel or other fish species at the time of survey. The site had no suitability for white-clawed crayfish given very shallow water. No otter signs were recorded in vicinity of the site.

A biological water quality sample was not collected at this site.

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site A2 was of **local importance (lower value)** (**Table 4.4**).



Plate 4.2 Representative image of site A2 on an unnamed Drish River tributary, September 2021

4.1.3 Site A3 – Unnamed stream, Leigh

Site A3 was located on an unnamed stream (no EPA code) draining to the north-west of the proposed site boundary. The Clover River tributary (FW2) had been historically straightened and deepened at this location and was semi-dry at the time of survey, with only small localised pools of standing, stagnant rainwater and no flows. The channel featured a base of cobble and mixed gravels bedded in mud. No aquatic vegetation was present and the ephemeral channel likely only conveys water after heavy rainfall events or during floods.

Site A3 was not of fisheries value given its dry, ephemeral nature and absence of aquatic habitats. No otter signs were recorded in the vicinity of the site.

Given the semi-dry nature of the site (rainwater pools only), it was not possible to collected a biological water quality sample at the time of survey.

Given the absence of aquatic habitats, the aquatic ecological evaluation of site A3 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.3 Representative image of site A3 on an unnamed Clover River tributary, September 2021 (semi-dry, ephemeral channel)

4.1.4 Site A4 – Unnamed stream, Noard

Site A4 was located on the uppermost reaches of an unnamed stream (no EPA code) in an extensive area of cutover bog (PB4), near the proposed location of turbine T12. The lowland depositing stream (FW2) had been extensively straightened and deepened historically, with steep V-shaped banks of 3-4m high. The stream was a homogenous 2.5-3m wide and 0.2-0.3m deep. The stream suffered from low summer flows at the time of survey (glide habitat only) with very high peat staining. The substrata comprised almost exclusively deep silt (peat), with localised, heavily bedded small boulder. The over-deepened channel supported abundant common reed which covered >95% of the channel. Water mint (*Mentha aquatica*) was occasional on sloping banks. In addition to high shading from common reed, willow and birch lined the channel, resulting in local tunnelling. The site was bordered by bracken (*Pteridium aquilinum*) scrub (HH3) and willow scrub (WS1) in an area of cutover bog.

Three-spined stickleback and European eel (*Anguilla anguilla*) were the only fish recorded via electro-fishing at site A4 (**Appendix A**). With the exception of low densities of these species, the stream was of poor fisheries value at the time of survey given poor flows and heavy siltation (from peat escapement). Suitability for European eel was poor but some desirable characteristics for the species were present (e.g. instream refugia, macrophyte & fish prey base). Poor flows, heavy vegetation cover, heavy siltation and historical modifications precluded the presence of salmonids or lamprey from the site. There was poor suitability for white-clawed crayfish and none were recorded. No otter signs were recorded in the vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (good status)** (**Appendix B**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle

areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of Red-listed European eel, the aquatic ecological evaluation of site A4 was of **local importance (higher value)** (**Table 4.4**).



Plate 4.4 Representative image of site A4 on an unnamed Clover River tributary, September 2021

4.1.5 Site A5 – Clover River, Noard

Site A5 was located on the uppermost reaches of the Clover River (16C04) (also known as the Derheen River), approx. 150m downstream of a wetland area in cutover bog near proposed turbine T16. The lowland river (FW2) at this location had been historically straightened and extensively deepened, with steep V-shaped banks of 5-8m in height. Whilst flowing through a channel of up to 6-7m wide, the river itself was invariably <1m wide at the time of survey. The profile was of slow-flowing glide that averaged a homogenous 0.2-0.3m deep, with no riffle or pool areas. The substrata comprised almost exclusively deep (peat-derived) silt, often up to 0.3m in depth. Some superficial gravels were present but very heavily bedded in silt. Peat-staining was high at the time of survey. Macrophyte cover was high overall, with abundant bulrush (*Typha latifolia*) instream and frequent water mint and common reed along channel margins. Water horsetail was occasional, with bottle sedge (*Carex rostrata*) also present. Terrestrial encroachment was high given the narrow width of the channel. Scattered hawthorn (*Crataegus monoygna*), gorse (*Ulex europaeus*) and willow were present within the channel. The site was bordered by willow and bracken-dominated scrub, in a wider area of extensive cutover bog (PB4).

Three-spined stickleback was the only fish species recorded via electro-fishing at site A5 (**Appendix A**). With the exception of high densities of these species, the site was of very poor fisheries value given

its diminutive size, poor flows and heavy siltation (from peat escapement). These characteristics precluded the presence of salmonids or lamprey. Despite some suitability for European eel, none were recorded. Eel habitat was poor overall and was notably much improved in the upstream-connecting wetland system located within Littleton Bog. White-clawed crayfish habitat was poor overall (given heavy siltation) and none were recorded. No otter signs were recorded in the vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (good status)** (**Appendix B**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site A5 was of **local importance (lower value)** (**Table 4.4**).



Plate 4.5 Representative image of site A5 on the uppermost reaches of the Clover River, September 2021

4.1.6 Site A6 – Clover River, Noard

Site A6 was located on the Clover River (16C04) at the R639 crossing, approx. 2.8km downstream of site A5. The lowland depositing river (FW2) at this location had been historically straightened and extensively deepened, with V-shaped bank heights of 5-6m. The river averaged 6-8m wide (narrower upstream of bridge) and 0.4-0.8m deep. Upstream of the bridge, shallower riffles and glide was present (0.1-0.3m deep). The profile was of slow-flowing, deep homogenous glide with riffle and shallower glide present upstream. Peat-staining was high at the time of survey. The cobble and mixed gravel substrata were very heavily silted in all but the fastest-flowing areas. Boulder was occasional, with large woody debris (LWD) frequent downstream of the bridge adding some valuable habitat

heterogeneity. Riparian shading was high, with macrophytes confined to upstream of the bridge in a more open section of channel (historical tree clearance). Here, unbranched bur-reed (*Sparganium emersum*) was occasional instream, with frequent marginal stands of fool's watercress (*Apium nodiflorum*), localised lesser water parsnip (*Berula erecta*), blue water speedwell (*Veronica anagallis-aquatica*) and water starwort (*Callitriche* sp.). Common duckweed (*Lemna minor*) was also frequent. Aquatic bryophytes were rare and limited to occasional *Leptodictyum riparium* on larger cobble and boulder. The channel was lined by mature treelines of sycamore (*Acer psuedoplatanus*), ash (*Fraxinus excelsior*) and elder (*Sambucus nigra*) with scrubby understories. The site was bordered by buildings and artificial surfaces (BL3) and improved pasture (GA1).

A total of four fish species were recorded via electro-fishing at site A6 (**Appendix A**). The site was dominated by adult brown trout (*Salmo trutta*), with low numbers of juveniles. Low numbers of perch (*Perca fluviatilis*), stone loach (*Barbatula barbatula*) and a single three-spined stickleback were also recorded. Despite significant siltation pressures, the site was evidently of good value as an adult trout habitat. Due to siltation pressures, spawning habitat was limited to a small, faster-flowing area upstream of the bridge. This also offered some moderate value for spawning lamprey but ammocoete habitat was sub-optimal (largely flocculent, humic deposits) and none were recorded. Despite some good suitability for European eel, none were recorded. Two predated white-clawed crayfish were recorded (likely otter predation), although no live crayfish were recorded. Otter spraint was recorded on marginal boulders immediately upstream of the bridge (ITM 621355, 657615).

Biological water quality, based on Q-sampling, was calculated as **Q3-4 (moderate status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids, utilisation by otter and the possible presence of white-clawed crayfish (prey remains recorded), the aquatic ecological evaluation of site A6 was of **local importance (higher value)** (**Table 4.4**).



Plate 4.6 Representative image of site A6 on the Clover River, September 2021 (upstream of road culvert)

4.1.7 Site B1 – Unnamed stream, Longfordpass South

Site B1 was located on the upper reaches of an unnamed Drish River tributary, approx. 0.3km upstream of the Drish River confluence. The stream (FW2) had been heavily modified (straightened and deepened) and flows were intermittent at the time of survey, with frequent peat dams instream obstructing flow. The homogenous channel averaged 2m wide and <0.1m deep, with very deep silt (peat) deposits on the bed of up to 0.75m deep. Stagnant standing water was present locally, with several dry sections (between peat dams). The channel was heavily vegetated by terrestrial species and willow. However, more open areas supported abundant common duckweed and water mint. Reed canary grass (*Phalaris arundinacea*) was also frequent along the riparian zone. The site was bordered by dry meadows habitat (GS2) and recently planted immature sitka spruce (*Picea sitchensis*) woodland (WS2) with alder (*Alnus glutinosa*) borders. Mature coniferous forestry (WD4) was present along the north bank.

Three-spined stickleback was the only fish species recorded via electro-fishing at site B1 (**Appendix A**). With the exception of moderate densities of this species, the heavily-vegetated and modified channel was not of fisheries value at the time of survey given a lack of flow and very heavy siltation (peat). There was no suitability for white-clawed crayfish. No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (good status)** (**Appendix B**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site B1 was of **local importance (lower value)** (**Table 4.4**).



Plate 4.7 Representative image of site B1 on an unnamed Drish River tributary, September 2021

4.1.8 Site B2 – Drish River, Longfordpass Bridge

Site B2 was located on the Drish River (16D02) at Longfordpass Bridge on the R639 road. The lowland depositing river (FW2) had been extensively straightened and deepened historically, resulting in very poor hydromorphology. The river suffered from very low water levels at the time of survey with no flows present (i.e. ponding habitat). The channel was a homogenous 10-12m wide and 0.1-0.3m deep with deep silt deposits of >0.3m locally. Near the upstream local road bridge, hard substrata were present (boulder and cobble with mixed gravels). However, elsewhere deep silt dominated. The site was very heavily vegetated (near 100% cover), with open ponding areas very localised. These supported a diverse range of macrophytes including abundant branched bur-reed (*Sparganium erectum*) with spiked water milfoil (*Myriophyllum spicatum*), lesser pondweed (*Potamogeton pusillus*), river water dropwort (*Oenanthe fluviatilis*), water-forget-me-not (*Myosotis scorpioides*), yellow water lily (*Nuphar lutea*) and fool's watercress. Cover of common duckweed and ivy-leaved duckweed (*Lemna trisulca*) was high. The aquatic moss *Fontinalis antipyretica* was present on the dry, perched bridge apron (1m fall), indicating intermittent higher flows (e.g. in winter). Filamentous algae was also present on harder substrata. The channel was lined by reed canary grass with occasional bittersweet (*Solanum dulcamara*), hedge bindweed (*Calystegia sepium*) and willowherbs (*Epilobium* spp.). The site was bordered by improved pasture (GA1).

Three-spined stickleback were the only fish recorded via electro-fishing at site B2 (**Figure 3.6**). With the exception of moderate densities of this species, the site was of very poor fisheries value at the time of survey given a seasonal lack of flow and impounding/ponding of water between stands of

instream vegetation. Whilst some suitability still remained for European eel, none were recorded. However, the Drish River at this location would have greater fisheries value for European eel and perhaps salmonids during higher flow periods (e.g. winter). Despite some habitat suitability, no white-clawed crayfish were recorded during the survey and crayfish eDNA was not detected in the sample collected from the site (**Table 4.1**). A regular otter spraint site was recorded on the upstream side of the dry bridge apron (ITM 624888, 660462) – this did not contain crayfish remains.

A biological water quality sample was not collected at this site.

Given utilisation by otter, the aquatic ecological evaluation of site B2 was of **local importance (higher value)** (**Table 4.4**).



Plate 4.8 Representative image of site B2 on the Drish River at Longfordpass Bridge, September 2021 (facing downstream to bridge)

4.1.9 Site B3 – Drish River, Castletown Bridge

Site B3 was located on the Drish River (16D02) at Castletown Bridge, a proposed GCR crossing approx. 6km downstream of site B2. The lowland alkaline river (FW2) at this location had been arterially drained historically but retained some good semi-natural features. The river suffered from very low summer flows at the time of survey. The water width was 5-6m on average in a heavily-vegetated channel up to 8-10m wide. The depth averaged 0.3-1m with deeper pool areas to 1.5m locally. The profile was of very slow-flowing glide, with localised faster runs between macrophyte beds exposing gravel substrata. The substrata were predominantly cobble and medium to coarse gravels with frequent boulder. However, these were bedded in silt and moderately calcified (compacted). The compacted bed was also moderately to heavily silted, given low flows and depositional conditions. The river at this location was very heavily vegetated (>90% cover) with abundant lesser water parsnip

and broad-leaved pondweed (*Potamogeton natans*), in addition to common reed, branched bur-reed and frequent stands of heterophyllous common clubrush (*Schoenoplectus lacustris*) in gravel-dominated areas of faster flows. Yellow lily was common, with common duckweed and ivy-leaved duckweed frequent. Reed canary grass was also frequent instream. River water dropwort was occasional. The moss *Rhynchostegium riparium* was occasional. Filamentous algae was present, locally. Adjoining the river margins was a herbaceous community supporting primarily reed canary grass, bittersweet, marsh willowherb (*Epilobium palustre*), great willowherb (*Epilobium hirsutum*), water mint and water-forget-me-not. The site was bordered by improved pasture (GA1) and, downstream, an intermittent treeline (WL2) of ash, hawthorn and sycamore.

A total of four fish species were recorded via electro-fishing at site B3 (**Appendix A**). Low numbers of stone loach and three-spined stickleback were present, with single examples of pike (*Esox lucius*) (juvenile) and European eel also recorded. Despite some suitability, no salmonids or lamprey were recorded. Salmonid and lamprey spawning habitat was present but very localised (mostly downstream of bridge) and limited in extent due to very high vegetation cover, siltation and low flows. Salmonid nursery habitat was poor, given low seasonal flows. Some good-quality holding habitat for adult salmonids was present in association with macrophyte beds and overhanging vegetation. European eel suitability was high, with ample instream refugia present. Despite some good suitability, no white-clawed crayfish were recorded, although the value of the site was reduced given compaction of substrata and poorly accessible boulder refugia. White-clawed crayfish eDNA was detected on the Drish River approx. 5.7km downstream at site B5 (see section 4.5). No otter signs were recorded in vicinity of the site, despite good foraging suitability.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of Red-listed European eel, the aquatic ecological evaluation of site B3 was of **local importance (higher value)** (**Table 4.4**).



Plate 4.9 Representative image of site B3 on the Drish River, September 2021 (facing upstream from Castletown Bridge)

4.1.10 Site B4 – Cooleeny River, Killoran

Site B4 was located on the upper reaches of the Cooleeny River (16C14) at a proposed GCR crossing. The Drish River tributary at this location was dry at the time of survey, with no flows or standing water present. As a result, there was no aquatic value. The channel featured a dry mud base and had been historically straightened and deepened. The river at this location likely only conveys water after heavy rainfall events or during floods (i.e. ephemeral).

Site B4 was not of fisheries value given its dry, ephemeral nature and absence of aquatic habitats. No otter signs were recorded in the vicinity of the site.

Given the dry, ephemeral nature of the site, it was not possible to collected a biological water quality sample at the time of survey.

Given the absence of aquatic habitats, the aquatic ecological evaluation of site B4 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.10 Representative image of site B4 on the Cooleeny River, September 2021 (dry, ephemeral channel)

4.1.11 Site B5 – Drish River, d/s Ballyduff Bridge

Site B5 was located on the Drish River (16D02) 100m downstream of Ballyduff Bridge at a proposed GCR crossing, approx. 5.7km downstream of site B3. The swift-flowing, lowland alkaline river (FW2) was largely natural at this location and averaged 10-12m wide and 0.2-0.5m deep. Localised deeper pool to 0.8m was present downstream of the bridge. The site was typified by swift, shallow glide and occasional riffle and pool. The substrata were dominated by heavily compacted and calcified cobble with occasional interstitial gravels and frequent boulder. Siltation was low overall and no soft sediment deposits were present, even in association with macrophyte beds or pool slacks (i.e., high-energy site). Given the compacted bed and high-energy nature, macrophytes were limited to infrequent water crowfoot (*Ranunculus* sp.) and marginal beds of fool's watercress, watercress and water mint, with a single stand of iris (*Iris psuedacorus*) on a mid-channel island downstream of the bridge. Ivy-leaved duckweed was present but rare given high flows. Reed canary grass with bittersweet, nettle (*Urtica dioica*) and hedge bindweed lined the channel. However, the cover of aquatic bryophytes was very high (>75%) with abundant *Fontinalis antipyretica* and frequent *Rhynchostegium riparium*. The calcicolous liverwort *Pellia endiviifolia* was occasional with *Riccardia chamedryfolia* on the bridge abutments. Filamentous algae was present (5%) cover, indicating enrichment. The site was bordered by mature treelines of sycamore and ash with occasional willow and elder.

A total of five fish species were recorded via electro-fishing at site B5 (**Appendix A**). The site was dominated by mixed cohort Atlantic salmon and brown trout, with stone loach, minnow (*Phoxinus phoxinus*), European eel and pike also captured. The site was an excellent-quality salmonid nursery

with a high density of juvenile Atlantic salmon and brown trout present in cobble-dominated zones. Deeper pools and undercuts/overhangs supported moderate numbers of adult trout, and provided some good holding habitat for migratory adults. European eel habitat was moderate-quality given natural bed compaction (high flow rates & calcification) and poorly-accessible boulder refugia. Lamprey ammocoete habitat was not present, though some localised interstitial gravels were present which provided some lower value for spawning. Despite some suitability for white-clawed crayfish (reduced due to bed compaction/calcification), none were recorded during sweep netting and hand-searching. However, white-clawed crayfish eDNA was detected at the site (**Table 4.1**). Both otter and invasive mink (*Neovison vison*) spraint was recorded on the upstream side of the bridge abutment (ITM 618948, 661308). Neither contained crayfish remains.

Biological water quality, based on Q-sampling, was calculated as **Q3-4 (moderate status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids (including Atlantic salmon) and European eel, in addition to utilisation by otter, the aquatic ecological evaluation of site B5 was of **local importance (higher value)** (**Table 4.4**).



Plate 4.11 Representative image of site B5 on the Drish River, September 2021 (facing downstream from Ballyduff Bridge)

4.1.12 Site B6 – Ballygammane River, Athlummon

Site B6 was located on the Ballygammane River (16B55) at a local road crossing and proposed GCR crossing, approx. 0.6km upstream of the Drish River confluence. The river at this location had been straightened historically, with more recent modifications evident (e.g. pipe culvert from adjacent

house). However, some semi-natural characteristics remained. The small alkaline river (FW2) had been historically straightened and deepened but showed some good instream recovery. The river averaged 2.5-3m wide in a channel of up to 5-6m. The trapezoidal channel featured banks of 2-2.5m in height. Water levels were low at the time of survey and the site averaged 0.1-0.2m deep with only very localised pool to 0.6m near the adjoining pipe culvert. The profile comprised a series of swift-flowing, shallow glide and riffle sequences with only very localised pool. The substrata were dominated by compacted, calcified boulder and cobble, much of which was exposed during the survey. Mixed medium to coarse gravels were present locally. Siltation was light overall, though some deep deposits were present near each respective culvert (up to 0.2m deep). Due to calcification, high shading and livestock poaching, macrophytes were limited to only very occasional fool's watercress along channel margins. However, cover of submerged *Pellia endiviifolia* was high, with occasional *Brachythecium rivulare* and *Riccardia chamedryfolia* present on the tops of larger boulder. The site was lined by mature treelines of ash, hawthorn and alder with scrubby understories, and was bordered by improved pasture (GA1) and a broad-leaved plantation (WS2).

A total of four fish species were recorded via electro-fishing at site B6 (**Appendix A**). The site was dominated by mixed cohort brown trout with low numbers of Atlantic salmon, with minnow, three-spined stickleback and *Lampetra* sp. also recorded. Despite its very shallow nature, the site supported moderate densities of Atlantic salmon parr and mixed cohort brown trout. The numbers of adult trout were low given the paucity of deeper holding habitat. Spawning habitat was present but the value was reduced by both siltation and calcification pressures (spawning habitat better suited to Atlantic salmon). The site was of most value as a salmonid nursery. Whilst some soft sediment accumulations were present, these were largely flocculent and no ammocoetes were recorded. However, a low number of *Lampetra* sp. transformers (near-adults) were captured. The site had low suitability for European eel and white-clawed crayfish given the shallow depth and lack of accessible refugia - neither species was recorded. No otter signs were recorded in vicinity of the site

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids (including Atlantic salmon) and *Lampetra* sp., the aquatic ecological evaluation of site B6 was of **local importance (higher value)** (**Table 4.4**).



Plate 4.12 Representative image of site B6 on the Ballygammane River, September 2021

4.1.13 Site C1 – Black River, Clonoura

Site C1 was located on the uppermost reaches of the Black River (16B01) that drained to the south of the proposed wind farm site. The site was dry at the time of survey, with no pools of standing water and a dry mud base. As a result, there was no aquatic value. The river channel had been straightened and deepened historically and averaged 1.5-2m wide with bank heights of 1-2m. Evidently, the channel was ephemeral, likely only conveying water during wetter periods. The channel was heavily scrubbed over with high levels of terrestrial encroachment and willow scrub. The site was bordered by a broad-leaved plantation (WS2) with tillage (BC3) to the east.

Site C1 was not of fisheries value given its dry, ephemeral nature and absence of aquatic habitats. No otter signs were recorded in the vicinity of the site.

Given the dry, ephemeral nature of the site, it was not possible to collected a biological water quality sample at the time of survey.

Given the absence of aquatic habitats, the aquatic ecological evaluation of site C1 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.13 Representative image of site C1 on the Black River, September 2021 (dry, ephemeral channel)

4.1.14 Site C2 – Black River, Derryvella

Site C2 was located on the Black River (16B02), approx. 3.6km downstream from site C1. The lowland depositing river (FW2) had been straightened and deepened historically, with some recovery evident. The stream was culverted underneath a Bord na Móna rail line via a large corrugated pipe culvert. Upstream, flows were low and the channel was heavily scrubbed. Downstream of the culvert, the channel narrowed and flows improved. Shallow glide and riffle predominated with occasional pool, grading to slow-flowing glide downstream. The river averaged 2-2.5m wide and 0.1-0.2m deep, with locally deeper pool to 0.3-0.5m. The substrata near the culvert were dominated by moderately-silted small cobble and medium-coarse gravels with occasional small boulder. However, downstream silt deposits became deep and frequent albeit flocculent (peat-derived with some sand). The river was heavily shaded by willow scrub. As a result, macrophytes were limited to the vicinity of the culvert. Water mint and fool's watercress were both present, in addition to localised common reed. No aquatic bryophytes were recorded, though some *Pellia* sp. liverwort grew on muddy banks. The site was bordered by an area of cutover bog (PB4) with abundant scrub (WS1).

A total of three fish species were recorded via electro-fishing at site C2 (**Appendix A**). The site supported a small population of mixed-cohort brown trout, with a single Atlantic salmon parr (0+) and three-spined stickleback also captured. Despite historical modifications, poor flows and siltation pressures (peat escapement), the site was of some moderate value as a salmonid nursery, at least in vicinity of the culvert where riffle habitat was present. The salmonid spawning value was compromised by siltation but the value likely improved during higher flows. Holding habitat was limited to the culvert pool with shallow glide dominating downstream. Whilst some limited lamprey

spawning habitat was present, ammocoete habitat was unsuitable given the flocculent nature of the silt (peat-dominated). Despite some suitability for European eel and white-clawed crayfish none were recorded (limited refugia). No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids (including Atlantic salmon), the aquatic ecological evaluation of site C2 was of **local importance (higher value)** (**Table 4.4**).



Plate 4.14 Representative image of site C2 on the Black River, September 2021 (downstream of pipe culvert)

4.1.15 Site C3 – North Glengoole River, Derryvella

Site C3 was located on the North Glengoole River (16N28) at a local road crossing adjacent to Loch Doire Bhile, approx. 1.1km upstream of the Black River confluence. The lowland depositing river (FW2) had been historically straightened and deepened with steep V-shaped banks of 2-3m in height. The river averaged 2m wide and 0.1-0.15m deep, with localised small pools to 0.25m maximum. The profile comprised very shallow glide and riffle with limited pool. The river flowed through a perched twin-bore pipe culvert (0.3m fall). The substrata were dominated by medium to coarse gravels with small cobble and occasional small boulder. However, these were moderately compacted, with moderate to high siltation (peat-derived, plumes underfoot). The narrow channel was heavily shaded by riparian scrub and macrophytes were limited to occasional lesser water parsnip and watercress in more open areas. Common duckweed was present but scarce. Aquatic bryophytes were limited to rare *Rhynchostegium riparoides*, with *Pellia* sp. on muddy banks. The site was lined with dense bramble-

dominated scrub (WS1) with willow and gorse and adjoined an area of recolonising cutover bog (PB4). Heavy tunnelling was present upstream and downstream of the culvert.

Four fish species were recorded via electro-fishing at site C3 (**Appendix A**). The site supported a low density of juvenile brown with a single Atlantic salmon parr (1+) recorded. Two juvenile European eel were also recorded, in addition to a low density of three-spined stickleback. Salmonid spawning habitat, whilst present, was compromised by siltation and compaction of substrata. The value of the salmonid nursery habitat was reduced given low flows, shallow depth and the presence of a culvert which evidently acted as a migration barrier at base flows. Indeed, all fish recorded were confined to the pool immediately downstream of the culvert, despite some suitability for salmonids upstream. European eel were present in low densities. The site was considered unsuitable for lamprey given compaction of substrata, siltation and lack of suitable soft sediment deposits for ammocoetes (flocculent only). No white-clawed crayfish were recorded (paucity of suitable refugia). No otter signs were recorded in vicinity of the site.

A biological water quality sample was not collected at this site.

Given the presence of salmonids (including Atlantic salmon) and Red-listed European eel, the aquatic ecological evaluation of site C3 was of **local importance (higher value)** (**Table 4.4**).



Plate 4.15 Representative image of site C3 on the North Glengoole River, September 2021

4.1.16 Site C4 – North Glengoole River, Derryvella

Site C4 was located on the North Glengoole River (16N28) at a Bord na Móna rail crossing (culvert), approx. 0.8km downstream of site C3 and 0.25km upstream of the Black River confluence. The lowland depositing river (FW2) had been historically straightened and deepened with V-shaped banks of up to 4m in height and old embankments evident along the channel. The river averaged 2-2.5m wide and 0.1-0.2m deep, with locally deeper pool to 0.4m. Shallow glide and riffle predominated, with only localised pool. In shallower areas near the culvert the substrata comprised mixed gravels and small cobble with occasional boulder. However, outside of this area, depositional silt dominated (up to 0.2m deep). Hard substrata were exposed to moderate siltation and partial bedding. Siltation would have been higher if not for macrophyte growth. Cover of macrophytes was high (>75%) with abundant fool's watercress, frequent water mint and localised bulrush. Floating mats of *Agrostis* sp. grass were present along channel margins. Aquatic bryophytes were not recorded. The river channel was open with only scattered gorse, hawthorn and willow. A well-developed herbaceous layer supporting purple loosestrife (*Lythrum salicaria*), willowherbs (*Epilobium* spp.), hogweed (*Heracleum sphondylium*), reed canary grass and rank grasses was present along the channel margins. The site was bordered by dry meadows habitat (GS2) and improved pasture (GA1) in a wider landscape of cutover bog (PB4).

Brown trout and three-spined stickleback were the only two fish species recorded via electro-fishing at site C4 (**Appendix A**). The site supported a moderate density of juvenile brown trout and low numbers of small adults with a single three-spined stickleback also recorded. The site was of good value as a salmonid nursery, with good, albeit highly localised, spawning habitat present also. Holding habitat for adults was moderate, at best (largely confined to vicinity of the pipe culvert). Whilst some lamprey spawning habitat was present, ammocoete habitat was not recorded (flocculent and peat-dominated). Despite some suitability, no European eel were recorded. White-clawed crayfish habitat was moderate overall, with the value reduced due to a lack of accessible refugia or banks for burrowing (i.e. hard, excavated banks). No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3-4 (moderate status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids, the aquatic ecological evaluation of site C4 was of **local importance (higher value)** (**Table 4.4**).



Plate 4.16 Representative image of site C4 on the North Glengoole River, September 2021

4.1.17 Site C5 – Black River, Derryhogan

Site C5 was located on the Black River (16B01) at a local road bridge, approx. 1.5km downstream of site C2. The river had been extensively straightened and deepened, with very steep (near vertical) V-shaped banks of 4-5m in height. The river flowed under the local road via a pipe corrugated culvert (that was accessible to fish). The river averaged a homogenous 3-4m in a channel up to 5-6m wide. The depth varied from 0.2 to 0.5m, with occasional pool areas to 1m. Deep slow-flowing glide dominated the site, with occasional pool. Riffle was present upstream of the road culvert. The substrata comprised compacted and heavily silted mixed gravels and cobble, with occasional boulder (near culvert only). Bank erosion was frequent (exposed clay) and contributed to the silt loading. Siltation was high overall (largely peat-derived) with deep silt-sand deposits present along channel margins (up to 0.2m deep). The site was heavily shaded by mature treelines of ash, elder, hawthorn and cypress (Cupressaceae family) with poorly-developed understories. As a result, macrophytes were not present. Aquatic bryophytes were not recorded, with the liverworts *Pellia endiviifolia* and *Conocephalum conicum* on muddy banks. The site was bordered by improved pasture (GA1).

Brown trout and stone loach were the only two fish species recorded via electro-fishing at site C5 (**Appendix A**). Adult trout dominated, with only low numbers of juveniles present. The site was a moderate-quality salmonid habitat, with moderate-quality spawning and nursery habitat. Holding habitat, by way of deeper pools, bank undercuts and submerged tree root systems, was of good quality. Despite high siltation, soft sediment accumulations did not support lamprey ammocoetes (largely humic or clay-based in nature). Some very limited superficial spawning gravels suitable for lamprey were present in the vicinity of the culvert although spawning habitat improved upstream, where riffles were more commonplace. Aside from submerged tree root systems, suitability for

European eel and white-clawed crayfish was relatively poor given limited accessible instream refugia such as boulders and macrophytes (neither species recorded). However, white-clawed crayfish eDNA was detected at the site, in addition to crayfish plague (*Aphanomyces astaci*) (**Table 4.1**). No otter signs were recorded in vicinity of the site.

A biological water quality sample was not collected at this site.

Given the presence of salmonids and the detection of white-clawed crayfish eDNA, the aquatic ecological evaluation of site C5 was of **local importance (higher value)** (**Table 4.4**).



Plate 4.17 Representative image of site C5 on the Black River, September 2021

4.1.18 Site C6 – Black River, Two Mile Borris

Site C6 was located on the Black River (16B01) at the N75 road crossing, approx. 5km downstream of site C5. As per upstream, the lowland river (FW2) at this location had been straightened and deepened historically, flowing in a steep, 5-8m high trapezoidal channel. The river averaged 6-8m wide and 0.2-0.6m deep, with locally deeper areas to 0.9m. Slow-flowing glide predominated, with localised riffles near the road bridge and occasional pools. The substrata were dominated by cobble with frequent boulder and small interstitial patches of mixed gravels. Siltation was moderate overall (peat), given low flows, but soft sediment accumulations were localised. The substrata were relatively mobile. The site supported a diverse range of macrophytes, with frequent lesser water parsnip and occasional water starwort (*Callitriche* sp.), water mint, water crowfoot (*Ranunculus* sp.) and watercress (*Nasturtium officinale*). Curled pondweed (*Potamogeton crispus*) was present but rare. Common duckweed and ivy-leaved duckweed were both common. Coverage of aquatic bryophytes was high, with abundant *Fontinalis antipyretica* on larger cobble/boulder. Given the presence of several indicator species (EC, 2013) and the high coverage of bryophytes, the aquatic plant community was

considered representative of the Annex I habitat 'Water courses of plain to montane levels, with submerged or floating vegetation of *Ranunculion fluitantis* and *Callitricho-Batrachion* (low water level during summer) or aquatic mosses [3260]'. Riparian shading was relatively high given the presence of maturing alder treelines along the channel (both banks). The site was bordered by improved pasture (GA1) and grassy verges habitat (GS2).

A total of four fish species were recorded via electro-fishing from site C6 (**Appendix A**). The site was dominated by relatively high numbers of mixed-cohort brown trout with moderate densities of Atlantic salmon parr. *Lampetra* sp. ammocoetes were recorded at moderate densities of 3.3 per m^2. A single stone loach was also captured. The site was of excellent value as a salmonid nursery given the abundance of vegetated cobble refugia in addition to macrophyte beds (including *Ranunculus* sp.). Good-quality salmonid and lamprey spawning habitat was present but was compromised by siltation and limited in extent. Holding habitat for adult salmonids was also of good-quality given the presence of macrophyte refugia, vegetation overhangs and deeper glide areas. Small areas of soft sediment provided some locally good-quality ammocoete habitat. Despite some good suitability (i.e. ample refugia), no European eel or white-clawed crayfish were recorded. However, abundant crayfish remains were identified in otter spraint underneath the road bridge (ITM 619150, 657803; **Plate 4.38**).

Biological water quality, based on Q-sampling, was calculated as **Q4 (good status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids (including Atlantic salmon), *Lampetra* sp., Annex I floating river vegetation [3260] and utilisation by otter, the aquatic ecological evaluation of site C6 was of **local importance (higher value)** (**Table 4.4**).



Plate 4.18 Representative image of site C6 on the Black River, September 2021

4.1.19 Site D1 – Breegagh River, Killeen

Site D1 was located on the Breegagh River (16B03) at a local road crossing, where the river flowed through a large three-bore box culvert. The small lowland river (FW2) had been straightened and deepened historically, with cobble/boulder revetments in the vicinity of the road culvert. The river averaged 2.5-3m wide and 0.3-0.7m deep in homogenous deep, slow-flowing glide. Pool was occasional. Riffles were limited to the vicinity of the culvert. Peat-staining was not present at the time of survey. The substrata were dominated by compacted cobble with occasional boulder and limited interstitial mixed gravels. The site suffered from heavy siltation, although deposits were flocculent, with only very localised, shallow accumulations. Large woody debris (LWD) was frequent instream which improved habitat heterogeneity of the straightened channel. The river flowed through a maturing broad-leaved plantation and shading was high. As a result, macrophytes were limited to occasional fool's watercress, water mint and lesser water parsnip along channel margins in more open areas. Reed canary grass was abundant along channel margins and created overhangs of high value for salmonids. Aquatic bryophytes were absent with the exception of localised *Brachythecium rivulare* on exposed boulder near the culvert. The site was bordered by a broad-leaved plantation of sycamore, wych elm (*Ulmus glabra*) and alder (WD1), with dense bramble scrub (WS1) and improved pasture (GA1).

Atlantic salmon and brown trout were the only two fish species recorded at site D1 (**Appendix A**). Brown trout dominated the site, with mixed cohorts present. A moderate number of Atlantic salmon parr (two cohorts) were also recorded. The site was of excellent value as an adult salmonid habitat, supporting a high density of adult brown trout, with some good holding habitat present (scoured banks, vegetation overhangs etc.). The site was of moderate value only as a nursery given siltation pressures and predominance of deep homogenous glide. Similarly, spawning habitat for both salmonids and lamprey was largely absent given compaction of the bed and siltation (some present upstream of farm culvert, however). Despite some good suitability (ample refugia), no European eel were recorded. No white-clawed crayfish were recorded and suitability was low overall given siltation and general lack of refugia. No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids (including Atlantic salmon), the aquatic ecological evaluation of site D1 was of **local importance (higher value)** (**Table 4.4**).



Plate 4.19 Representative image of site D1 on the Breegagh River, September 2021 (facing upstream from culvert)

4.1.20 Site D2 – Breegagh River, Ballymurreen Bridge

Site D2 was located on the Breegagh River (16B03) at Ballymurreen Bridge, approx. 4.8km downstream of site D1. The lowland river (FW2) had been straightened historically but not deepened and retained many good semi-natural characteristics. The river averaged 4-5m wide (channel up to 7m wide in places) and 0.2-0.4m deep. Locally deeper glide and pool to 0.8m was present. The heterogenous profile comprised swift-flowing glide with occasional riffles near the bridge, and pool becoming more frequent downstream. In faster-flowing areas, the substrata were dominated by relatively mobile and clean cobble and mixed gravels, with occasional small boulder. Sand patches were also present. However, deeper glide was more depositing in nature and soft sediment deposits were abundant. Siltation was moderate overall and peat-staining was not present at the time of survey. The site supported a range of macrophytes. Lesser water parsnip was frequent, with occasional water crowfoot (*Ranunculus* sp.), watercress and localised branched bur-reed. Water forget-me-not, reed canary grass and water mint were common along channel margins. Common duckweed and filamentous algae were present, indicating enrichment. Aquatic bryophytes were limited to very occasional *Brachythecium rivulare* on larger, more stable boulder. The river was flanked on the east bank by a mature treeline of blackthorn (*Prunus spinosa*), hawthorn, ash, elder, sycamore and bramble, with the west bank open featuring improved grassland (GA1).

A total of four fish species were recorded via electro-fishing at site D2 (**Appendix A**). The site supported moderate densities of brown trout and Atlantic salmon with low numbers of stone loach and three-spined stickleback also present. *Lampetra* sp. were present in high numbers. The site was an excellent quality salmonid nursery with moderate densities of juvenile Atlantic salmon and brown

trout. A moderate density of adult brown trout was also present in deeper glide and pool. Both salmonid and lamprey spawning habitat was of good-quality, albeit threatened by siltation. The site was of most value as a lamprey nursery habitat, with excellent-quality lamprey ammocoete habitat present, particularly in association with macrophyte beds. *Lampetra* sp. ammocoetes were widespread at moderate densities (13.7 per m^2). A single *Lampetra* sp. transformer was also recorded. Despite some moderate suitability, European eel and white-clawed crayfish were not recorded. However, white-clawed crayfish eDNA was detected at the site (**Table 4.1**). Despite high suitability, no otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids (including Atlantic salmon), *Lampetra* sp. and the detection of white-clawed crayfish eDNA, the aquatic ecological evaluation of site D2 was of **local importance (higher value)** (**Table 4.4**).



Plate 4.20 Representative image of site D2 on the Breegagh River, September 2021 (facing downstream from Ballymurreen Bridge)

4.2 Lacustrine survey site results

4.2.1 Site L1 – lake/wetland, Longfordpass South

Site L1 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary. The open site comprised two small lake basins with associated wetland areas covering an area of c.1ha. The lakes were evidently seasonal (ephemeral) and averaged 0.1-0.2m deep with very few deeper areas. The bed was comprised entirely of soft silt (peat). Peat staining was high at the time of survey. The basins were fed by run-off from extensive cutover bog via narrow peatland drains supporting small stands of bulrush and cotton grass. These were also present in the lake basins alongside localised bottle sedge and bog pondweed. The lake was situated in cutover bog (PB4).

The cutover peat lake was not considered of fisheries value given its heavily silted, ephemeral, shallow nature and isolation from other aquatic habitats. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L1 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.21 Representative image of site L1, October 2021

4.2.2 Site L2 – lake/wetland, Bawnreagh

Site L2 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary. The large, shallow linear cutover lake covered an area of c.1ha and ranged from 0.2-0.5m

deep. The bed was comprised entirely of soft silt (peat). Peat staining was high at the time of survey. Macrophyte coverage was low with only occasional bog pondweed, broad-leaved pondweed and bulbous rush (*Juncus bulbosus*). Stonewort (*Chara* sp.) and bladderwort (*Utricularia* sp.) were present along the margins but rare overall. Cottongrass and bottle sedge were abundant in the peaty littorals. The lake was situated in cutover bog (PB4) with heath and scattered pre-thicket lodgepole pine.

The cutover peat lake was not considered of fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L2 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.22 Representative image of site L2, October 2021

4.2.3 Site L3 – lake/wetland, Bawnreagh

Site L3 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary and adjacent to site L2. The shallow linear cutover lake covered an area of c.0.5ha and ranged from 0.2-0.6m deep. The bed was comprised entirely of soft silt (peat). Peat staining was high at the time of survey. Macrophyte coverage was low with only occasional bog pondweed, broad-leaved pondweed and bulbous rush. Cottongrass and bottle sedge were abundant in the exposed peaty littorals. The lake was situated in cutover bog (PB4) with heath and scattered pre-thicket lodgepole pine.

The cutover peat lake was not considered of fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L3 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.23 Representative image of site L3, October 2021

4.2.4 Site L4 – lake/wetland, Bawnreagh

Site L4 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary. The large shallow cutover lake covered an area of c.1.1ha and ranged from 0.2-1m deep. The bed was comprised entirely of soft silt (peat). Peat staining was high at the time of survey. Macrophyte growth was low with only very occasional broad-leaved pondweed and bog pondweed in the open water. Stonewort (*Nitella* sp.) was present in the peaty margins but rare overall. Abundant cotton grass was present on the peaty littorals with occasional marsh pennywort. The lake was situated in lowland blanket bog (PB3)/cutover bog (PB4) with heath and pre-thicket lodgepole pine.

The cutover peat lake was considered of poor fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L4 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.24 Representative image of site L4, October 2021

4.2.5 Site L5 – lake/wetland, Bawnreagh

Site L5 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary. The large shallow cutover lake covered an area of c.1.4ha and ranged from 0.2-0.4m deep in the margins to up to 1.3m in open water. The bed was comprised entirely of soft silt (peat). Peat staining was high at the time of survey. The open water supported occasional bog pondweed with small, scattered stands of common reed. Stonewort (*Chara* sp.) was also recorded as rare (indicative of higher alkalinity). Bottle sedge and cotton grass were locally abundant along the lake margins with occasional marsh pennywort (*Hydrocotyle vulgaris*). The lake was situated in cutover bog (PB4) with abundant lodgepole pine and downy birch on the shorelines.

The cutover peat lake was considered of poor fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L5 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.25 Representative image of site L5, October 2021

4.2.6 Site L6 – lake/wetland, Bawnreagh

Site L6 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary, adjacent to site L5. The small, shallow cutover lake covered an area of c.0.14ha and ranged from 0.2-0.4m deep. The bed was comprised entirely of soft silt (peat). Peat staining was moderate at the time of survey. Macrophyte coverage was low in open water with only occasional bog pondweed. The littorals supported abundant bottle sedge and cotton grass, with occasional stands of bulrush. The lake was situated in cutover bog (PB4) with mixed broad-leaved woodland (WD1) to the south of the site.

The cutover peat lake was considered of poor fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. However, the occurrence of *Piscicola* sp. leech (i.e. a fish parasite) (**Appendix B**) would indicate the presence of a fish population (likely three-spined stickleback). The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L6 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.26 Representative image of site L6, October 2021

4.2.7 Site L7 – lake/wetland, Bawnreagh

Site L7 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary. The shallow cutover lake covered an area of c.0.25ha and ranged from 0.2-0.6m deep. The bed was comprised entirely of soft silt (peat). Peat staining was moderate at the time of survey. The lake supported frequent bladderwort (*Utricularia* sp.) with occasional bog pondweed and rare fen pondweed (*Potamogeton coloratus*) (the latter indicative of higher alkalinity). Decaying *Sphagnum cuspidatum* was also present in the lake basin. Scattered stands of bottle sedge and common reed were present on the peaty littorals alongside abundant cotton grass. The lake was situated in cutover bog (PB4) with mixed broad-leaved woodland (WD1) to the south of the site.

The cutover peat lake was not considered of fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L7 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.27 Representative image of site L6, October 2021

4.2.8 Site L8 – lake/wetland, Lanespark

Site L8 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary. The lake was situated in a deep depression created from historical cutover with 1.5m to 2m high banks. The large linear cutover lake covered an area of c.5ha with frequent islands, deep margins (0.7m) and an even deeper central basin (to 1.4m). The bed was comprised entirely of soft silt (peat). Peat staining was high at the time of survey. Macrophyte coverage was low with only occasional bog pondweed in open water. Cottongrass and bottle sedge were abundant and formed large tracts in the peaty littorals. The lake was situated in cutover bog (PB4) with abundant heather (*Calluna vulgaris*) and mature birch woodland. Coniferous afforestation (WD4) was present to the north of the site.

The cutover peat lake was not considered of fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L8 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.28 Representative image of site L8, October 2021

4.2.9 Site L9 – lake/wetland, Clonoura

Site L9 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary. The large, shallow cutover lake covered an area of c.0.8ha and ranged from 0.2m to 1m in depth with a bed comprised entirely of soft silt (peat). Peat staining was high at the time of survey. The lake supported frequent bladderwort (*Utricularia* sp.) and occasional bog pondweed, with bulrush and abundant bottle sedge around the margins. Bog pimpernel (*Lysimachia tenella*) was also recorded along the lakeshore (although this was rare). Abundant cotton grass was present on the peaty littorals. The lake was situated in cutover bog (PB4) with mixed broad-leaved woodland (WD1) dominated by willow to the east and north of the lake.

The cutover lake was of poor fisheries value given its heavily silted, generally shallow nature and isolation from other aquatic habitats. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L9 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.29 Representative image of site L9, October 2021

4.2.10 Site L10 – lake/wetland, Clonoura

Site L10 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary, south of site L9. The large, shallow cutover lake covered an area of c.3.5ha and ranged from 0.2m to 1m in depth with a bed comprised entirely of soft silt (peat). The eastern margin was steeper and deeper than the western and northern margins which had more gradual sloping shorelines. Peat staining was high at the time of survey, exacerbated by significant wind fetch. Macrophyte coverage was low with only occasional bog pondweed (*Potamogeton polygonifolius*) in open water. Stands of bottle sedge and bulrush were scattered around the lake margins. Abundant cotton grass (*Eriophorum angustifolium*) was present on the peaty littorals The lake was situated in cutover bog (PB4) with localised bog woodland (WN7) support downy birch and willow (*Salix* sp.).

The cutover peat lake was of poor fisheries value given its heavily silted, generally shallow nature and isolation from other aquatic habitats. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L10 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.30 Representative image of site L10, October 2021

4.2.11 Site L11 – lake/wetland, Clonoura

Site L11 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary. The small, shallow cutover lake covered an area of c.0.38ha and averaged 0.2-0.3m deep. The bed was comprised entirely of soft silt (peat). Peat staining was high at the time of survey. Macrophyte coverage was low with only occasional bog pondweed and water horsetail in open water. Frequent stands of bottle sedge and bulrush were present in the margins with abundant cotton grass on the peaty littorals. The lake was situated in cutover bog (PB4) with downy birch and willow (*Salix* sp.) growing along the low gradient and cutover shorelines.

The cutover peat lake was not considered of fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L11 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.31 Representative image of site L11, October 2021

4.2.12 Site L12 – lake/wetland, Noard

Site L12 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary. The small, shallow cutover lake covered an area of c.0.18ha and was 0.1-0.3m deep. The bed was comprised entirely of soft silt (peat). Peat staining was high at the time of survey. Macrophyte coverage was low with only occasional bog pondweed. The peaty littorals (including exposed lakebed) supported abundant cotton grass in addition to rushes (*Juncus* spp.). The lake was situated in cutover bog (PB4) with immature downy birch and willow (*Salix* sp.) growing along the shoreline.

The cutover peat lake was considered of poor fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. However, there was some low potential for European eel given the presence of the species in the nearby Clover River (survey site A4). The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L12 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.32 Representative image of site L12, October 2021

4.2.13 Site L13 – lake/wetland, Noard

Site L13 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary, and immediately west of site L12. The small, shallow oval-shaped cutover lake covered an area of c.0.3ha and was 0.1-0.3m deep. The bed was comprised entirely of soft silt (peat). Peat staining was high at the time of survey. Macrophyte coverage was low with only occasional bog pondweed. The peaty littorals (including exposed lakebed) supported abundant cotton grass in addition to rushes (*Juncus* spp.). The lake was situated in cutover bog (PB4) with immature downy birch and willow (*Salix* sp.) growing along the shoreline.

The cutover peat lake was considered of poor fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. However, there was some low potential for European eel given the presence of the species in the nearby Clover River (survey site A4). The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L13 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.33 Representative image of site L13, October 2021

4.2.14 Site L14 – lake/wetland, Noard

Site L14 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary. The shallow cutover lake and wetland covered an area of c.1.4ha and ranged from 0.1-0.3m deep. The bed was comprised entirely of soft silt (peat). Turbidity was low at the time of survey (i.e. low peat staining). The site was heavily vegetated with abundant water mint, bulrush, marsh horsetail (*Equisetum palustre*) in wetland areas and occasional bog pondweed in open water sections. Water starwort (*Callitriche* sp.) was also occasional. Spike rush (*Eleocharis palustris*), *Juncus* spp. and bottle sedge were present along the margins. Abundant cotton grass was present on the peaty littorals. The lake was situated in cutover bog (PB4) with downy birch, willow (*Salix* sp.) and lodgepole pine growing along the low gradient and cutover shorelines.

The cutover peat lake and wetland was not considered of fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L14 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.34 Representative image of site L14, October 2021

4.2.15 Site L15 – lake/wetland, Noard

Site L15 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary. The large, shallow cutover lake covered an area of c.2ha and averaged 0.3-0.4m deep in the margins but deepened to 0.7m in the central basin. The bed was comprised entirely of soft silt (peat). Peat staining was high at the time of survey. The lake supported frequent bladderwort (*Utricularia* sp.) with occasional bog pondweed and water starwort (*Callitriche* sp.). Water mint and bottle sedge were scattered along the margins, along with abundant rushes (*Juncus* spp.). The lake was situated in cutover bog (PB4) with downy birch and willow (*Salix* sp.) growing along the shoreline with scattered lodgepole pine (*Pinus contorta*).

The cutover lake was of poor fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L15 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.35 Representative image of site L15, October 2021

4.2.16 Site L16 – lake/wetland, Derryhogan

Site L16 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary adjacent to site L15. The site was a complex of pond and anastomosing wetland habitats which covered an area of c.0.2ha and ranged from 0.1-0.3m deep. The north of the basin comprised more open water but graded into wetland with channels and pools to the south west. A drain was cut along the north side of the pond that was discharging water to the pond and wetland adjoining the existing peatland track running northwest to south east. The open water and pools supported frequent bog pondweed with very localised broad-leaved pondweed (*Potamogeton natans*) and stonewort (*Chara* sp.). Bulrush was locally frequent with occasional bottle sedge. Filamentous growth was abundant. The peaty littorals supported abundant cotton grass. The lake was situated in cutover bog (PB4) with downy birch and willow (*Salix* sp.) growing along the shoreline with scattered lodgepole pine.

The cutover lake and wetland complex was of poor fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L16 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.36 Representative image of site L16, October 2021

4.2.17 Site L17 – lake/wetland, Lanespark

Site L17 was located at the southern extent of the proposed site boundary near Lanespark Bog, adjacent to Loch Doire Bhile and the North Glengoole Stream. As with Loch Doire Bhile, the site had been excavated as part of habitat creation on cutover bog. The shallow, clear-water lake covered an area of c.0.7ha and ranged from 0.2m to 1m deep. The substrata comprised gravels and clay. The lake was fringed by common reed with occasional stands of broad-leaved pondweed. Stonewort (*Chara* sp.) was abundant on the lakebed. The open, gravelly banks supported scattered willow (*Salix* sp.) with coniferous afforestation (WD4) present to the north of the site.

The artificial lake was not considered of fisheries value given its shallow nature, isolation from other aquatic habitats and absence of fish stocking history (in contrast to the nearby Loch Doire Bhile which supports stocked brown and rainbow trout). Whilst there was some good suitability for white-clawed crayfish, none were recorded. The species is known from the adjoining Loch Doire Bhile. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic habitats of high conservation value, the aquatic ecological evaluation of site L17 was of **lower importance (lower value)** (**Table 4.4**).



Plate 4.37 Representative image of site L17, October 2021

4.3 White-clawed crayfish survey

No live white-clawed crayfish were recorded via hand-searching and sweep netting of instream refugia during the surveys undertaken at 16 no. wetted riverine and 17 no. lacustrine sites in September and October 2021, respectively.

However, abundant crayfish remains (some very fresh) were identified in otter spraint at site C6 on the Black River (**Plate 4.38**). Two predated white-clawed crayfish were present at site A6 on the Clover River (likely from otter predation), although no live crayfish were recorded.

Furthermore, white-clawed crayfish eDNA was detected at sites on the Drish River, Clover River, Black River and Breegagh River (**Table 4.1**).

Crayfish plague was detected at sites on the Clover River and Black River (see section 4.4 below).



Plate 4.38 Regular otter spraint site at site C6 on the Black River with abundant remains of white-clawed crayfish, October 2021

4.4 eDNA analysis

Despite the fact that no live, white-clawed crayfish were recorded during the site surveys, composite water samples collected from the Clover River (FK180), Breegagh River (FK181), Black River (FK182) and Drish River (FK183) returned a positive result for white-clawed crayfish eDNA (**Table 4.1; Appendix C**). Particularly strong signatures were present at the Clover River and Black River sites. The sample from the Drish River at site B2 (FK184) was negative for white-clawed crayfish eDNA, i.e. freshwater crayfish eDNA not present or was present below the limit of detection in a series of 12 qPCR replicates (0 positive qPCR replicates out of 12).

Composite water samples from the Clover River (FK180) and Black River (FK183) tested positive for crayfish plague (12 & 5 of 12 qPCR replicates, respectively) (**Table 4.1; Appendix C**). No crayfish plague eDNA was detected in the Breegagh River (FK181) or Drish River (FK183 & FK184) samples.

Table 4.1 eDNA results in the vicinity of the proposed Littleton wind farm, Co. Tipperary (positive qPCR replicates out of 12 in parentheses)

Sample	Watercourse (site)	White-clawed crayfish	Crayfish plague
FK184	Drish River (site B2)	Negative (0/12)	Negative (0/12)
FK183	Drish River, N75 road crossing	**Positive (1/12)**	Negative (0/12)
FK180	Clover River, Borris	**Positive (12/12)**	**Positive (12/12)**
FK182	Black River (site C5)	**Positive (12/12)**	**Positive (5/12)**
FK181	Breegagh River (site D2)	**Positive (2/12)**	Negative (0/12)

4.5 Otter signs

A total of 4 no. otter signs were recorded across 37 no. survey sites during the course of aquatic surveys undertaken in September-October 2021. All were recorded from riverine sites.

A regular spraint site with fresh prints, was recorded underneath the road bridge at site C6 on the Black River (ITM 619150, 657803). This contained abundant (and fresh) white-clawed crayfish remains. Regular spraint sites were also recorded at site B2 on the Drish River and site A6 on the Clover River.

No otter signs were recorded in the cutover bog lake and pond sites albeit otters are likely to use them at certain times of the year (e.g. spring) when amphibians are breeding.

No breeding (holts) or resting (couch) areas were identified in the vicinity of the survey sites in July 2022.

4.6 Invasive aquatic species

The invasive pathogen crayfish plague (*Aphanomyces astaci*) was detected via eDNA analysis in the Clover River and Black River (see section 4.4 above).

American mink (*Neovison vison*) spraint was recorded at Ballyduff Bridge (site B5) on the Drish River. The species is considered a high-risk impact species in Ireland (O'Flynn et al., 2014).

4.7 Biological water quality (macro-invertebrates)

No rare or protected macro-invertebrate species (according to national red lists) were recorded in the biological water quality samples taken from a total of 12 no. riverine sites in September 2021 (**Figure 4.1, Appendix B**).

Site C6 on the Black River achieved **Q4 (good status)** water quality and thus met the target good status (≥Q4) requirements of the European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2019 and the Water Framework Directive (2000/60/EC) (**Figure 4.1**). This was given the presence of one group A taxa in fair numbers (5% of total abundance), namely the stonefly *Protonemura meyeri* (**Appendix B**).

Sites A6 on the Clover River, B5 on the Drish River and C4 on the North Glengoole Stream achieved **Q3-4 (moderate status)** water quality (**Figure 4.1**). This was given the low numbers (<5%) of group A species mayflies including *Ecdyonurus dispar* (**Appendix B**).

The remaining 8 no. sampling sites on an unnamed stream (A4), Clover River (A5), unnamed stream (B1), Drish River (B3), Ballygammane River (B6), Black River (C2) and the Breegagh River (D1 & D2) **or Q3 (poor status)** based on an absence of group A species; low numbers or an absence of group B species and a dominance of group C species such as the mayfly *Baetis rhodani*, the caseless caddis *Hydropsyche instabilis*, freshwater shrimp (*Gammarus duebeni*) and the riffle beetle *Elmis aenea* (**Appendix B**).

It should be noted that the ratings for sites A4, A5 and B1 were tentative due to low summer flows and or a lack of suitable riffle areas for sampling (Toner et al., 2005).

4.8 Lacustrine macro-invertebrates

No rare or protected macro-invertebrate species were recorded in the sweep samples taken from 10 no. lake/wetland sites in October 2021 (**Appendix B**).

The shallow, peat lakes and wetlands supported a varied diversity of species, typically dominated by baetid mayflies *Centroptilum luteolum* and *Cloeon dipterum*, bluet damselflies such as *Coenagrion* sp., water boatmen (*Hesperocorixa* spp.) and freshwater hoglouse (*Asellus aquaticus*) and a low diversity of Sphaeriidae and Planorbidae molluscan species (**Appendix B**).

4.9 Macrophytes and aquatic bryophytes

No rare or protected macrophytes or aquatic bryophyte species were recorded during the survey. The Annex I habitat 'Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation or aquatic mosses [3260]' (aka floating river vegetation) was recorded on the Black River at site C6. Several indicator species (EC, 2013) were present, such as water crowfoot (*Ranunculus* sp.) and water starwort (*Callitriche* sp.), with a particularly high coverage of aquatic bryophytes, including abundant *Fontinalis antipyretica*. This Annex habitat was not recorded at the remaining survey sites.

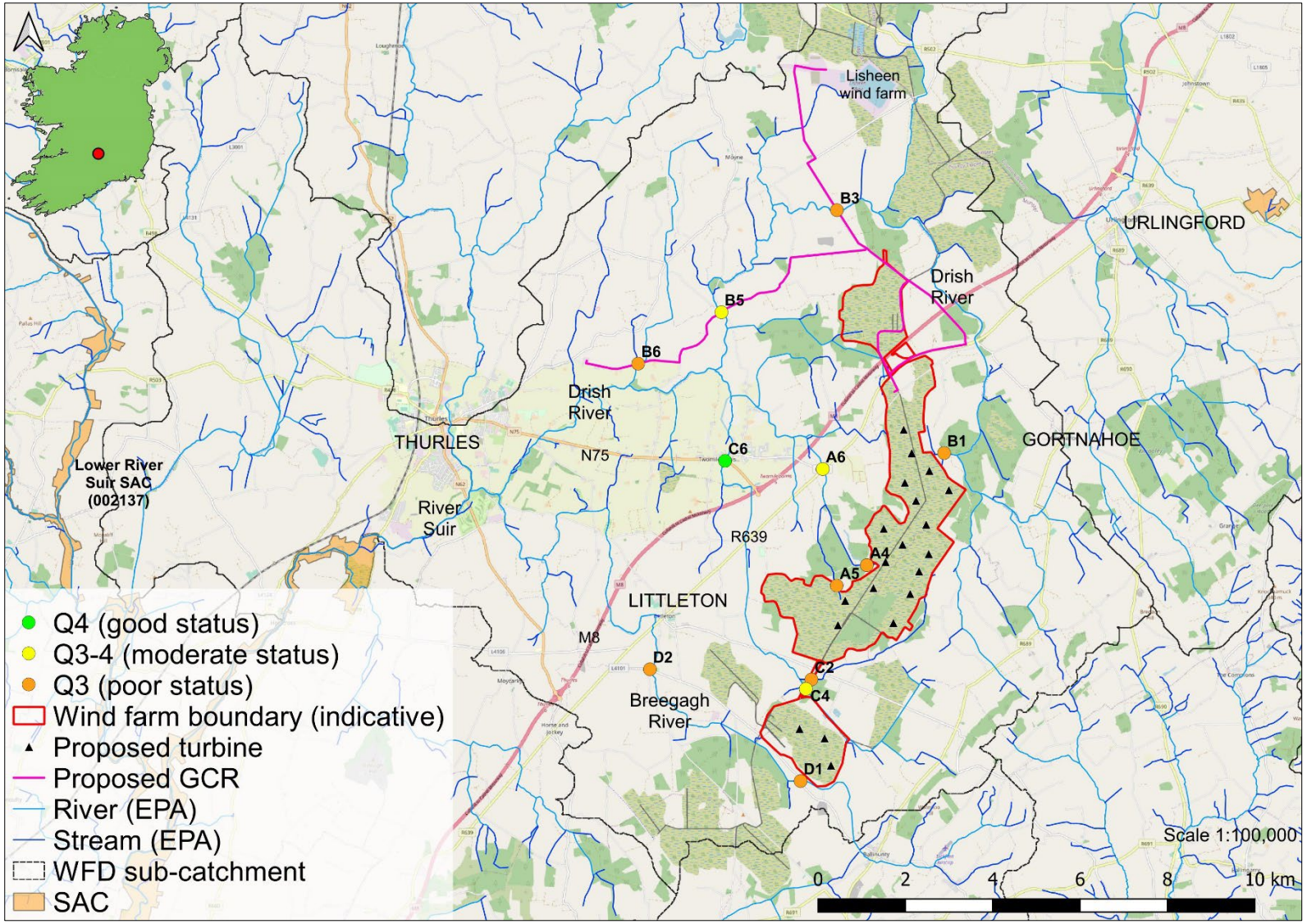


Figure 4.1 Overview of the biological water quality status in the vicinity of the proposed Littleton wind farm project, Co. Tipperary

4.10 Aquatic ecological evaluation

An aquatic ecological evaluation of each survey site was based on the results of fisheries surveys, white-clawed crayfish surveys, otter surveys, macrophyte and aquatic bryophyte surveys, eDNA analysis and biological water quality (**Table 4.4**). None of the 37 no. survey sites were evaluated as greater than **local importance (higher value)** in terms of their aquatic ecology.

A total of 13 no. sites on the Clover River (site A6) and unnamed tributary (A4), Drish River (B2, B3 & B5), Ballygammane River (B6), Black River (C2, C5 & C6), North Glengoole Stream (C3 & C4), Breegagh River (D1 & D2) were evaluated as **local importance (higher value)** in terms of their aquatic ecology due to the presence of species and or habitats of higher conservation value (**Table 4.4**).

The remaining 24 no. sites (i.e. sites A1, A2, A3, A5, B1, B4, C1, L1, L2, L3, L4, L5, L6, L7, L8, L9, L10, L11, L12, L13, L13, L14, L15, L16 & L17) were evaluated as **local importance (lower value)**, given the absence of aquatic species or habitats of high conservation value (**Table 4.4**).

Table 4.2 Summary of fish species of higher conservation value and relative abundances (low, medium, high & very high) recorded via **electro-fishing** per riverine survey site in the vicinity of the proposed Littleton wind farm, September 2021

Site	Watercourse	Relative abundance				Other species
		Atlantic salmon	Brown trout	*Lampetra* sp.	European eel	
A1	Unnamed stream					Three-spined stickleback
A2	Unnamed stream	No fish recorded – dry channel				
A3	Unnamed stream	No fish recorded – dry channel				
A4	Unnamed stream				Low	Three-spined stickleback
A5	Clover River					Three-spined stickleback
A6	Clover River		Medium			Three-spined stickleback, perch, stone loach
B1	Unnamed stream					Three-spined stickleback
B2	Drish River					Three-spined stickleback
B3	Drish River				Low	Three-spined stickleback, pike, stone loach
B4	Cooleeny River	No fish recorded – dry channel				
B5	Drish River	High	High		Low	Minnow, pike, stone loach
B6	Ballygammane River	Low	Medium	Low		Minnow, three-spined stickleback
C1	Black River	No fish recorded – dry channel				
C2	Black River	Low	Low			Three-spined stickleback
C3	North Glengoole River	Low	Low		Low	Three-spined stickleback
C4	North Glengoole River		Medium			Three-spined stickleback
C5	Black River		Low			Stone loach
C6	Black River	Medium	High		Low	Stone loach
D1	Breegagh River	Medium	High			
D2	Breegagh River	Medium	Medium	High		Three-spined stickleback, stone loach

Conservation value: Atlantic salmon (*Salmo salar*), brook lamprey (L*ampetra planeri*) and river lamprey (*Lampetra fluviatilis*) are listed under Annex II of the Habitats Directive [92/42/EEC]. Atlantic salmon and river lamprey are also listed under Annex V of the Habitats Directive [92/42/EEC]. European eel are 'critically endangered' according to most recent ICUN red list (Pike et al., 2020) and listed as 'critically engendered' in Ireland (King et al., 2011). With the exception of the Inland Fisheries Acts 1959 to 2017, brown trout and coarse fish species have no legal protection in Ireland.

Table 4.3 Summary of aquatic species & habitats of higher conservation value recorded in the vicinity of the proposed Laurclavagh wind farm, July 2022

Site	Watercourse	White-clawed crayfish	Otter signs[4]	Annex I aquatic habitats	Rare or protected macrophytes/ aquatic bryophytes	Rare or protected macro-invertebrates	Other species/habitats of high conservation value
Riverine sites							
A1	Unnamed stream	None recorded	No signs	Not present	None recorded	None recorded	None recorded
A2	Unnamed stream	None recorded	No signs	Not present	None recorded	None recorded	None recorded
A3	Unnamed stream	None recorded	No signs	Not present	None recorded	None recorded	None recorded
A4	Unnamed stream	None recorded	No signs	Not present	None recorded	None recorded	**European eel**
A5	Clover River	None recorded	No signs	Not present	None recorded	None recorded	None recorded
A6	Clover River	**None recorded but predated crayfish recorded**	**Regular spraint site**	Not present	None recorded	None recorded	None recorded
B1	Unnamed stream	None recorded	No signs	Not present	None recorded	None recorded	None recorded
B2	Drish River	None recorded; negative eDNA sample	**Regular spraint site**	Not present	None recorded	None recorded	None recorded
B3	Drish River	None recorded	No signs	Not present	None recorded	None recorded	**European eel**
B4	Cooleeny River	None recorded	No signs	Not present	None recorded	None recorded	None recorded
B5	Drish River	None recorded	No signs	Not present	None recorded	None recorded	**Atlantic salmon, European eel**
B6	Ballygammane River	None recorded	No signs	Not present	None recorded	None recorded	**Atlantic salmon, *Lampetra* sp.**
C1	Black River	None recorded	No signs	Not present	None recorded	None recorded	None recorded
C2	Black River	None recorded	No signs	Not present	None recorded	None recorded	**Atlantic salmon,**
C3	North Glengoole River	None recorded	No signs	Not present	None recorded	None recorded	**Atlantic salmon, European eel**

Site	Watercourse	White-clawed crayfish	Otter signs[4]	Annex I aquatic habitats	Rare or protected macrophytes/ aquatic bryophytes	Rare or protected macro-invertebrates	Other species/habitats of high conservation value
C4	North Glengoole River	None recorded	No signs	Not present	None recorded	None recorded	None recorded
C5	Black River	**None recorded but positive eDNA sample**	No signs	Not present	None recorded	**White-clawed crayfish (eDNA only)**	None recorded
C6	Black River	**None recorded but remains identified in otter spraint**	**Regular spraint site with prints**	**Floating river vegetation [3260]**	None recorded	**White-clawed crayfish (otter spraint)**	**Atlantic salmon, European eel**
D1	Breegagh River	None recorded	No signs	Not present	None recorded	None recorded	**Atlantic salmon**
D2	Breegagh River	**None recorded but positive eDNA sample**	No signs	Not present	None recorded	**White-clawed crayfish (eDNA only)**	**Atlantic salmon, *Lampetra* sp.**
Lacustrine sites							
L1	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L2	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L3	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L4	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L5	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L6	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L7	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L8	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L9	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L10	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L11	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded

Site	Watercourse	White-clawed crayfish	Otter signs[4]	Annex I aquatic habitats	Rare or protected macrophytes/ aquatic bryophytes	Rare or protected macro-invertebrates	Other species/habitats of high conservation value
L12	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L13	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L14	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L15	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L16	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L17	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded

Conservation value: White-clawed crayfish (*Austropotamobius pallipes*), Atlantic salmon (*Salmo salar*) and Eurasian otter (*Lutra lutra*) are listed under Annex II and Annex V of the Directive on the Conservation of Natural Habitats of Wild Fauna and Flora (92/43/EEC) ('EU Habitats Directive') and white-clawed crayfish and otter are protected under the Irish Wildlife Acts 1976-2021. White-clawed crayfish (Füreder et al., 2010) are listed as 'Endangered' according to the IUCN Red List. The European Union (Invasive Alien Species) (Freshwater Crayfish) Regulations 2018 (SI 354/2018) affords further protection to native white-clawed crayfish by prohibiting the introduction and spread of five no. invasive 'Union concern' crayfish species listed under EU Regulation 1143/2014. European eel are 'critically endangered' according to most recent ICUN red list (Pike et al., 2020) and listed as 'critically engendered' in Ireland (King et al., 2011). With the exception of the Inland Fisheries Acts 1959 to 2017, brown trout and coarse fish species have no legal protection in Ireland. Six-stamened waterwort (*Elatine hexandra*) is listed as 'near threatened' in Ireland (Wyse-Jackson et al., 2016).

[4] Otter signs within 150m of the survey site

Table 4.4 Aquatic ecological evaluation summary of the Littleton wind farm survey sites according to NRA (2009) criteria

Site no.	Watercourse	EPA code	Evaluation of importance	Rationale summary
Riverine sites				
A1	Unnamed stream	n/a	Local importance (lower value)	Historically realigned stream that was dry at this location at the time of survey with an absence of aquatic habitats or species
A2	Unnamed stream	n/a	Local importance (lower value)	Uppermost reaches of heavily modified stream with poor summer flows & siltation pressures; three-spined stickleback recorded via electro-fishing; no aquatic species or habitats of high conservation value
A3	Unnamed stream	n/a	Local importance (lower value)	Historically modified ephemeral stream that was dry at this location at the time of survey with an absence of aquatic habitats or species
A4	Unnamed stream	n/a	**Local importance (higher value)**	Upper reaches of heavily modified, heavily vegetated lowland stream with very poor hydromorphology & significant siltation pressures; European eel & three-spined stickleback recorded via electro-fishing; Q3 (poor status) water quality (tentative rating)
A5	Clover River	16C04	Local importance (lower value)	Upper reaches of heavily modified lowland river with very poor hydromorphology & significant siltation pressures; three-spined stickleback recorded via electro-fishing; Q3 (poor status) water quality (tentative rating); no aquatic species or habitats of high conservation value
A6	Clover River	16C04	**Local importance (higher value)**	Historically modified lowland river with some instream recovery but significant siltation pressures; brown trout, perch, stone loach & three-spined stickleback recorded via electro-fishing; Q3-4 (moderate status) water quality
B1	Unnamed stream	n/a	Local importance (lower value)	Upper reaches of heavily modified, heavily vegetated lowland stream with very poor hydromorphology, significant siltation pressures, poor flows & poor fluvial connectivity; three-spined stickleback recorded via electro-fishing; Q3 (poor status) water quality (tentative rating); no aquatic species or habitats of high conservation value
B2	Drish River	16D02	**Local importance (higher value)**	Very heavily modified lowland river with very high coverage of aquatic vegetation, very poor hydromorphology & no summer flows; three-spined stickleback recorded via electro-fishing; regular otter spraint site recorded
B3	Drish River	16D02	**Local importance (higher value)**	Historically modified lowland alkaline river with high aquatic vegetation cover & low summer flows but some instream recovery; European eel, pike, stone loach & three-spined stickleback recorded via electro-fishing; Q3 (poor status) water quality
B4	Cooleeny River	16C14	Local importance (lower value)	Historically modified ephemeral lowland river that was dry at this location at the time of survey with an absence of aquatic habitats or species
B5	Drish River	16D02	**Local importance (higher value)**	Semi-natural, swift-flowing lowland alkaline river of high fisheries value; Atlantic salmon, brown trout, European eel, stone loach, minnow & pike recorded via electro-fishing; white-

Site no.	Watercourse	EPA code	Evaluation of importance	Rationale summary
				clawed crayfish eDNA detected; regular otter spraint site recorded; Q3-4 (moderate status) water quality
B6	Ballygammane River	16B55	**Local importance (higher value)**	Historically modified high-energy lowland alkaline river with some instream recovery & low summer flows; Atlantic salmon, brown trout, *Lampetra* sp., minnow & three-spined stickleback recorded via electro-fishing; Q3 (poor status) water quality
C1	Black River	16B01	Local importance (lower value)	Upper reaches of historically modified ephemeral lowland river that was dry at this location at the time of survey with an absence of aquatic habitats or species
C2	Black River	16B01	**Local importance (higher value)**	Heavily modified lowland river with poor summer flows & significant siltation pressures; Atlantic salmon, brown trout & three-spined stickleback recorded via electro-fishing; Q3 (poor status) water quality
C3	North Glengoole River	16N28	**Local importance (higher value)**	Small historically modified lowland river with poor hydromorphology & significant siltation pressures; Atlantic salmon, brown trout & European eel & three-spined stickleback recorded via electro-fishing
C4	North Glengoole River	16N28	**Local importance (higher value)**	Small historically modified lowland river with some instream recovery but siltation pressures; brown trout & three-spined stickleback recorded via electro-fishing; Q3-4 (moderate status) water quality
C5	Black River	16B01	**Local importance (higher value)**	Heavily modified lowland river with very poor hydromorphology & significant siltation pressures; brown trout & stone loach recorded via electro-fishing; white-clawed crayfish eDNA detected
C6	Black River	16B01	**Local importance (higher value)**	Historically modified lowland alkaline river with some good instream recovery & high fisheries value; Atlantic salmon, brown trout, *Lampetra* sp. & stone loach recorded via electro-fishing; regular otter spraint site recorded containing abundant white-clawed crayfish remains; Annex I floating river vegetation [3260] present; Q4 (good status) water quality
D1	Breegagh River	16B03	**Local importance (higher value)**	Heavily modified lowland river with poor hydromorphology & significant siltation pressures; Atlantic salmon & brown trout recorded via electro-fishing; Q3 (poor status) water quality
D2	Breegagh River	16B03	**Local importance (higher value)**	Historically modified lowland alkaline river with good instream recovery & high fisheries value; Atlantic salmon, brown trout, *Lampetra* sp. & three-spined stickleback recorded via electro-fishing; white-clawed crayfish eDNA detected; Q3 (poor status) water quality

Site no.	Watercourse	EPA code	Evaluation of importance	Rationale summary
Lacustrine sites				
L1	Lake/wetland	n/a	Local importance (lower value)	Small, shallow seasonal peat wetland/lake complex of 1ha in cutover bog; no aquatic species or habitats of high conservation value recorded
L2	Lake/wetland	n/a	Local importance (lower value)	Large 1ha, shallow linear peat lake in cutover bog with high peat staining & low macrophyte cover; no aquatic species or habitats of high conservation value recorded
L3	Lake/wetland	n/a	Local importance (lower value)	Small 0.5ha shallow linear peat lake in cutover bog with high peat staining & low macrophyte cover; no aquatic species or habitats of high conservation value recorded
L4	Lake/wetland	n/a	Local importance (lower value)	Large 1.1ha, shallow peat lake in cutover bog with high peat staining & low macrophyte cover; no aquatic species or habitats of high conservation value recorded
L5	Lake/wetland	n/a	Local importance (lower value)	Large 1.4ha, shallow lake with calcareous influences in cutover bog with low peat staining & moderate macrophyte cover; no aquatic species or habitats of high conservation value recorded
L6	Lake/wetland	n/a	Local importance (lower value)	Small 0.14ha shallow lake in cutover bog with moderate peat staining & low macrophyte cover; *Piscicola* sp. fish leech indicates presence of fish population; no aquatic species or habitats of high conservation value recorded
L7	Lake/wetland	n/a	Local importance (lower value)	Small 0.25ha, shallow lake with calcareous influences in cutover bog with low peat staining & moderate macrophyte cover; no aquatic species or habitats of high conservation value recorded
L8	Lake/wetland	n/a	Local importance (lower value)	Large 5ha linear shallow lake in cutover bog with high peat staining & low macrophyte cover; no aquatic species or habitats of high conservation value recorded
L9	Lake/wetland	n/a	**Local importance (higher value)**	Small 0.8ha shallow peat lake in cutover bog with high peat staining & low macrophyte cover; no aquatic species or habitats of high conservation value recorded
L10	Lake/wetland	n/a	Local importance (lower value)	Large 3.5ha, shallow peat lake in cutover bog with high peat staining & low macrophyte cover; no aquatic species or habitats of high conservation value recorded
L11	Lake/wetland	n/a	Local importance (lower value)	Small 0.38ha, shallow peat lake in cutover bog with high peat staining & low macrophyte cover; no aquatic species or habitats of high conservation value recorded
L12	Lake/wetland	n/a	Local importance (lower value)	Small 0.18ha, shallow peat lake in cutover bog with high peat staining & low macrophyte cover; no aquatic species or habitats of high conservation value recorded
L13	Lake/wetland	n/a	Local importance (lower value)	Small 0.3ha, shallow peat lake in cutover bog with high peat staining & low macrophyte cover; no aquatic species or habitats of high conservation value recorded
L14	Lake/wetland	n/a	Local importance (lower value)	Large 1.4ha shallow peat lake & wetland complex in cutover bog with high vegetation cover; no aquatic species or habitats of high conservation value recorded
L15	Lake/wetland	n/a	Local importance (lower value)	Large 2ha shallow peat lake in cutover bog with high peat staining & moderate macrophyte cover; no aquatic species or habitats of high conservation value recorded

Site no.	Watercourse	EPA code	Evaluation of importance	Rationale summary
L16	Lake/wetland	n/a	Local importance (lower value)	Small 0.2ha shallow peat lake & wetland complex in cutover bog with high vegetation cover; no aquatic species or habitats of high conservation value recorded
L17	Lake/wetland	n/a	Local importance (lower value)	Small 0.7ha, shallow clear-water artificial lake on calcareous substrata excavated as part of habitat creation works with abundant macrophytes; no aquatic species or habitats of high conservation value recorded

Conservation value: Atlantic salmon (*Salmo salar*), *Lampetra* spp. and otter (*Lutra lutra*) are all listed under Annex II of the Habitats Directive [92/42/EEC]. Furthermore, Atlantic salmon, *Lampetra* spp. are also listed under Annex V of the Habitats Directive [92/42/EEC] while otter are also listed on under Annex IV of the Habitats Directive [92/42/EEC]. Otters (along with their breeding and resting places) are also protected under provisions of the Irish Wildlife Acts 1976 to 2021. European eel are 'critically endangered' according to most recent ICUN red list (Pike et al., 2020) and listed as 'critically engendered' in Ireland (King et al., 2011). With the exception of the Inland Fisheries Acts 1959 to 2017, brown trout and coarse fish species have no legal protection in Ireland.

5. Discussion

5.1 Most valuable areas for aquatic ecology

A total of 14 no. sites on the Clover River (site A6) and unnamed tributary (A4), Drish River (B2, B3 & B5), Ballygammane River (B6), Black River (C2, C5 & C6), North Glengoole Stream (C3 & C4), Breegagh River (D1 & D2) and a peat lake at site L9 were evaluated as **local importance (higher value)** in terms of their aquatic ecology due to the presence of species and or habitats of higher conservation value (**Table 4.4**). This was due to the presence of higher conservation value species such as Atlantic salmon (7 no. sites), lamprey (*Lampetra* sp.) (2 no. sites), European eel (5 no. sites), otter (3 no. sites), white-clawed crayfish (4 no. sites, eDNA & in otter spraint), protected macrophytes (1 no. site) and or Annex I aquatic habitats (2 no. sites) (**Table 4.4**).

The remaining 23 no. sites (i.e. sites A1, A2, A3, A5, B1, B4, C1, L1, L2, L3, L4, L5, L6, L7, L8, L10, L11, L12, L13, L13, L14, L15, L16 & L17) were evaluated as **local importance (lower value)**, given the absence of aquatic species or habitats of high conservation value (**Table 4.4**). Sites on two unnamed Clover River tributaries (A2 & A3), Cooleeny River (B4) and the Black River (C1) were dry at the time of survey (September 2021) and did not support aquatic habitats or species.

5.1.1 Fish species of high conservation value

Atlantic salmon were recorded from a total of 7 no. sites (Table 4.2; **Appendix A**). These were located on the Drish River (site B5), Ballygammane River (B6), Black River (C2 & C6) and its North Glengoole River tributary (C3) and the Breegagh River (D1 & D2). Brown trout were also recorded at these sites, in addition to site A6 on the Clover River, North Glengoole River (V4) and the Black River (C5). The highest relative densities of salmonids and better quality salmonid habitats were present at sites on the Drish River[1], Black River and Breegagh River, although abundances of both Atlantic salmon and brown trout were typically low across the survey area (**Appendix A**). The quality of salmonid was typically poor due to significant hydromorphological pressures resulting from arterial drainage (i.e. extensive straightening & deepening).

Lamprey ammocoetes (*Lampetra* sp.) were recorded from 2 no. sites on the Black River (C6, low density) and Breegagh River (D2, high density) during targeted electro-fishing, *Lampetra* sp. transformers were also recorded at site B6 on the Ballygammane River. This highly restricted distribution was considered to reflect the paucity of suitable nursery (soft sediment) habitat within the vicinity of the proposed project, in addition to the presence of sub-optimal or absence of spawning habitat, primarily due to significant arterial drainage pressures (**Appendix A**).

European eel were only recorded in low densities at a total of 5 no. sites on an unnamed Clover River tributary (A4), Drish River (B3 & B5), North Glengoole River (C3) and the Black River (C6) (**Table 4.1; Appendix A**). The paucity of eel recorded during the electro-fishing surveys was considered to reflect

[1] The Drish River was heavily polluted by zinc and lead mine at Lisheen in the recent past (AECOM, 2020; O'Connor, 2007), with fish life significantly affected. However, good recovery is now evident in this watercourse despite other pressures, including siltation and hydromorphology.

a combination sub-optimal habitat resulting from historical modifications and low summer flows at numerous survey sites and the large instream distance from marine habitats (**Appendix A**).

Whilst some of the more mature cutover lake survey sites had inherently more aquatic value, none were considered of significant fisheries value due to their generally very shallow nature, peat substrata, lower pH and poor connectivity or isolation from other aquatic habitats supporting fish populations. There was some low European eel potential in those lakes situated in close proximity to the riverine watercourses found to support the species (e.g. lake site L12 & L17).

5.1.2 Otter

Despite widespread suitability, only a low number of otter signs (4 no.) were recorded during the survey. All were recorded from riverine sites with the lakes surveyed providing poor otter habitat, primarily due to insufficient prey resources. Regular spraint sites were recorded at sites A6 on the Clover River, B2 on the Drish River and C6 on the Black River.

This paucity of signs was considered to mainly reflect the influence of historical instream modifications (straightening, deepening) on the health and distribution of fish populations, the key prey resource of otter (Krawczyk et al., 2016; Ruiz-Olmo & Jiménez, 2009). Otters are food-limited and prey availability is a crucial factor in determining mortality, breeding success and the status of local populations (Sittenthaler et al., 2019; Ruiz-Olmo et al., 2002). Furthermore, otter sign marking is routinely associated with prominent features such as large instream boulders and tree root systems (Almeida et al., 2012). Historical drainage, such as that carried out historically in the vicinity of the proposed project, significantly reduces instream habitat heterogeneity (O'Grady, 2017) and the availability or marking areas (outposts), which therefore results in the deposition and detection of fewer otter signs such as spraints, irrespective of watercourse utilisation (e.g. for foraging).

No breeding (holt) or couch (resting) areas were identified in the vicinity of the survey sites in September-October 2021.

While there was suitability for otter to use the cutover bog lakes onsite these habitats were extremely numerous and otters likely use them when prey resources are optimal e.g. during the spring when amphibians breed. They may move from the adjoining river systems into Littleton Bog in accordance with the natural cyclicity of prey availability.

5.1.3 White-clawed crayfish & crayfish plague

Despite suitability at numerous sites, no live, white-clawed crayfish were recorded during targeted surveys in September-October 2022. However, abundant crayfish remains (including some very fresh) were identified in otter spraint at site C6 on the Black River (**Plate 4.38**). This would indicate the presence of crayfish in the vicinity of the site. Indeed, contemporary and historic records are available for the river at this location (**Figure 3.1**). Two predated (recently killed) white-clawed crayfish were present at site A6 on the Clover River (likely from otter predation) and the species was previously known form the river (**Figure 3.1**). In verification of site surveys, white-clawed crayfish eDNA was detected at sites on the Clover River and Black River (site C5), in addition to the Drish River (site B2 & other site) and Breegagh River (site D2) (**Table 4.1**).

Most of the 17 no. survey lakes were inherently unsuitable for the white-clawed crayfish given their unsuitable peat geologies, water chemistry (acidic) and physical habitat attributes (Demers et al., 2005; Lucey & McGarrigle, 1987). However, there was good suitability at site L17, a small artificial alkaline lake adjacent to Loch Doire Bhile, a site known to support crayfish (NPWS data). No crayfish were recorded from site L17 via hand searching or sweep netting.

Crayfish plague was detected at sites on the Clover River and Black River (12 & 5 positive qPCR replicates out of 12, respectively; **Table 4.1**), but not in the Drish or Breegagh Rivers. Whilst plague outbreaks have occurred in the wider Suir catchment since 2017 (NPWS, 2017b), these results represent the first known records of the pathogen in the Suir_SC_040 river sub-catchment (as per National Crayfish Plague Surveillance Program data of Swords & Griffin, 2022; Swords et al., 2021, 2020; White et al., 2019). Crayfish plague, which can cause up to 100% mortality in white-clawed crayfish populations (Edgerton et al., 2004), is listed as one of the world's 100 worst invasive species (GISD, 2022; Lowe et al., 2000) and is becoming highly prevalent across Ireland. *Aphanomyces astaci* is considered an obligate crayfish parasite not capable of surviving for a long period outside a crayfish host (Strand et al., 2011; Söderhäll & Cerenius, 1999). Therefore, the simultaneous detection of both crayfish plague and white-clawed crayfish signatures in the same watercourse (i.e. Clover River & Black River) is an unusual but increasingly common observation in Ireland that may suggest latent infections and some developing natural resistance in Irish crayfish populations (pers. obs.).

5.1.4 Macrophytes & aquatic bryophytes

No other rare or protected macrophytes or aquatic bryophytes species were recorded during the survey. The Annex I habitat 'Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation or aquatic mosses [3260]' (aka floating river vegetation) was recorded on the Black River at site C6. Several indicator species (EC, 2013) were present, such as water crowfoot (*Ranunculus* sp.) and water starwort (*Callitriche* sp.), with a particularly high coverage of aquatic bryophytes, including abundant *Fontinalis antipyretica*. This Annex habitat was not recorded at the remaining survey sites.

5.1.5 Macro-invertebrates & biological water quality

No rare or protected macro-invertebrate species (according to national red lists) were recorded in the biological water quality samples taken from 12 no. wetted riverine sites in September 2021 or 17 no. sweep samples from lake sites in October 2021 (**Appendix B**).

Site C6 on the Black River achieved **Q4 (good status)** water quality and thus met the target good status (≥Q4) requirements of the European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2019 and the Water Framework Directive (2000/60/EC) (**Figure 4.1**). The remaining 11 no. riverine sample sites achieved **Q3-4 (moderate status)** (sites A6, B5 & C4) or **Q3 (poor status)** (sites A4, A5, B1, B3, B6, C2, D1 & D2) in September 2021.

With the exception of site C6 on the Black River, the biological water quality in the vicinity of the proposed project was unsatisfactory and was not meeting good status targets. Peat extraction (leading to siltation) and forestry are the significant threats to water quality in the survey area (EPA, 2019).

Furthermore, low summer flows and widespread hydromorphological modifications also influenced biological water quality in September 2021.

5.2 Aquatic ecology summary

The riverine watercourses in the vicinity of the proposed Littleton wind farm were typically lowland channels which had been extensively straightened and or deepened historically as part of arterial drainage and land reclamation works, resulting in poor hydromorphology and reduced habitat heterogeneity. Whilst some good instream recovery had occurred locally (e.g. Drish River, Black River, Breegagh River), significant siltation and hydromorphological pressures were evident throughout the survey area. The lakes and wetlands located within the proposed site boundary typically originate from historical cutover bog activities and as such are shallow, highly turbid (peat stained), poorly vegetated and of lower productivity, providing relatively poor habitat for many higher conservation value species or habitats. None of these lake/wetland sites corresponded to Annex I lake habitats. (e.g. 3160).

None of the 37 no. survey sites were evaluated as greater than **local importance (higher value)** in terms of their aquatic ecology. Whilst a number of high conservation value species (e.g. Atlantic salmon, otter, white-clawed crayfish) and habitats (e.g. floating river vegetation) were recorded in September-October 2021, the majority of sites (24 no.) were evaluated as **local importance (lower value)** in terms of their aquatic ecology.

Atlantic salmon and brown trout were widespread within survey area but typically present at lower densities. Lamprey (*Lampetra* sp.) and European eel were recorded at a low number of sites, primarily reflecting sub-optimal habitats. Other fish species recorded were pike, perch, stone loach, minnow and three-spined stickleback. Although no live white-clawed crayfish were recorded, the species was detected from the Clover River and Black River (otter spraint & eDNA) as well as the Drish River and Breegagh River (eDNA only). No other rare or protected macro-invertebrates were recorded. Invasive crayfish plague was detected in the Clover and Black Rivers. A low number of otter signs were recorded in vicinity of the project (no holts or couches). Site C6 on the Black River supported Annex I floating river vegetation habitat [3260]. The highest value watercourses within vicinity of the project in terms of aquatic ecology were those with higher flow volumes and better instream recovery from arterial drainage, namely the Drish River, Black River and, to a lesser extent, the Breegagh River.

5.3 Recommendations for further surveys

Given the location and large scale of the proposed project, there are several recommendations for further study which were beyond the scope of this survey. These would include the following;

- Collect eDNA samples at lake/wetland sites in vicinity of proposed works/infrastructure to validate presence or absence of fish and amphibian populations (i.e. smooth newt & common frog)
- Collect additional eDNA sample for white-clawed crayfish at lake site L17 given habitat suitability and presence of species in nearby Loch Doire Bhile

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7. Appendix A – fisheries assessment report

Please see accompanying fisheries assessment report

8. Appendix B – Q-sample results (biological water quality)

Table 8.1 Macro-invertebrate Q-sampling results for 12 no. riverine sites in the vicinity of Littleton wind farm, September 2021

Group	Family	Species	A4	A5	A6	B1	B3	B5	B6	C2	C4	C6	D1	D2	EPA group
Ephemeroptera	Heptageniidae	*Ecdyonurus dispar*			1										A
Ephemeroptera	Heptageniidae	*Ecdyonurus* sp.									1				A
Ephemeroptera	Heptageniidae	sp. indet.						1							A
Plecoptera	Nemouridae	*Protonemura meyeri*										9			A
Ephemeroptera	Baetidae	*Alainites muticus*			1				1			1	1		B
Ephemeroptera	Baetidae	*Centroptilum luteolum*						1							B
Ephemeroptera	Baetidae	*Cloeon dipterum*		1											B
Plecoptera	Leuctridae	*Leuctra hippopus*			1					1		5	3		B
Trichoptera	Goeridae	*Silo pallipes*									1	1			B
Trichoptera	Limnephilidae	sp. indet.						1							B
Trichoptera	Sericostomatidae	*Sericostoma personatum*			1			2			1				B
Odonata	Coenagrionidae	*Coenagrion* sp.		1		2									B
Ephemeroptera	Baetidae	*Baetis rhodani*			7		21	5	2		22	1	23	9	C
Ephemeroptera	Caenidae	*Caenis luctuosa*					4								C
Trichoptera	Hydropsychidae	*Hydropsyche instabilis*			66			6	1	59	3	35	22	59	C
Trichoptera	Polycentropodidae	*Polycentropus flavomaculatus*					16	2					1	2	C
Trichoptera	Psychomyiidae	*Tinodes waeneri*			4										C
Trichoptera	Psychomyiidae	*Tinodes* sp.												6	C
Trichoptera	Rhyacophilidae	*Rhyacophila dorsalis*									2		1		C
Mollusca	Bithnyiidae	*Bithynia tentaculata*				2	13								C
Mollusca	Lymnaeidae	*Stagnicola fuscus*				1									C
Mollusca	Planorbidae	*Planorbis planorbis*				7									C
Mollusca	Sphaeriidae	sp. indet.		3	10	1	2								C
Mollusca	Tateidae	*Potamopyrgus antipodarum*										2		3	C
Crustacea	Gammaridae	*Gammarus duebeni*	4	2	4	1	9	5	18	35	45	20	12	37	C

Group	Family	Species	A4	A5	A6	B1	B3	B5	B6	C2	C4	C6	D1	D2	EPA group
Coleoptera	Dytiscidae	*Acilius canaliculatus*	1												C
Coleoptera	Dytiscidae	*Dyiscus semisulcatus*	1												C
Coleoptera	Dytiscidae	*Hydroporus tessellatus*				4									C
Coleoptera	Dytiscidae	*Hygrotus inaequalis*				1									C
Coleoptera	Dytiscidae	*Ilybius ater*				1									C
Coleoptera	Dytiscidae	*Ilybius fuliginosus*		3		1									C
Coleoptera	Dytiscidae	*Nebrioporus depressus*						4						1	C
Coleoptera	Elmidae	*Elmis aenea*			4		6	9	1	38	33	17	8	27	C
Coleoptera	Elmidae	*Limnius volckmari*						3			2			2	C
Coleoptera	Gyrinidae	sp. indet.			2						1	1	1		C
Coleoptera	Gyrinidae	*Gyrinus caspius*		2	1	3									C
Coleoptera	Halipliidae	*Haliplus lineatocollis*					2	4				1			C
Coleoptera	Hydraenidae	*Hydraena gracilis*					1	1		1					C
Coleoptera	Hydrophilidae	*Helophorus aequalis*		3											C
Coleoptera	Hydrophilidae	*Helophorus brevipalpis*								1					C
Coleoptera	Hydrophilidae	*Helophorus grandis*				1									C
Coleoptera	Noteridae	*Laccobius minutus*				1									C
Diptera	Ceratopogonidae	sp. indet.						1			1				C
Diptera	Chauboridae	sp. indet.													C
Diptera	Chironomidae	non-*Chironomus* spp.			1		4		2	4	7	4	2		C
Diptera	Culicidae	sp. indet.												1	C
Diptera	Pediciidae	*Dicranota sp.*							3	2	4		3	2	C
Diptera	Simuliidae	sp. indet.					4				15	4			C
Diptera	Thaumleidae	sp. indet.								1					C
Diptera	Tipuliidae	Tipula sp.						1	2						C
Hemiptera	Corixidae	*Corixidae nymph*				1									C
Hemiptera	Corixidae	*Hesperocorixa linnaei*					1								C

Group	Family	Species	A4	A5	A6	B1	B3	B5	B6	C2	C4	C6	D1	D2	EPA group
Hemiptera	Corixidae	*Hesperocorixa sahlbergi*	1	9			1								C
Hemiptera	Gerridae	*Gerris* sp.				5			2	1	4	1	1		C
Hemiptera	Hydrometridae	*Hydrometra stagnorum*	1	2											C
Hirudinidae	Piscicolidae	*Piscicola* sp.											1		C
Arachnida	Hydrachnidiae	Hydrachnidiae						1			1				C
Crustacea	Asellidae	*Asellus aquaticus*	3	69	11	6	4					1		3	D
Mollusca	Lymnaeidae	*Ampullaceana balthica*						4						1	D
Mollusca	Physidae	*Physa fontinalis*					8								D
Hirudinidae	Erpobdellidae	*Erpobdella testacea*							1						D
Hirudinidae	Glossiphoniidae	*Glossiphonia complanata*			3		1			1			1	2	D
Diptera	Chironomidae	*Chironomus* sp.				3									E
Abundance			**11**	**95**	**117**	**41**	**97**	**51**	**33**	**144**	**143**	**103**	**80**	**155**	
Q-rating			Q3*	Q3*	Q3-4	Q3*	Q3	Q3-4	Q3	Q3	Q3-4	Q4	Q3	Q3	
WFD status			Poor	Poor	Mod	Poor	Poor	Mod	Poor	Poor	Mod	Good	Poor	Poor	

* tentative rating due to poor flows and or lack of suitable riffle areas for sampling (as per Toner et al., 2005)

Table 8.2 Macro-invertebrate sweep sample results for 10 no. lake/wetland sites in the vicinity of Littleton wind farm, September 2021

Group	Family	Species	L2	L4	L5	L6	L7	L9	L10	L11	L12	L13
Ephemeroptera	Baetidae	*Centroptilum luteolum*	2	12	37	22						
Ephemeroptera	Baetidae	*Cloeon dipterum*			33		75	18				
Ephemeroptera	Leptophlebiidae	*Paraleptophlebia cincta*		7							1	3
Trichoptera	Leptoceridae	sp. indet.		1								
Trichoptera	Limnephilidae	*Limnephilus marmoratus*			2			6				
Trichoptera	Phryganeidae	*Agrypnia varia*		1	1							
Odonata	Aeshnidae	*Brachytron pratense*				1						
Odonata	Coenagrionidae	*Coenagrion* sp.	1	1	4	2	4	2	3	2	19	9
Odonata	Libellulidae	*Sympetrum* sp.	7				1					
Ephemeroptera	Caenidae	*Caenis horaria*			2							
Trichoptera	Polycentropodidae	*Plectrocnemia conspersa*					3					
Trichoptera	Polycentropodidae	*Plectrocnemia geniculata*	1									
Mollusca	Lymnaeidae	*Lymnaea stagnalis*								1		
Mollusca	Planorbidae	*Bathyomphalus contortus*					14					
Mollusca	Planorbidae	*Gyraulis laevis*			1							
Mollusca	Planorbidae	*Planorbis planorbis*						2				
Mollusca	Sphaeriidae	sp. indet.		14		53						
Coleoptera	Dytiscidae	sp. indet.									2	2
Coleoptera	Dytiscidae	*Hygrotus inaequalis*							1			
Coleoptera	Dytiscidae	*Laccophilus minutus*	1									
Coleoptera	Dytiscidae	*Rhantus exsoletus*						1				
Coleoptera	Gyrinidae	*Gyrinus marinus*			1							
Coleoptera	Gyrinidae	*Gyrinus minutus*		3		1			1			1
Coleoptera	Haliplidae	*Haliplus ruficollis* group			1							
Coleoptera	Haliplidae	sp. indet.			1							

Group	Family	Species	L2	L4	L5	L6	L7	L9	L10	L11	L12	L13
Coleoptera	Hydraenidae	*Hydraena gracilis*										
Coleoptera	Hydrophilidae	*Enochrus* sp.					1					
Diptera	Chironomidae	non-*Chironomus* spp.		4	7			6		1		
Diptera	Thaumleidae	sp. indet.	2		3	1	2	3				
Diptera	Tipuliidae	Tipula sp.						1				
Hemiptera	Corixidae	*Corixa punctata*								1		
Hemiptera	Corixidae	*Hesperocorixa linnaei*		7	54			1		1	2	
Hemiptera	Corixidae	*Hesperocorixa sahlbergi*								1		
Hemiptera	Corixidae	*Hesperocorixa* sp.	7				51				204	105
Hemiptera	Notonectidae	*Notonecta marmorea viridis*						2		1		2
Hemiptera	Notonectidae	*Notonecta obliqua*										1
Hirudinidae	Piscicolidae	*Piscicola* sp.				2						
Arachnida	Hydrachnidiae	Hydrachnidiae	1		1					1	2	
Crustacea	Asellidae	*Asellus aquaticus*			3		88	26	2	1		
Mollusca	Lymnaeidae	*Ampullaceana balthica*			1	1	3			2		
Mollusca	Physidae	*Physa fontinalis*						1				
Annelida	Naididae (Tubificidae)	sp. indet.		1							1	
Annelidae	Oligochaeta	sp. indet.	1	1		2	4		3		5	
Abundance			**23**	**52**	**152**	**85**	**246**	**69**	**10**	**12**	**236**	**123**

9. Appendix C – eDNA analysis lab report

SureScreen Scientifics

Folio No: E12289
Report No: 1
Client: Triturus Environmental Limited
Contact: Ross Macklin

TECHNICAL REPORT

ANALYSIS OF ENVIRONMENTAL DNA IN WATER FOR AQUATIC SPECIES DETECTION

SUMMARY

When aquatic organisms inhabit a waterbody such as a pond, lake or river they continuously release small amounts of their DNA into the environment. By collecting and analysing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm the presence or absence of the target species within the waterbody.

RESULTS

Date sample received in laboratory: 02/11/2021
Date results reported: 16/11/2021
Matters affecting result: None

Forensic Scientists and Consultant Engineers
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Tel: +44 (0)1332 292003 Email: scientifics@surescreen.com
Company Registration No. 08950940

SureScreen Scientifics

TARGET SPECIES: Crayfish plague *(Aphanomyces astaci)*

Lab ID	Site Name	OS Reference	SIC	DC	IC	Result	Positive Replicates
FK180	Clover River	-	Pass	Pass	Pass	Positive	12/12
FK181	Breegah River D2	-	Pass	Pass	Pass	Negative	0/12
FK182	Black River C5	-	Pass	Pass	Pass	Positive	5/12
FK183	Drish River N75 road bridge	-	Pass	Pass	Pass	Negative	0/12
FK184	Drish River B2	-	Pass	Pass	Pass	Negative	0/12

TARGET SPECIES: White-clawed crayfish *(Austropotamobius pallipes)*

Lab ID	Site Name	OS Reference	SIC	DC	IC	Result	Positive Replicates
FK180	Clover River	-	Pass	Pass	Pass	Positive	12/12
FK181	Breegah River D2	-	Pass	Pass	Pass	Positive	2/12
FK182	Black River C5	-	Pass	Pass	Pass	Positive	12/12
FK183	Drish River N75 road bridge	-	Pass	Pass	Pass	Negative	1/12
FK184	Drish River B2	-	Pass	Pass	Pass	Negative	0/12

If you have any questions regarding results, please contact us: ForensicEcology@surescreen.com

Reported by: **MSc Gabriela Danickova** Approved by: **PhD Chris Troth**

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METHODOLOGY

The samples detailed above have been analysed for the presence of target species eDNA following scientifically published eDNA assays and protocols which have been thoroughly tested, developed and verified for use by SureScreen Scientifics.

The analysis is conducted in two phases. The sample first goes through an extraction process where the filter is incubated in order to obtain any DNA within the sample. The extracted sample is then tested via real time PCR (also called q-PCR) for each of the selected target species. This process uses species-specific molecular markers (known as primers) to amplify a select part of the DNA, allowing it to be detected and measured in 'real time' as the analytical process develops. qPCR combines amplification and detection of target DNA into a single step. With qPCR, fluorescent dyes specific to the target sequence are used to label targeted PCR products during thermal cycling. The accumulation of fluorescent signals during this reaction is measured for fast and objective data analysis. The primers used in this process are specific to a part of mitochondrial DNA only found in each individual species. Separate primers are used for each of the species, ensuring no DNA from any other species present in the water is amplified.

If target species DNA is present, the DNA is amplified up to a detectable level, resulting in positive species detection. If target species DNA is not present then amplification does not occur, and a negative result is recorded.

Analysis of eDNA requires scrupulous attention to detail to prevent risk of contamination. True positive controls, negative controls and spiked synthetic DNA are included in every analysis and these have to be correct before any result is declared and reported. Stages of the DNA analysis are also conducted in different buildings at our premises for added security.

SureScreen Scientifics Ltd is ISO9001 accredited and participate in Natural England's proficiency testing scheme for GCN eDNA testing. We also carry out regular inter-laboratory checks on accuracy of results as part of our quality control procedures.

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INTERPRETATION OF RESULTS

SIC: **Sample Integrity Check** [Pass/Fail]
When samples are received in the laboratory, they are inspected for any tube leakage, suitability of sample (not too much mud or weed etc.) and absence of any factors that could potentially lead to inconclusive results.

DC: **Degradation Check** [Pass/Fail]
Analysis of the spiked DNA marker to see if there has been degradation of the kit or sample, between the date it was made to the date of analysis. Degradation of the spiked DNA marker may indicate a risk of false negative results.

IC: **Inhibition Check** [Pass/Fail]
The presence of inhibitors within a sample are assessed using a DNA marker. If inhibition is detected, samples are purified and re-analysed. Inhibitors cannot always be removed, if the inhibition check fails, the sample should be re-collected.

Result: **Presence of eDNA** [Positive/Negative/Inconclusive]

Positive: DNA was identified within the sample, indicative of species presence within the sampling location at the time the sample was taken or within the recent past at the sampling location.

Positive Replicates: Number of positive qPCR replicates out of a series of 12. If one or more of these are found to be positive the pond is declared positive for species presence. It may be assumed that small fractions of positive analyses suggest low level presence, but this cannot currently be used for population studies. Even a score as low as 1/12 is declared positive. 0/12 indicates negative species presence.

Negative: eDNA was not detected or is below the threshold detection level and the test result should be considered as evidence of species absence, however, does not exclude the potential for species presence below the limit of detection.

Inconclusive: Controls indicate inhibition or degradation of the sample, resulting in the inability to provide conclusive evidence for species presence or absence.

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FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

APPENDIX 5

Triturus Aquatic Survey Report 2024

Aquatic baseline report for Littleton wind farm, Co. Tipperary

Prepared by Triturus Environmental Ltd. for Fehily Timoney & Company

March 2024

Please cite as:

Triturus (2024). Aquatic baseline report for Littleton wind farm, Co. Tipperary. Report prepared by Triturus Environmental Ltd. for Fehily Timoney & Company. March 2024.

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1. Introduction

1.1 Background

Triturus Environmental Ltd. were commissioned by Fehily Timoney to conduct baseline aquatic and fisheries surveys to inform EIAR preparation for the proposed Littleton wind farm project, located near Littleton, Co. Tipperary (**Figure 2.1**). Undertaken on a sub-catchment-wide scale, this report provides a baseline assessment of the aquatic ecology including fisheries, biological water quality, protected species and habitats in the vicinity of the proposed project, inclusive of the proposed grid cable route (GCR). The surveys would serve to update previous surveys of the site (by Triturus in 2021) whilst also accounting for any changes in proposed infrastructure and site layout in the interim period. Aquatic surveys were undertaken in September and October 2023.

1.2 Project description

A full description of the proposed project will be provided in any Environmental Impact Assessment Report (EIAR) used to support consenting applications.

2. Methodology

2.1 Selection of watercourses for assessment

All freshwater watercourses which could be affected directly or indirectly by the proposed wind farm project were considered as part of the current baseline. This included sites in vicinity of the proposed site boundary in addition to watercourse crossings of the proposed grid cable route (GCR) options. A total of 30 no. riverine sites were selected for detailed aquatic assessment (see **Table 2.1, Figure 2.1** below). The flow paths and nomenclature for the watercourses surveyed followed Environmental Protection Agency (EPA) mapping.

Riverine survey sites survey sites were present on the Clover River (EPA code: 16C04), Drish River (16D02), Black River (16B01), North Glengoole River (16N28), Breegagh River (16B03), River Goul (15G02), Ardreagh River (15A03), Lisduff Stream (15L08), Tincashel River (15T05), Clomantanagh Lower Stream (15C91), Gorteenahilla River (15G08), Lismaine Stream (15L16), Lisdowney Stream (15L02), River Nore (15N01) and several unnamed watercourses (**Table 2.1**). Additionally, a total of 17 no. lakes/wetlands located within the proposed site boundary at Littleton Bog were also surveyed in September-October 2023 (**Table 2.1; Figure 2.2**). The aquatic survey sites were located within the Suir_SC_040, Goul_SC_010 and Nore_SC_070 river sub-catchments. The proposed wind farm site boundary did not overlap with any European sites. However, there was potential downstream hydrological connectivity between the proposed project and the Lower River Suir SAC (002137), a site designated for a range of aquatic qualifying interests (NPWS, 2017a). A single GCR watercourse crossing of the River Nore (at site E9) traversed the River Barrow And River Nore SAC (2162) and River Nore SPA (4233).

Please note this aquatic report should be read in conjunction with the final Environmental Impact Assessment Report (EIAR) prepared for the proposed project. More specific aquatic methodology is outlined below and in the appendices of this report.

2.2 Aquatic site surveys

Aquatic surveys of the watercourses within the vicinity of the proposed wind farm project were conducted on the 5th, 6th, 7th and 21st September and 12th-13th October 2023. Survey effort focused on both instream and riparian habitats at each aquatic sampling location. Surveys at each of these sites included a fisheries assessment (electro-fishing and or fisheries habitat appraisal), white-clawed crayfish survey, otter survey (within 150m of the survey site), macrophyte and aquatic bryophyte survey and biological water quality (Q-sampling at riverine sites) or invertebrate sweep sampling (lacustrine sites) (**Figure 2.1**). This holistic approach informed the overall aquatic ecological evaluation of each site in context of the proposed project and ensured that any habitats and species of high conservation value would be detected to best inform mitigation.

In addition to the ecological characteristics of the site, a broad aquatic and riparian habitat assessment was conducted utilising elements of the methodology given in the Environment Agency's 'River Habitat Survey in Britain and Ireland Field Survey Guidance Manual 2003' (EA, 2003) and the Irish Heritage Council's 'A Guide to Habitats in Ireland' (Fossitt, 2000). This broad characterisation helped

define the watercourses' conformity or departure from naturalness. All sites were assessed in terms of:

- Physical watercourse/waterbody characteristics (i.e. width, depth etc.) including associated evidence of historical drainage
- Substrate type, listing substrate fractions in order of dominance (i.e. bedrock, boulder, cobble, gravel, sand, silt etc.)
- Flow type by proportion of riffle, glide and pool in the sampling area
- An appraisal of the macrophyte and aquatic bryophyte community at each site
- Riparian vegetation composition

Table 2.1 Location of 47 no. aquatic survey sites in the vicinity of Littleton wind farm, Co. Tipperary

Site no.	Watercourse	EPA code	Location	X (ITM)	Y (ITM)	GCR crossing
Riverine sites						
A1	Unnamed stream	n/a	Longfordpass North	622135	660772	
A2	Unnamed stream	n/a	Clooncleagh	619285	660881	
A3	Unnamed stream	n/a	R639 road crossing, Leigh	622188	658445	
A4	Unnamed stream	n/a	Noard	621555	656463	
A5	Clover River	16C04	Noard	621241	655973	
A6	Clover River	16C04	R639 road crossing, Leigh	621356	657637	
A7	Clover River	16C04	Noard	619601	659306	
B1	Drish River	16D02	Longfordpass South	624723	657212	
B2	Drish River	16D02	Bridge 100m u/s Longfordpass Bridge	624889	660463	Yes
B3	Drish River	16D02	Castletown Bridge	621680	663563	
B4	Drish River	16D02	Ballyduff Bridge	618961	661310	
B5	Drish River	16D02	Drish Bridge	614891	658369	
C1	Black River	16B01	Clonoura	623707	654329	
C2	Black River	16B01	Derryvella	621096	652818	
C3	North Glengoole River	16N28	Derryvella	620969	652602	
C4	Black River	16B01	Derryhogan	619908	653512	
C5	Black River	16B01	N75 crossing, Two Mile Borris	619120	657824	
D1	Breegagh River	16B03	Kileen	621369	650304	
D2	Breegagh River	16B03	Ballymurreen Bridge	617399	653051	
D3	Breegagh River	16B03	Archerstown Bridge	613950	656841	
E1	River Goul	15G02	R689 road crossing, Fennor	627891	660586	Yes
E2	Ardreagh River	15A03	Lisduff	629611	660275	Yes
E3	Lisduff Stream	15L08	Lisduff	630069	660402	Yes
E4	Tincashel River	15T05	Lisduff	630645	660666	Yes
E5	Clomantanagh Lower Stream	15C91	Clomantagh Lower	635617	663477	Yes

Site no.	Watercourse	EPA code	Location	X (ITM)	Y (ITM)	GCR crossing
E6	Unnamed stream	n/a	Kilrush	637410	665322	Yes
E7	Gorteenahilla River	15G08	Ballyguider Bridge	638977	666778	Yes
E8	Lismaine Stream	15L16	Clone	642128	667587	Yes
E9	Lisdowney Stream	15L02	Grange Bridge	643580	668665	Yes
E10	River Nore	15N01	Parksgrove	644041	671505	Yes
Lacustrine sites						
L1	Lake/wetland	n/a	Longfordpass South	623838	657293	
L2	Lake/wetland	n/a	Bawnreagh	624148	657036	
L3	Lake/wetland	n/a	Bawnreagh	624203	656996	
L4	Lake/wetland	n/a	Bawnreagh	623830	656968	
L5	Lake/wetland	n/a	Bawnreagh	623886	656483	
L6	Lake/wetland	n/a	Leigh	623554	656506	
L7	Lake/wetland	n/a	Leigh	623573	656457	
L8	Lake/wetland	n/a	Clonoura	623966	655791	
L9	Lake/wetland	n/a	Clonoura	623089	655449	
L10	Lake/wetland	n/a	Clonoura	623128	655375	
L11	Lake/wetland	n/a	Clonoura	623259	655119	
L12	Lake/wetland	n/a	Clonoura	623355	654846	
L13	Lake/wetland	n/a	Noard	622700	655234	
L14	Lake/wetland	n/a	Noard	622759	655206	
L15	Lake/wetland	n/a	Noard	622190	654897	
L16	Lake/wetland	n/a	Lanespark	622163	654688	
L17	Lake/wetland	n/a	Noard	621406	651982	

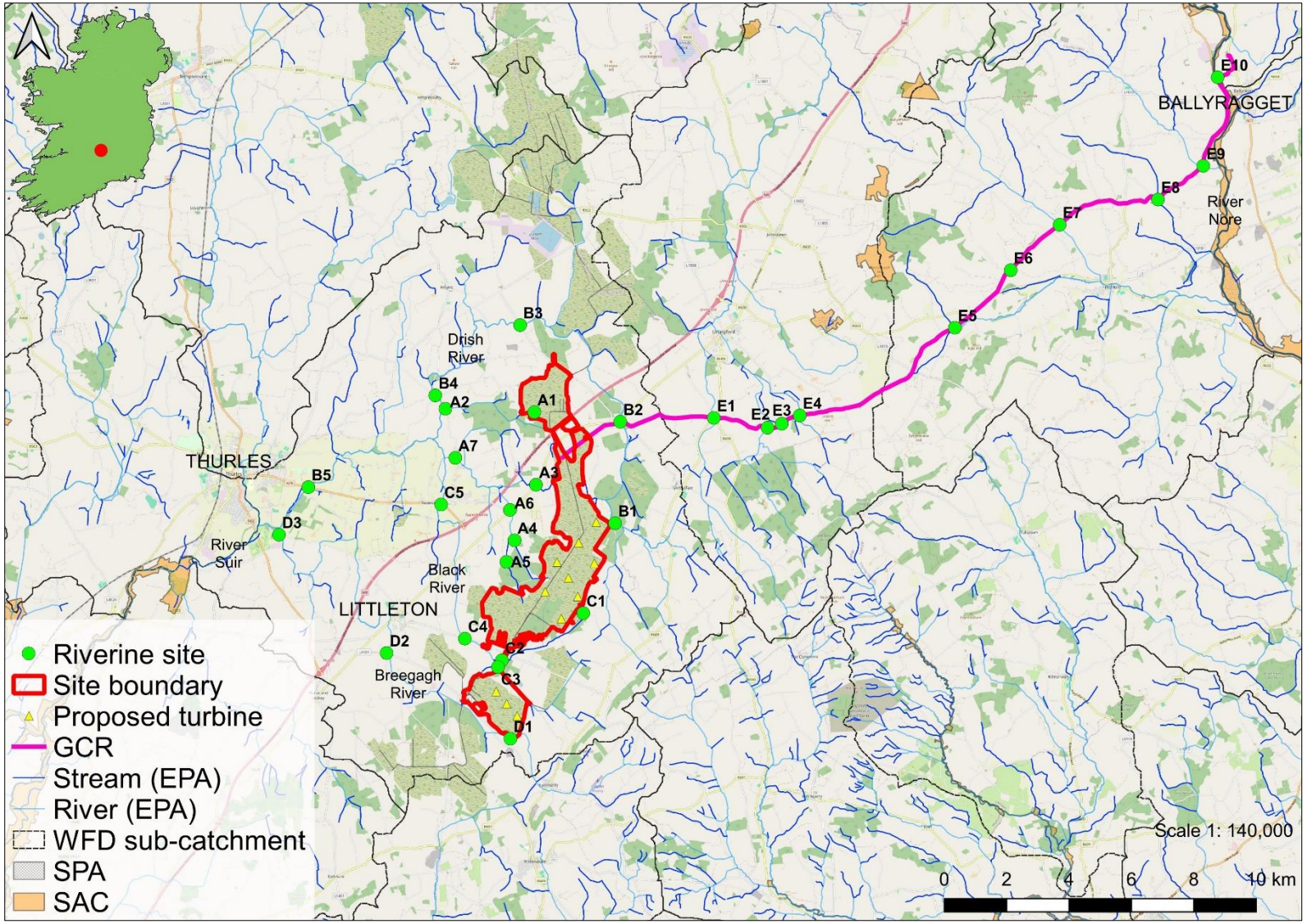


Figure 2.1 Overview of the 30 no. riverine survey sites in vicinity of the proposed Littleton wind farm project, Co. Tipperary

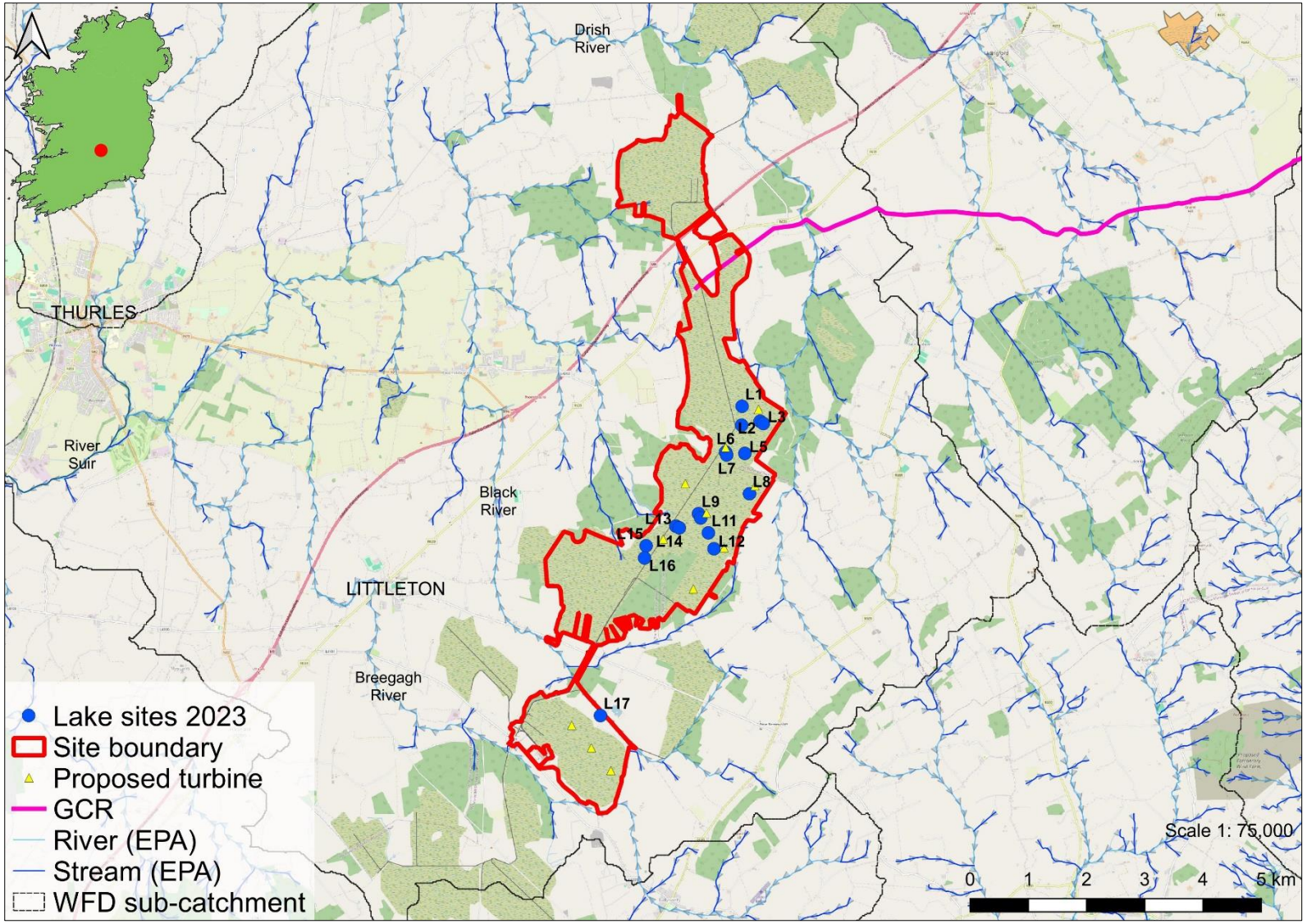


Figure 2.2 Overview of the 17 no. lacustrine survey sites in vicinity of the proposed Littleton wind farm project, Co. Tipperary

2.3 Fisheries assessment (electro-fishing) & appraisal

A single anode Smith-Root LR24 backpack (12V DC input; 300V, 100W DC output) was used to electro-fish sites on riverine watercourses in the vicinity of the proposed Littleton wind farm in September 2023 (**Table 2.1, Figure 2.1; Appendix A**), following notification to Inland Fisheries Ireland, under the conditions of a Department of the Environment, Climate and Communications (DECC) licence. The survey was undertaken in accordance with best practice (CFB, 2008; CEN, 2003) and Section 14 licencing requirements.

Furthermore, a fisheries habitat appraisal of all aquatic survey sites, including 17 no. lake/wetland habitats (**Table 2.1**), was undertaken to establish their importance for salmonid, lamprey, European eel and other fish species. The baseline assessment also considered the quality of spawning, nursery and holding habitat for salmonids and lamprey within the vicinity of the survey sites. For detailed survey methodology, please refer to accompanying fisheries assessment report in **Appendix A.**

2.4 White-clawed crayfish survey

White-clawed crayfish (*Austropotamobius pallipes*) surveys were undertaken at the aquatic survey sites in September-October 2023 under a National Parks and Wildlife (NPWS) open national licence (no. C24/2023), as prescribed by Sections 9, 23 and 34 of the Wildlife Act (1976 to 2023), to capture and release crayfish to their site of capture. As per Inland Fisheries Ireland aquatic biosecurity recommendations, the crayfish sampling started at the uppermost site(s) of the wind farm catchment/sub-catchments in the survey area to minimise the risk of transfer invasive propagules (including crayfish plague) in an upstream direction. Hand-searching of instream refugia and sweep netting was undertaken according to Reynolds et al. (2010). An appraisal of white-clawed crayfish habitat at each site was conducted based on physical habitat attributes, water chemistry and incidental records in mustelid spraint. Additionally, a desktop review of crayfish records within the wider survey area was completed.

2.5 Biological water quality (Q-sampling)

A total of 30 no. riverine survey sites were assessed for biological water quality through Q-sampling in September 2023. All samples were taken with a standard kick sampling hand net (250mm width, 500µm mesh size) from areas of riffle/glide utilising a 2-minute kick sample, as per Environmental Protection Authority (EPA) methodology (Feeley et al., 2020). Large cobble was also washed at each site for 1-minute (where present) to collect attached macro-invertebrates (as per Feeley et al., 2020). Samples were elutriated and fixed in 70% ethanol for subsequent laboratory identification. Samples were converted to Q-ratings as per Toner et al. (2005) and assigned to WFD status classes (**Table 2.2**). Any rare invertebrate species were identified from the NPWS Red List publications for beetles (Foster et al., 2009), mayflies (Kelly-Quinn & Regan, 2012), stoneflies (Feeley et al., 2020) and other relevant taxa (i.e. Byrne et al., 2009; Nelson et al., 2011).

Table 2.2 Reference categories for EPA Q-ratings (Q1 to Q5)

Q value	WFD status	Pollution status	Condition
Q5 or Q4-5	High status	Unpolluted	Satisfactory
Q4	Good status	Unpolluted	Satisfactory
Q3-4	Moderate status	Slightly polluted	Unsatisfactory
Q3 or Q2-3	Poor status	Moderately polluted	Unsatisfactory
Q2, Q1-2 or Q1	Bad status	Seriously polluted	Unsatisfactory

2.6 Lacustrine macro-invertebrate communities

A subset of 17 no. lake/wetland sites were sampled for macro-invertebrates via sweep netting in September-October 2023. A standard lake net (250mm width, mesh size 500µm) was used to sweep macrophytes to capture macro-invertebrates. The net was also moved along the lake/lake bed to collect epibenthic and epiphytic invertebrates from the substratum (as per Cheal et al., 1993). A 3-minute sampling period was employed. To ensure appropriate habitat coverage, the sampling period was also divided amongst the range of meso-habitats present at the survey site to get a representative sample for sub-habitats.

2.7 Macrophytes and aquatic bryophytes

Surveys of the macrophyte and aquatic bryophyte community were conducted by instream wading at each of the wetted aquatic survey sites, with specimens collected (by hand, sweep nets or via grapnel) for on-site identification. An assessment of the aquatic vegetation community helped to identify any rare macrophyte species (Flora Protection Order or Wyse-Jackson et al., 2016) or habitats corresponding to the Annex I habitats, e.g., 'Water courses of plain to montane levels, with submerged or floating vegetation of the *Ranunculion fluitantis* and *Callitricho-Batrachion* (low water level during summer) or aquatic mosses [3260]' (more commonly referred to as 'floating river vegetation').

2.8 Otter signs

The presence of otter (*Lutra lutra*) at each aquatic survey site was determined through the recording of otter signs within 150m of each survey site. Notes on the age and location (ITM coordinates) were made for each otter sign recorded, in addition to the quantity and visible constituents of spraint (i.e. remains of fish, crustaceans, molluscs etc.).

2.9 Aquatic ecological evaluation

The evaluation of aquatic ecological receptors contained within this report uses the geographic scale and criteria defined in the 'Guidelines for Assessment of Ecological Impacts of National Road Schemes' (NRA, 2009).

2.10 Biosecurity

A strict biosecurity protocol following IFI (2010) and the Check-Clean-Dry approach was adhered to during surveys for all equipment and PPE used. Disinfection of all equipment and PPE before and after use with Virkon™ was conducted to prevent the transfer of pathogens or invasive propagules between survey sites. Surveys were undertaken at sites in a downstream order to minimise the risk of upstream propagule mobilisation. Care was given towards preventing the spread or introduction of highly virulent crayfish plague (*Aphanomyces astaci*). Furthermore, staff did not undertake any work in a known crayfish plague catchment for a period of <72hrs in advance of the survey. Where feasible, equipment was also thoroughly dried (through UV exposure) between survey areas. Any aquatic invasive species or pathogens recorded within or adjoining the survey areas were geo-referenced. All Triturus staff are certified in 'Good fieldwork practice: slowing the spread of invasive non-native species' by the University of Leeds.

3. Desktop review

3.1 Survey area description

The proposed Littleton wind farm is located in an extensive area of cutover bog within the townlands of Noard, Ballybeg, Kileen, Newhill, Derryhogna, Kilmakill, Lansespark, Derryvella, Leigh, Clonoura, Longfordpass North, Longfordpass South and Bawnreagh approximately 2.5km west of Littleton, County Tipperary (**Figure 2.1**). The proposed wind farm site is within the South Eastern River Basin District and within hydrometric areas 15 (Nore) and 16 (Suir). The watercourses and aquatic surveys sites in the vicinity of Littleton wind farm are typically small, historically modified lowland depositing channels (FW2; Fossitt, 2000) which flow over areas of Tournaisian and Visean limestone and calcareous shale (Geological Survey of Ireland data). Land use practices in the wider survey area comprise peat bogs (CORINE 412), transitional woodland scrub (324) with localised coniferous forests (312) and adjoining pastures (231).

3.2 Fisheries

The Drish River, a tributary of the River Suir, is known to support *Lampetra* sp. (O'Connor, 2007; Kurz & Costello, 1999) as well as Atlantic salmon (*Salmo salar*), brown trout (*Salmo trutta*) and pike (*Esox lucius*) (1993 data presented in AECOM, 2020). The trout and pike in the Drish were found to be fast growing and similar to those in comparable rivers in the Irish midlands (CFB data referenced in AECOM, 2020). The river suffered significant pollution from a zinc and lead mine at Lisheen until the recent past (AECOM, 2020; O'Connor, 2007).

The Clover River, a tributary of the Drish River, is known to support brown trout, three-spined stickleback (*Gasterosteus aculeatus*), perch (*Perca fluviatilis*) and stone loach (*Barbatula barbatula*) (Triturus 2021 data). The Breegagh River, another Drish River tributary, also supports brown trout, stone loach and three-spined stickleback in addition to Atlantic salmon and *Lampetra* sp. (Triturus 2021 data). The Black River (Two Mile Borris) is known to support Atlantic salmon, brown trout, European eel and stone loach (Triturus 2021 data) in addition to lamprey *Lampetra* sp. (O'Connor, 2007). The North Glengoole River, a Black River tributary, supports Atlantic salmon, brown trout, European eel and three-spined stickleback (Triturus 2021 data).

In terms of the proposed GCR option, the route crosses the River Goul and several tributaries (Ardreagh River, Lisduff Stream & Tincashel River) which are known to support Atlantic salmon, brown trout, stone loach and three-spined stickleback (IFI 2021 data). The Gorteenahilla River, a tributary of the Nuenna River, supports Atlantic salmon, brown trout, *Lampetra* sp. and three-spined stickleback (Triturus 2021-2022 data). The Lismaine Stream frequently runs dry and provides poor quality fisheries habitat (Triturus data). The Lisdowney Stream, a River Nore tributary, supports Atlantic salmon, brown trout, European eel and three-spined stickleback (Triturus 2021 data; IFI 2021 data). The River Nore in the vicinity of Ballyragget supports a range of fish species including Atlantic salmon, brown trout, *Lampetra* sp., European eel, minnow (*Phoxinus phoxinus*), stone loach and rudd (*Scardinius erythropthalmus*) (Triturus 2021 data).

Fisheries data for the other watercourses surveyed was not available at the time of survey.

3.3 Protected aquatic species data

A comprehensive desktop review of available data from the National Parks and Wildlife Service (NPWS), National Biodiversity Data Centre (NBDC), Inland Fisheries Ireland (IFI), Botanical Society of Britain and Ireland (BSBI), National Crayfish Plague Surveillance Programme (NCPSP), Environmental Protection Agency (EPA) and Triturus databases for the 10km grid squares containing and adjoining the project (i.e. S15, S16, S25, S26, S36, S46 & S47) identified records for a low number of rare and or protected aquatic species within the vicinity of the proposed wind farm.

A high number of contemporary white-clawed crayfish (*Austropotamobius pallipes*) records (>100) were available for the respective grid squares in the 1996-2014 period (**Figure 3.1**), with a further 50 approx. historical records. A low number of records were available for the Drish River, Clover River (single record), Black River, River Goul, River Nore and Lough Doire Bhile (near lake site L17) (**Figure 3.1**).

A low number of contemporary otter (*lutra lutra*) records (2005-2022) were available for the relevant grid squares, with records from the Black River, Drish River and River Nore (**Figure 3.1**). Otter signs were recorded during previous surveys for the project on the Clover River, Black River and Drish River (Triturus 2021 data).

A low number of records were available for freshwater pearl mussel (M*argaritifera margaritifera*) for the River Nore located between the River Erkina confluence and Ballyragget in the 1993 to 2007 period (i.e. downstream of the proposed project). However, no live mussel have been recorded in this area of the River Nore since 2007 (Pascal Sweeney pers. comm.), including during a survey completed in May 2023 (Triturus data).

A low number of records for lamprey (*Lampetra* sp.) (reported as brook lamprey) were available for the River Nore downstream of Durrow (data not shown). *Lampetra* sp. are also known from the Nuenna River (Gordon et al., 2021; Matson et al., 2018) and several survey watercourses (see section 3.2 above).

Historical records (1968 & 1972) for spawning sea lamprey (*Petromyzon marinus*) were available for the River Nore in the vicinity of Ballyragget (data not shown).

Two records for Flora (Protection) Order 2022 macrophyte species opposite-leaved pondweed (*Groenlandia densa*) were available from a former pond in the vicinity of Urlingford but these were historical only (i.e. pre-1900, data not shown).

A single record for smooth newt (*Lissotriton vulgaris*) was available for bog habitat at Derryvella adjacent to the North Glengoole River at survey site C3 from 2010 (data not shown).

3.4 EPA water quality data (existing data)

The following outlines the available water quality data for the watercourses in context of the proposed wind farm site boundary. Only recent water quality is summarised below. Contemporary EPA biological monitoring data was available for the Drish, Clover and Black Rivers only. Please note that biological water quality analysis was undertaken as part of this study, with the results presented in the **section 4** and **Appendix B** of this report.

3.4.1 Drish River

The Drish River (EPA code: 16D02) drains north and then south-west of the proposed wind farm site boundary before joining the River Suir downstream of Thurles. There was a total of 4 no. contemporary EPA biological monitoring stations on the river in the vicinity of the proposed project. The Drish River achieved Q3 (poor status) at the two uppermost stations (RS16D020040 (site B2), RS16D020070 (site B3)), **Q3-4 (moderate status)** at station RS16D020100 and **Q4 (good status)** at station RS16D020200 in 2023.

The Drish_010, _020, _040 & _050 river waterbodies were all of poor status in the 2016-2021 period and were considered 'at risk' of failing to achieve good status (WFD Risk 3rd cycle). The lower reaches (Drish_060) achieved moderate status in the same period but were also considered 'at risk'. Peat extraction, forestry and agriculture are the primary threats to water quality in these waterbodies (EPA, 2019).

3.4.2 Clover River

There were 2 no. contemporary EPA biological monitoring stations on the Clover River (16C04), a tributary of the Black River. The Clover achieved **Q3 (poor status)** at station RS16C040100 (survey site A3) in 2023 but this elevated to **Q3-4 (moderate status)** in the lower reaches at station RS16C040300 (also in 2023).

The upper reaches of the Clover River (Clover_010 waterbody) were of poor status in the 2016-2021 period, whilst the lower reaches (Clover_020 waterbody) were of moderate status. Both waterbodies were considered 'at risk' of not achieving good status. Peat extraction and forestry are the significant threats to water quality in these waterbodies (EPA, 2019).

3.4.3 Black River

There were 2 no. contemporary EPA biological monitoring stations on the Black River (16B01), a tributary of the Drish River. At Black River Bridge (station RS16B010030) and station RS16B010100 the river achieved **Q3 (poor status)** in 2023.

The Black (Twomileborris)_010 waterbody (encompassing most of the river) was of moderate WFD status in the 2016-2021 period and was considered 'at risk' of achieving good status. The lower reaches of the Black River are part of the Drish_050 waterbody which was of poor status in the same period and also 'at risk'. (as outlined above). Peat extraction is the primary threat to water quality in these waterbodies (EPA, 2019).

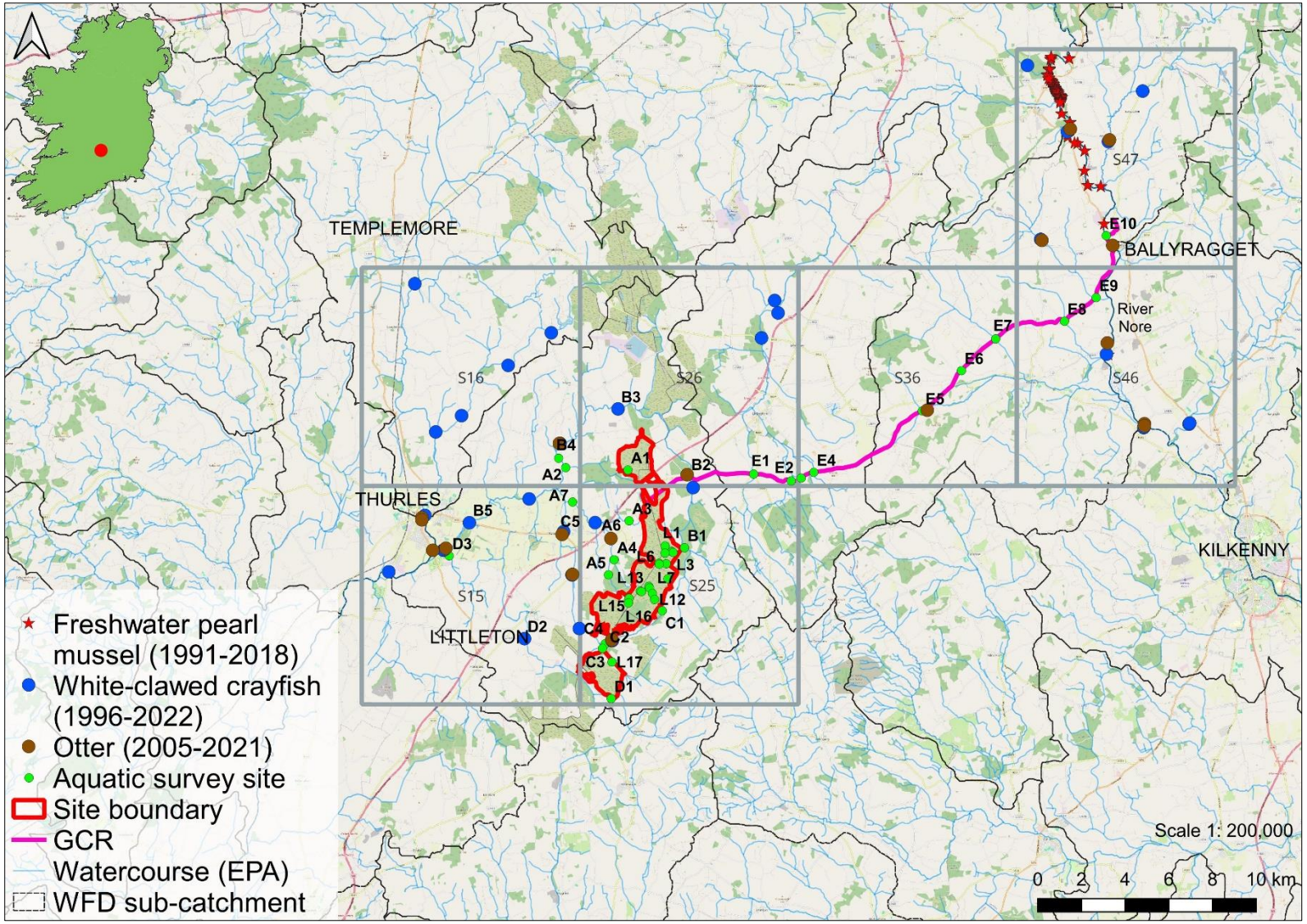


Figure 3.1 Distribution of selected protected species records in the vicinity of the proposed Littleton wind farm (source: NPWS, EPA, NBDC & Triturus data)

4. Results of aquatic surveys

The following section summarises each of the 30 no. riverine and 17 no. lake/wetland survey sites in terms of aquatic habitats, physical characteristics and overall value for fish, macro-invertebrates and macrophyte/aquatic bryophyte communities. Biological water quality (Q-sample) and macro-invertebrate sweep sample results are summarised for each site and provided in full in **Appendix B**. Habitat codes are according to Fossitt (2000). Scientific names are provided at first mention only. Sites were surveyed in September-October 2023. Please refer to **Appendix A** (fisheries assessment report) for more detailed fisheries results. A summary of the fish species recorded at each survey site is provided in **Table 4.1**. A summary of the aquatic species and habitats of high conservation concern recorded during the surveys is provided in **Table 4.2**. An evaluation of the aquatic ecological importance of each survey site based on these aquatic surveys is provided and summarised in **Table 4.3**.

4.1 Riverine survey site results

4.1.1 Site A1 – unnamed stream, Longfordpass North

Site A1 was located on the uppermost reaches of an unnamed Drish River tributary (no EPA code) within the proposed site boundary. Situated in an extensive area of cutover bog (PB4), the Drish River tributary had been extensively straightened and deepened, with V-shaped banks to 4-5m in height. The homogenous channel was 1-1.5m wide and <0.1m deep with imperceptible flows at the time of survey (near stagnant glide and pool). The channel had been excavated with a gravel-dominated base. Occasional cobble and bolder was also present. However, these were heavily silted (flocculent deposits from peat escapement). The stream was considered likely ephemeral (seasonal) at this location. Given the low flows and high riparian shading, macrophytes were absent with the exception of very localised water horsetail (*Equisetum fluviatile*) and common reed (*Phragmites australis*) along channel margins. No aquatic bryophytes were recorded. The channel was heavily scrubbed over with high levels of terrestrial encroachment from willow (*Salix* sp.), downy birch (*Betula pubescens*) and bramble (*Rubus fruticosus* agg.). The site was bordered by dry meadow habitat (GS2) and cutover bog (PB4) habitat in the wider area.

Three-spined stickleback (*Gasterosteus aculeatus*) was the only fish species recorded via electro-fishing at site A1 (**Appendix A**). With the exception of low densities of this species, the site was of very poor fisheries value at the time of survey given observed low seasonal flows (stagnant), very shallow nature, heavy siltation and historical modifications. There was no suitability for white-clawed crayfish given very shallow water. No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site A1 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.2 Representative image of site A1 on an unnamed Drish River tributary, September 2023

4.1.2 Site A2 – unnamed stream, Clooncleagh

Site A2 was located on the lower reaches of an unnamed Drish River tributary at a local road crossing, approximately 3.2km downstream of site A1. The stream (FW2) had been straightened and deepened throughout, resulting in a V-shaped channel with 2-3m high banks and very poor hydromorphology. The stream was culverted under the local road almost as far as the Drish confluence. Where open at the road crossing, the stream was <1.5m wide and was semi-dry at the time of survey, with only remnant, shallow pools of stagnant water (no flows). The channel featured a base of cobble and mixed gravels bedded in mud. No aquatic vegetation was present and the ephemeral channel likely only conveys water after heavy rainfall events or during floods. The stream was very heavily tunnelled by nitrophilous vegetation dominated by nettle (*Urtica dioica*) and bramble, with a dense stock-proof hawthorn (*Crataegus monogyna*) hedgerow along the south bank. The site was bordered by the Ballybeg Farm Co-op (BL3) and heavily improved pasture (GA1).

Site A2 was not of fisheries value given its dry, ephemeral nature and absence of aquatic habitats. No otter signs were recorded in the vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q2-3 (poor status)** (**Appendix B**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site A2 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.2 Representative image of site A2 on an unnamed Drish River tributary, September 2023 (semi-dry, ephemeral channel)

4.1.3 Site A3 – unnamed stream, Leigh

Site A3 was located on an unnamed stream (no EPA code) draining to the west of the proposed site boundary. The Clover River tributary (FW2) had been historically straightened and deepened along field boundaries and was semi-dry at the time of survey, with only localised ponding of 0.1m deep stagnant water between debris dams and no flows. The stream passed under the local road via a pipe culvert that was dry at the time of survey. The channel featured a base of cobble and mixed gravels bedded in silt/mud. Leaf litter and woody debris was abundant on the bed. No aquatic vegetation was present in the ephemeral channel, which was very heavily shaded by mature treelines and hedgerows supporting bramble, ivy (Hedera helix), ash (*Fraxinus excelsior*) and elder (*Sambucus nigra*). Non-native snowberry (*Symphoricarpos albus*) was recorded at the road crossing. The site was bordered by heavily improved pasture (GA1).

No fish were recorded via electro-fishing at site A3. The site was not of fisheries value given its semi-dry, ephemeral nature and poor quality aquatic habitats with no flows. There was no suitability for white-clawed crayfish. No otter signs were recorded in the vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q2-3 (poor status)** (**Appendix B**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site A3 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.3 Representative image of site A3 on an unnamed Clover River tributary, September 2023

4.1.4 Site A4 – unnamed stream, Noard

Site A4 was located on an unnamed tributary of the Clover River. The lowland depositing channel (FW2) had been extensively straightened and deepened throughout, resulting in a deep trapezoidal channel with 2-3m high banks and poor hydromorphology. The stream was 3-4m wide and 0.4-0.6m deep with a profile dominated by deep, slow-flowing glide with occasional pool. Riffle was absent. The substrata were dominated by deep peat/silt and sands with scattered boulder. Cobble was present but highly localised and bedded in silt. Peat staining was very high at the time of survey. Macrophyte cover was high with frequent branched bur-reed (*Sparganium erectum*) and lesser pondweed (Potamogeton pusillus). Localised stands of bulrush (*Typha latifolia*), broad-leaved pondweed (*Potamogeton natans*) and common reed were present with frequent bent grass (*Agrostis* sp.) encroachment of the margins. Aquatic bryophytes were not recorded. The steep banks supported abundant bramble scrub and intermittent treelines of grey willow (*Salix cinerea*), dog rose (*Rosa canina*), hawthorn and ash. The site was bordered by coniferous afforestation (WD4), scrub (WS1), reclaimed wet grassland (GS4) and improved pasture (GA1).

Brown trout (*Salmo trutta*), stone loach (*Barbatula barbatula*), three-spined stickleback (*Gasterosteus aculeatus*) and perch (*Perca fluviatilis*) were recorded via electro-fishing at site A4 (**Appendix A**). The site was of poor value for salmonids, supporting only a low density of adult trout present in deeper holding pools. Spawning habitat was absent given very significant siltation, with slow-flowing glide resulting in poor quality nursery habitat. Despite abundant soft sediment accumulations, the site was unsuitable for lamprey given the flocculent, humic nature of the sediment and absence of suitable

spawning gravels. The site was also of poor suitability for European eel and white-clawed crayfish with none recorded. A regular otter spraint site (containing fish remains) was recorded on a marginal cobble bar (ITM 621499, 656663).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids and utilisation by otter, the aquatic ecological evaluation of site A4 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.4 Representative image of site A4 on an unnamed Clover River tributary, September 2023

4.1.5 Site A5 – Clover River, Noard

Site A5 was located on the upper reaches of the Clover River (16C04). The small lowland channel (FW2) had been straightened and deepened throughout, resulting in a trapezoidal channel with very poor hydromorphology and low flows. The river had been excavated in the recent past and was 2m wide and 0.3-0.4m deep with a bed comprised of soft silt (often up to 0.2m deep) underlain by compacted gravels and clay. The narrow channel was heavily vegetated with a relatively high diversity of vegetation including abundant common duckweed (*Lemna minor*), locally frequent common reed and broad-leaved pondweed, water mint (*Mentha aquatica*) and lesser pondweed. Blue water speedwell (*Veronica anagallis-aquatica*), bottle sedge (*Carex rostrata*) and watercress (*Nasturtium officinale*) were also present locally. The liverwort *Riccia fluitans* was abundant on the sloping clay banks and instream as floating mats. The banks had been historically cleared and were fenced to the banktop with only rank grass vegetation. The site was bordered by improved pasture (GA1) with coniferous

afforestation (and alder borders) present upstream.

No fish were recorded via electro-fishing at site A5. The river was not of fisheries value at this location given siltation and enrichment pressures, very poor hydromorphology (maintained channel), poor flows and intermittent connectivity with downstream habitats (instream blockages). White-clawed crayfish habitat was poor overall (given heavy siltation) and none were recorded. No otter signs were recorded in the vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site A5 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.5 Representative image of site A5 on the upper reaches of the Clover River, September 2023

4.1.6 Site A6 – Clover River, Leigh

Site A6 was located on the Clover River (16C04) at the R639 crossing, approx. 1.7km downstream of site A5. The lowland depositing river (FW2) at this location had been historically straightened and extensively deepened, with V-shaped bank heights of 5-6m. The river was 6-8m wide (narrower upstream of bridge) and 0.4-0.8m deep. Upstream of the bridge, shallower riffles and glide was present (0.1-0.3m deep). The profile was of slow-flowing, deep homogenous glide with riffle and shallower glide present only upstream. Peat-staining was high at the time of survey. The cobble and mixed gravel substrata were very heavily silted. Boulder was occasional, with large woody debris

(LWD) frequent downstream of the bridge adding some valuable habitat heterogeneity. Riparian shading was high, with macrophytes confined to upstream of the bridge in a more open section of channel (historical tree clearance). Here, unbranched bur-reed (*Sparganium emersum*) was occasional instream, with frequent marginal stands of fool's watercress (*Apium nodiflorum*), localised lesser water parsnip (*Berula erecta*), blue water speedwell and water starwort (*Callitriche* sp.). Common duckweed was also frequent. Aquatic bryophytes were rare and limited to occasional *Leptodictyum riparium* on larger cobble and boulder. The channel was lined by mature treelines of sycamore (*Acer psuedoplatanus*), ash and elder with scrubby understories. The site was bordered by buildings and artificial surfaces (BL3) and improved pasture (GA1).

Brown trout, stone loach and three-spined stickleback were recorded via electro-fishing at site A6 (**Appendix A**). Despite significant siltation pressures, the site was evidently of good value as an adult trout habitat. However, due to significant siltation pressures salmonid spawning habitat was limited to a small, faster-flowing area upstream of the bridge. This also offered some moderate value for spawning lamprey but ammocoete habitat was sub-optimal (largely flocculent, humic deposits) and none were recorded. Despite some good suitability for European eel, none were recorded. No white-clawed crayfish were recorded (moderate suitability) although the remains of predated crayfish were recorded at this site previously (Triturus 2021 data). An otter spraint site was recorded on marginal boulders upstream of the bridge (ITM 621353, 657617).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids and utilisation by otter, the aquatic ecological evaluation of site A6 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.6 Representative image of site A6 on the Clover River, September 2023

4.1.7 Site A7 – Clover River, Noard

Site A7 was located on the lower reaches of the Clover River (16C04) at a local road crossing approximately 2.8km downstream of site A6. The lowland river (FW2) had been deepened and locally straightened although some good hydromorphological recovery was evident. The river averaged 3-4m wide and 0.2-0.4m deep, with very localised deeper areas to 0.6m. The profile comprised peat-stained slow-flowing glide with localised riffle and pool. Large woody debris (LWD) was abundant instream and contributed to habitat heterogeneity. The substrata were dominated by mixed gravels and sands with localised boulder and cobble only. Soft sediment accumulations were present but shallow and flocculent. Siltation was high overall (peat-derived). Given high shading, macrophyte growth was sparse with localised fool's watercress and ivy-leaved duckweed (*Lemna trisulca*) along channel margins. Bittersweet (*Solanum dulcamara*) and reed canary grass (*Phalaris arundinacea*) were locally abundant in open areas of channel. Small stands of branched bur-reed were present locally. Aquatic bryophyte coverage was low with rare *Fontinalis antipyretica* and *Leptodictyum riparium*. The river was typically well shaded by dense grey willow and ash with abundant bramble scrub on the steep banks. The site was bordered by residential property and improved pasture (GA1).

Atlantic salmon, brown trout, stone loach, lamprey (*Lampetra* sp.) and pike (*Esox lucius*) were recorded via electro-fishing at site A7 (**Appendix A**). The site was a moderate quality salmonid habitat only given evident siltation pressures which impacted the spawning potential of the river at this location. The generally shallow nature of the site also reduced the value as a nursery habitat. Some moderate quality holding habitat was present locally due to undercut banks, overhanging vegetation and pools associated with LWD. Whilst a low density of *Lampetra* sp. ammocoetes were recorded, the site was considered sub-optimal due to the flocculent and humic nature of the soft sediment deposits. Despite some good suitability for European eel and white-clawed crayfish, none were recorded. Recent otter prints were recorded in marginal sand/mud under the dry bridge arch (ITM 619607, 659303).

Biological water quality, based on Q-sampling, was calculated as **Q3-4 (moderate status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids (including Atlantic salmon) and lamprey (*Lampetra* sp.), in addition to utilisation by otter, the aquatic ecological evaluation of site A7 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.7 Representative image of site A7 on the Clover River, September 2023

4.1.8 Site B1 – Drish River, Longfordpass South

Site B1 was located on the upper reaches of the Drish River (16D02). The lowland river (FW2) had been extensively straightened and deepened throughout, resulting in a homogenous trapezoidal channel with very poor hydromorphology and low summer flows. The channelized river was 3-4m wide and 0.5-0.8m deep, with locally deeper glide to >1.2m. The profile was of stagnant glide at the time of survey. The substrata were dominated by sand and heavily silted mixed gravels. Cobble and small boulder were scattered. The site was very heavily vegetated with near total cover of macrophytes. Fool's watercress was abundant with frequent common duckweed, ivy-leaved duckweed and lesser water parsnip. Blue water speedwell and water mint were occasional. Submerged macrophytes were dominated by river water dropwort (*Oenanthe fluviatilis*) with occasional spiked water milfoil (*Myriophyllum spicatum*). Localised stands of branched bur-reed were present with sparse growth of common reed. Semi-floating mats of reed canary grass were abundant along the channel margins and sloping banks. The banks had been cleared historically and supported scattered grey willow, blackthorn (*Prunus spinosa*) and downy birch. The site was bordered by dry meadow habitat (GS2) with intermittent treelines of ash, grey willow and Scot's pine (*Pinus sylvestris*).

Three-spined stickleback was the only fish species recorded via electro-fishing at site B1 (**Appendix A**). The river at this location was of very poor value for salmonids given heavy siltation, poor hydromorphology, poor flows and heavy macrophyte cover. Despite some good suitability for European eel, none were recorded (although the species was present downstream). There was some low suitability for white-clawed crayfish although none were recorded. No otter signs were recorded in vicinity of the site (although there were few marking opportunities).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site B1 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.7 Representative image of site B1 on the Drish River, September 2023

4.1.9 Site B2 – Drish River, Longfordpass North

Site B2 was located on the Drish River (16D02) at a local road crossing upstream of Longfordpass Bridge. The lowland depositing river (FW2) had been extensively straightened and deepened historically, resulting in very poor hydromorphology. The river suffered from low water levels at the time of survey with slight flows and ponding of water between macrophyte beds. However, downstream of the bridge strong flows emanated from a pipe culvert which diverts flow from upstream of the bridge (i.e. navigates the perched, dry apron). The channel was a homogenous 10-12m wide and 0.1-0.3m deep with deep silt deposits of >0.3m locally. Near the upstream local road bridge, hard substrata were present (boulder and cobble with mixed gravels). However, elsewhere deep silt dominated. The site was very heavily vegetated (near 100% cover), with open ponding areas very localised. These supported a diverse range of macrophytes including abundant spiked water milfoil, branched bur-reed, lesser water parsnip, fool's watercress and both common and ivy-leaved duckweed. Blue water speedwell and yellow water lily were locally frequent with more occasional lesser pondweed, river water dropwort and water-forget-me-not (*Myosotis scorpioides*). *Cinclidotus fontinaloides* was abundant on instream boulder and the dry bridge apron. The mosses *Fontinalis antipyretica*, *Leptodictyum riparium* and *Hygroamblystegium* sp. were present but rare. The channel

was lined and encroached by reed canary grass with frequent bittersweet, purple loosestrife (*Lythrum salicaria*), hedge bindweed (*Calystegia sepium*) and willowherbs (*Epilobium* spp.). Given the presence of numerous indicator species (EC, 2013; Devaney et al., 2013), the herb community was representative of the Annex I habitat 'Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]'. The site was bordered by improved pasture (GA1) with narrow buffers.

Atlantic salmon (*Salmo salar*), European eel (*Anguilla anguilla*) and three-spined stickleback were recorded via electro-fishing at site B2 (**Appendix A**). The site was of poor salmonid value given known flow issues in addition to poor hydromorphology and poor connectivity with downstream habitats (i.e. the site is typically stagnant pond-like glide). However, a single Atlantic salmon parr was recorded in fast glide of an inflowing channel downstream of the bridge. Boulder dominated areas in vicinity of the bridge apron provided good suitability for European eel and supported a low density. There was some low suitability for white-clawed crayfish although none were recorded. No otter signs were recorded in vicinity of the site (although the species is known to utilise the site).

Biological water quality, based on Q-sampling, was calculated as **Q2-3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of Annex I hydrophilous tall herb habitat [6430], the aquatic ecological evaluation of site B2 was of **county importance** (**Table 4.3**).



Plate 4.9 Representative image of site B2 on the Drish River facing downstream to Longfordpass Bridge, September 2023

4.1.10 Site B3 – Drish River, Castletown Bridge

Site B3 was located on the Drish River (16D02) at Castletown Bridge, approximately 6km downstream of site B2. The lowland alkaline river (FW2) at this location had been deepened historically but retained some good semi-natural features. Recent clearance of adjoining drains has occurred upstream of the bridge. The river was 5-6m wide in a heavily-vegetated channel up to 8-10m wide. The depth ranged 0.5-1m with deeper pool areas to 1.5m locally. The profile was of slow-flowing glide, with localised faster runs between macrophyte beds exposing gravel substrata. The substrata were dominated by cobble and mixed gravels with scattered boulder. However, these were bedded in silt and moderately calcified (compacted). The compacted bed was also moderately silted with soft sediment deposits frequent. The site was very heavily vegetated (>90% cover) with abundant heterophyllous common clubrush (*Schoenoplectus lacustris*), common duckweed, ivy-leaved duckweed and fool's watercress. Yellow lily, river dropwort, branched bur-reed, lesser water parsnip and broad-leaved pondweed were occasional with localised common reed and mare's-tail (*Hippuris vulgaris*). The moss *Rhynchostegium riparium* was occasional. Filamentous algae was present, locally. Adjoining the river margins was a sparse herbaceous community supporting reed canary grass, bittersweet, marsh willowherb (*Epilobium palustre*), great willowherb (*Epilobium hirsutum*), water mint and water-forget-me-not. The site was bordered by improved pasture (GA1) and, downstream, an intermittent treeline (WL2) of ash, hawthorn and sycamore.

Brown Trout, Lamprey (*Lampetra* sp.), stone loach, three-spined stickleback and pike were recorded via electro-fishing at site B3 (**Appendix A**). The quality of salmonid nursery and spawning habitat was poor with evident water quality pressures. Some very limited salmonid and lamprey spawning habitat was present (but sup-optimal). Deeper glide areas provided some good suitability as adult holding habitat. Soft sediment deposits were shallow and provided poor quality lamprey nursery habitat although a low density were recorded. Despite some good suitability, no European eel or white-clawed crayfish were recorded, although the value of the site was reduced given compaction of substrata and poorly accessible boulder refugia. No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q2-3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of lamprey (*Lampetra* sp.), the aquatic ecological evaluation of site B3 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.10 Representative image of site B3 on the Drish River at Castletown Bridge, September 2023 (facing upstream)

4.1.11 Site B4 – Drish River, Ballyduff Bridge

Site B4 was located on the Drish River (16D02) at Ballyduff Bridge approximately 5.7km downstream of site B3. The swift-flowing, lowland alkaline river (FW2) was largely natural at this location and was 10-12m wide and 0.2-0.5m deep. Localised deeper pool to 0.8m was present downstream of the bridge. The site was typified by swift, shallow glide and occasional riffle and pool. The substrata were dominated by heavily compacted and calcified cobble with occasional interstitial gravels and frequent boulder. Siltation was low overall and no soft sediment deposits were present, even in association with macrophyte beds or pool slacks (i.e., high-energy site). Heterophyllous fool's watercress was locally abundant in open areas with sparse stands of water crowfoot (*Ranunculus* sp.) and marginal beds of watercress and water mint. A single stand of iris (*Iris psuedacorus*) was present on a mid-channel island downstream of the bridge. Ivy-leaved duckweed was present but rare. Aquatic bryophytes dominated the site with abundant Leptodictyum riparium and Fontinalis antipyretica, and more occasional *Ricardia chamedryfolia*, *Pellia endiviifolia* and *Rhynchostegium riparium*. Filamentous algae was present (<1% cover). Reed canary grass with bittersweet, nettle and hedge bindweed lined the channel. The site was bordered by mature treelines of sycamore and ash with occasional willow and elder.

Atlantic salmon, brown trout and stone loach were recorded via electro-fishing at site B4 (**Appendix A**). The site was an excellent quality salmonid nursery, with abundant fast-flowing bryophyte-rich glide supporting a high density of juvenile Atlantic salmon and, less so, brown trout. Good quality spawning habitat (especially for Atlantic salmon) was widespread with abundant mixed gravels and cobbles (including upstream of bridge). Overhanging marginal vegetation and trees in addition to larger

boulder and bank scours provided valuable thermal refugia for adult salmonids. Despite some good suitability, no European eel or white-clawed crayfish were recorded. The high energy site was unsuitable for lamprey ammocoetes although some localised spawning habitat was present. No otter signs were recorded in vicinity of the site (although a regular spraint site is known upstream of the bridge; Triturus data).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids (including Atlantic salmon), the aquatic ecological evaluation of site B4 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.11 Representative image of site B4 on the Drish River at Ballyduff Bridge, September 2023

4.1.12 Site B5 – Drish River, Drish Bridge

Site B5 was located on the Drish River at Drish Bridge (N75) approximately 6.7km downstream of site B4. The swift-flowing lowland depositing river (FW2) had been locally straightened historically with some local bank works but good instream recovery was evident. The river was 6-8m wide (channel up to 10m) and 0.3-0.7m deep, with locally deeper areas to 1.5m. The profile comprised swift deep glide and pool with only very localised riffle upstream of the bridge crossing. The substrata were dominated by clean, mobile carse gravels and cobble, with frequent boulder. Sands and finer gravels were also present locally in pool slacks and along channel margins. Soft sediment accumulations were sand-dominated where present (rare overall). Siltation was low overall. Macrophyte cover was relatively high with locally abundant common clubrush, water crowfoot (*Ranunculus* sp.) and ivy-leaved duckweed. The deep margins also supported occasional heterophyllus fool's watercress, blue water

speedwell, water mint and scattered iris and branched bur-reed. The sloping margins supported abundant reed canary grass which typically overhung the margins (providing valuable refugia for fish). Aquatic bryophyte coverage was locally high with *Fontinalis antipyretica* and *Fissidens* sp. on larger boulder. However, given the fragmented nature of the aquatic vegetation community, the site *did not* represent Annex I floating river vegetation [3260]. Filamentous algae was present, further indicating enrichment. The historically modified and or grazed banks supported abundant reed canary grass with scattered bramble scrub, grey willow and immature oak (*Quercus* sp.). The site was bordered by semi-improved pasture (GA1).

Atlantic salmon, brown trout, European eel, lamprey (*Lampetra* sp.), minnow (*Phoxinus phoxinus*) and stone loach were recorded via electro-fishing at site B5 (**Appendix A**). The site was of very high value for salmonids with excellent quality nursery habitat present (especially for Atlantic salmon) given an abundance of macrophyte beds in swift glide. The site also provided excellent quality holding habitat by way of deeper pool (e.g. under bridge) and overhanging marginal vegetation. Such areas, in addition to frequent large boulder, were also of high suitability for European eel. Although localised, high quality salmonid and lamprey spawning habitat was present upstream of the bridge. The site was also of value for *Lampetra* sp. with a low density recorded in sub-optimal (sand-dominated) soft sediment deposits associated with macrophyte beds. Despite some good suitability for white-clawed crayfish, none were recorded. No otter signs were recorded in vicinity of the site although marking opportunities were poor.

Biological water quality, based on Q-sampling, was calculated as **Q4 (good status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids (including Atlantic salmon), *Lampetra* sp. and Red-listed European eel, in addition to Q4 (good status) water quality, the aquatic ecological evaluation of site B5 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.12 Representative image of site B5 on the Drish River upstream of Drish Bridge, September 2023

4.1.13 Site C1 – Black River, Clonoura

Site C1 was located on the uppermost reaches of the Black River (16B01) that drained to the south of the proposed wind farm site. The site was dry at the time of survey, with no pools of standing water and a dry mud base in a remnant channel. The river channel had been straightened and deepened historically and was 1.5-2m wide with bank heights of 1-2m. Evidently, the channel was ephemeral, likely only conveying water during wetter periods. The channel was heavily scrubbed over with high levels of terrestrial encroachment and willow scrub. The site was bordered by a broad-leaved plantation (WS2) with arable crops (BC1) to the east.

Site C1 was not of fisheries value given its dry, ephemeral nature and absence of aquatic habitats. No otter signs were recorded in the vicinity of the site.

Given the dry, ephemeral nature of the site, it was not possible to collected a biological water quality sample at the time of survey.

Given the absence of aquatic habitats, the aquatic ecological evaluation of site C1 was of **lower importance (lower value)** (**Table 4.3**).



Plate 4.13 Representative image of site C1 on the Black River, September 2023 (dry, ephemeral channel)

4.1.14 Site C2 – Black River, Derryvella

Site C2 was located on the upper reaches of the Black River (16B01) within Derryvella Bog, approximately 3.2km downstream from site C1. The lowland depositing river (FW2) had been straightened and deepened historically, with some recovery evident. The river was 2-2.5m wide and 0.1-0.2m deep, with locally deeper pool to 0.3-0.5m. The stream was culverted underneath a Bord na Móna rail line via a large corrugated pipe culvert. Upstream, flows were low and the channel was heavily scrubbed. Downstream of the culvert, shallow slow-flowing glide and localised riffle was present with occasional pool, grading to slow-flowing glide downstream. The substrata were dominated by humic silt deposits (peat) with scattered heavily-silted small cobble and mixed gravels with occasional small boulder. The river was very heavily shaded by willow and bramble scrub. As a result, macrophytes were limited to water mint and fool's watercress, in addition to localised iris and common reed. Some *Pellia* sp. liverwort grew on muddy banks. The site was bordered by an area of cutover bog (PB4) and semi-improved pasture (GA1) with abundant scrub (WS1).

Brown trout and three-spined stickleback were the only fish species recorded via electro-fishing at site C2 (**Appendix A**). Although recorded previously at the site (Triturus 2021 data), no Atlantic salmon were captured. Despite historical modifications, poor flows and siltation pressures (peat escapement), the site was of some moderate value as a salmonid nursery, at least in vicinity of the culvert where riffle habitat was present. The salmonid spawning value was compromised by siltation but the value likely improved during higher flows. Submerged tree roots and bank scours provided valuable holding areas for adult salmonids. Whilst some limited lamprey spawning habitat was present, ammocoete habitat was unsuitable given the flocculent nature of the silt (peat-dominated). Despite some

suitability for European eel and white-clawed crayfish none were recorded (limited refugia). No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids, the aquatic ecological evaluation of site C2 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.14 Representative image of site C2 on the Black River, September 2023

4.1.15 Site C3 – North Glengoole River, Derryvella

Site C3 was located on the North Glengoole River (16N28) at a Bord na Móna rail crossing (culvert), some 0.25km upstream of the Black River confluence. The lowland depositing river (FW2) had been historically straightened and deepened with V-shaped banks of up to 4m in height and old embankments evident along the channel. The river was 2-2.5m wide and 0.1-0.2m deep, with locally deeper pool to 0.4m. Shallow glide predominated, with only localised riffle associated with macrophyte beds and rare pool. In shallower areas near the culvert the substrata comprised mixed gravels and small cobble with occasional boulder. However, outside of this area, depositional silt dominated (up to 0.2m deep). Hard substrata were exposed to moderate siltation and partial bedding. Cover of macrophytes was high (>75%) with abundant fool's watercress, frequent water mint and brooklime (*Veronica beccabunga*) and localised bulrush. Aquatic bryophytes were not recorded. The river channel became heavily shaded downstream of the culvert with grey willow, hawthorn and gorse (*Ulex europaeus*). A narrow and fragmented herbaceous layer supporting purple loosestrife, hedge bindweed, willowherbs (*Epilobium* spp.), hogweed (*Heracleum sphondylium*), reed canary grass and

rank grasses was present along the channel margins. The site was bordered by dry meadows habitat (GS2) and improved pasture (GA1) in a wider landscape of cutover bog (PB4).

Brown trout and three-spined stickleback were the only fish species recorded via electro-fishing at site C3 (**Appendix A**). Although recorded previously (Triturus 2021 data), no Atlantic salmon were captured. The site was of moderate value for salmonids only, supporting a low density of mixed cohort brown trout, given significant siltation pressures. The shallow stream provided some suitable spawning habitat (exposed gravels) although these were heavily silted. Localised small pools associated with the culvert, bank scours and macrophyte stands provided some holding habitat for adult salmonids. Despite some suitability for European eel and white-clawed crayfish, none were recorded. No otter sign were recorded in vicinity of the site (few marking opportunities).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids, the aquatic ecological evaluation of site C3 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.16 Representative image of site C3 on the North Glengoole River, September 2023

4.1.16 Site C4 – Black River, Derryhogan

Site C4 was located on the Black River (16B01) at a local road bridge, approx. 1.5km downstream of site C2. The river had been extensively straightened and deepened, with very steep (near vertical) trapezoidal banks of 4-5m in height. The river flowed under the local road via a corrugated pipe culvert (fish passable). The homogenous river section was 3-4m in a channel up to 5-6m wide. The depth

varied from 0.2 to 0.5m, with occasional pool areas to 1m. Deep slow-flowing glide dominated the site, with occasional pool. Riffle was present upstream of the road culvert. The substrata comprised compacted and heavily silted mixed gravels and cobble, with occasional boulder (near culvert only). Bank erosion was frequent (exposed clay) and contributed to the silt loading. Siltation was high overall (largely peat-derived) with deep silt-sand deposits present along channel margins (up to 0.2m deep). The site was heavily shaded by mature treelines of ash, elder, hawthorn and cypress (Cupressaceae family). As a result, macrophytes were absent. Aquatic bryophytes were not recorded, with the liverworts *Pellia endiviifolia* and *Conocephalum conicum* on muddy banks. The site was bordered by improved pasture (GA1).

Brown trout and stone loach were the only two fish species recorded via electro-fishing at site C4 (**Appendix A**). Adult trout dominated, with only low numbers of juveniles present. The site was a moderate quality salmonid spawning and nursery habitat. Holding habitat, by way of deeper pools, bank undercuts and submerged tree root systems, was of good quality. Despite high siltation, soft sediment accumulations did not support lamprey ammocoetes (largely humic or clay-based in nature). Some very limited superficial spawning gravels suitable for lamprey were present in the vicinity of the culvert although spawning habitat improved upstream, where riffles were more commonplace. Aside from submerged tree root systems, suitability for European eel and white-clawed crayfish was relatively poor given limited accessible instream refugia (neither species recorded). No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids, the aquatic ecological evaluation of site C4 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.16 Representative image of site C4 on the Black River, September 2023 (downstream of culvert)

4.1.17 Site C5 – Black River, Two Mile Borris

Site C5 was located on the Black River (16B01) at the N75 road crossing, approx. 5km downstream of site C4. As per upstream, the lowland river (FW2) at this location had been straightened and deepened historically, flowing in a steep, 5-8m high trapezoidal channel. The river was 6-8m wide and 0.2-0.6m deep, with locally deeper areas to 1m. Slow-flowing glide predominated, with localised riffles near the road bridge and occasional pools. The substrata were dominated by cobble with frequent boulder and small interstitial patches of mixed gravels. Siltation was moderate overall (peat) but soft sediment accumulations were localised. The substrata were relatively mobile. The site supported a diverse range of macrophytes, with frequent lesser water parsnip and occasional water starwort (*Callitriche* sp.), water mint, water crowfoot (*Ranunculus* sp.) and watercress. Curled pondweed (*Potamogeton crispus*) was present but rare. Common duckweed and ivy-leaved duckweed were both frequent. Coverage of aquatic bryophytes was high, with abundant *Fontinalis antipyretica* on larger cobble/boulder. Filamentous algae was present (1% cover). Given the presence of several indicator species (EC, 2013) and the high coverage of bryophytes, the aquatic plant community was considered representative of the Annex I habitat 'Water courses of plain to montane levels, with submerged or floating vegetation of *Ranunculion fluitantis* and *Callitricho-Batrachion* (low water level during summer) or aquatic mosses [3260]'. Riparian shading was relatively high given the presence of maturing alder plantations along the channel (both banks). The site was bordered by improved pasture (GA1) and grassy verges habitat (GS2).

Atlantic salmon, brown trout, European eel, lamprey (*Lampetra* sp.) and stone loach were recorded via electro-fishing at site C5 (**Appendix A**). The site was of highest value as a salmonid nursery, with

boulder-rich glide and riffle supporting a moderate density of Atlantic salmon parr and a lower number of juvenile brown trout. Deeper glide with frequent bank scours and submerged tree roots provided valuable holding areas for adult trout. Spawning substrata was sparse and impacted by siltation pressures (but nonetheless present). The site was also of high value for European eel with abundant boulder and cobble supporting a moderate density of juveniles and small adults. Soft sediment accumulations were largely confined to the road culvert and these humic areas supported a low density of small *Lampetra* sp. ammocoetes. Despite some good suitability, no white-clawed crayfish were recorded (but known from the river, Triturus 2021 data). Abundant otter prints were recorded in marginal mud under the bridge (ITM 619139, 657812).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of Annex I floating river vegetation [3260], the aquatic ecological evaluation of site C5 was of **county importance** (**Table 4.3**).



Plate 4.17 Representative image of site C5 on the Black River, September 2023

4.1.18 Site D1 – Breegagh River, Killeen

Site D1 was located on the Breegagh River (16B03) at a local road crossing, where the river flowed through a stacked three-bore box culvert. The small lowland river (FW2) had been straightened and deepened historically, resulting in a homogenous channel with poor hydromorphology. Boulder revetments were present in the vicinity of the culvert. The river was 2.5-3m wide and 0.3-0.7m deep in deep, slow-flowing glide. Pool was occasional. Riffles were limited to the vicinity of the culvert. The substrata were dominated by compacted cobble with occasional boulder and limited interstitial mixed

gravels. The site suffered from heavy siltation, although deposits were flocculent, with only very localised, shallow accumulations. Large woody debris (LWD) was frequent instream which improved habitat heterogeneity of the straightened channel. The river flowed through a maturing broad-leaved plantation and shading was high. As a result, macrophytes were limited to occasional fool's watercress, water mint and lesser water parsnip along channel margins in more open areas. Reed canary grass was abundant along channel margins and created overhangs of high value for salmonids. Aquatic bryophytes were limited to localised *Brachythecium rivulare* on exposed boulder near the culvert. The site was bordered by a broad-leaved plantation of sycamore, wych elm (*Ulmus glabra*) and alder (*Alnus glutinosa*) (WD1), with dense bramble scrub (WS1) and improved pasture (GA1).

Atlantic salmon and brown trout were the only fish species recorded via electro-fishing at site D1 (**Appendix A**). The site was of good value as a salmonid nursery, supporting a moderate density of Atlantic salmon parr and juvenile trout. The site was of highest value as a holding habitat for adult trout, with frequent scoured banks and instream LWD providing valuable deeper glide and pool areas in an otherwise shallow river section. The site was of poor quality as a spawning habitat given significant siltation pressures. Despite some suitability, no European eel or white-clawed crayfish were recorded. A regular otter spraint site (with fish remains) was recorded on marginal mud in the box culvert (ITM 621359, 650301).

Biological water quality, based on Q-sampling, was calculated as **Q3-4 (moderate status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids (including Atlantic salmon) and utilisation by otter, the aquatic ecological evaluation of site D1 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.18 Representative image of site D1 on the Breegagh River, September 2023

4.1.19 Site D2 – Breegagh River, Ballymurreen Bridge

Site D2 was located on the Breegagh River (16B03) at Ballymurreen Bridge, approx. 4.8km downstream of site D1. The lowland river (FW2) had been straightened historically but not deepened and retained many good semi-natural characteristics. However, livestock poaching pressures has significantly impacted the quality of aquatic habitats since previous surveys of the site (September 2021). The river was 4-5m wide (channel up to 7m wide in places) and 0.2-0.4m deep. Locally deeper glide and pool to 0.8m was present. The profile comprised slow-flowing glide with occasional riffles near the bridge, and pool becoming more frequent downstream. The substrata were dominated by soft sediment deposits with only localised areas of exposed mixed gravels and cobbles (in contrast to 2021 when gravels were widespread). Sand patches were also present. The site supported sparse growth of macrophytes with scattered water crowfoot (*Ranunculus* sp.), lesser water parsnip, water forget-me-not, watercress and branched bur-reed. Filamentous algae were present, indicating enrichment. Aquatic bryophytes were limited to very occasional *Brachythecium rivulare* on larger, more stable boulder. The river was flanked on the east bank by a mature treeline of blackthorn, hawthorn, ash, elder, sycamore and bramble, with the west bank featuring improved grassland (GA1).

Atlantic salmon, brown trout, lamprey (*Lampetra* sp.) and stone loach were recorded via electro-fishing at site D2 (**Appendix A**). The site was a moderate quality salmonid nursery, with the value reduced in recent years due to evident siltation pressures which reduced the distribution of gravel and cobble areas. The shallow site was of relatively poor value as a holding habitat for adult salmonids although some scoured areas and overhanging vegetation provided valuable areas. Whilst some good quality nursery areas were present in association with *Ranunculus* beds, the site was poor overall given widespread siltation and low macrophyte cover. Lamprey ammocoete habitat was widespread although much of the soft sediment accumulations were clay-dominated and thus sub-optimal for *Lampetra* sp. Lamprey spawning habitat by way of finer gravels was present but highly localised. The site was of poor value for European eel given a paucity of accessible instream refugia and the shallow nature. Despite some suitability for white-clawed crayfish, none were recorded (although positive eDNA at the site in 2021). No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids (including Atlantic salmon) and lamprey (*Lampetra* sp.), the aquatic ecological evaluation of site D2 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.19 Representative image of site D2 on the Breegagh River at Ballymurreen Bridge, September 2021 (top) and September 2023 (bottom) showing evident deterioration in water quality and aquatic habitats due to livestock poaching

4.1.20 Site D3 – Breegagh River, Archerstown Bridge

Site D3 was located on the lower reaches of the Breegagh River (16B03) at Archerstown Bridge, approximately 9.6km downstream of site B2. The swift flowing lowland depositing river (FW2) was semi-natural in vicinity of the bridge, with some local bank modifications but an otherwise largely

natural channel. The river was 2-3m wide in a 4-5m channel upstream with braiding around a small island downstream of the bridge (river also wider). The river averaged 0.3-0.6m deep with locally deeper areas to 1.6m. The profile comprised riffle and swift deep glid with occasional pool. The substrata of the calcareous river were dominated by cobble and clean, mobile mixed gravels with frequent boulder. Beds of sand were present locally with flocculent soft sediment in slacks and along channel margins. Siltation was low overall given high flow rates and macrophyte cover. The site was heavily vegetated with abundant water crowfoot (*Ranunculus* sp.) and frequent heterophyllus lesser water parsnip. Fool's watercress was also frequent with occasional water mint, ivy-leaved duckweed and rare branched bur-reed. Cover of aquatic bryophytes was high with locally abundant *Fontinalis antipyretica*, *Chiloscyphus polyanthos* and *Leptodictyum riparium*. Larger boulders supported *Rhynchostegium riparioides*. The aquatic vegetation community was considered representative of the Annex I habitat floating river vegetation [3260]. Cover of filamentous algae was high (10%), despite high flow rates, indicating enrichment. The channel margins were dominated by reed canary grass with abundant bittersweet. The mature riparian zones supported treelines of sycamore, willow species and ash with abundant bramble and nettle. The site was bordered by residential properties (BL3/GA2) and improved pasture (GA1) with mature buffers.

Atlantic salmon, brown trout, European eel, minnow and stone loach were recorded via electro-fishing at site D3 (**Appendix A**). The site was of very high value for salmonids with excellent quality nursery habitat present (especially for Atlantic salmon) given an abundance of macrophyte beds in swift glide. The site also provided excellent quality holding habitat by way of deeper pool (e.g. downstream of bridge), extensive macrophyte beds and overhanging marginal vegetation. Such areas, in addition to frequent large boulder, were also of high suitability for European eel and white-clawed crayfish (the latter of which was not recorded). High quality spawning habitat for both salmonids and lamprey was present upstream and downstream of the bridge. However, there was a paucity of suitable lamprey nursery habitat with soft sediment accumulations shallow and flocculent in nature. An otter spraint site was recorded on a marginal boulder immediately downstream of the easternmost arch (ITM 613956, 656844).

Biological water quality, based on Q-sampling, was calculated as **Q3-4 (moderate status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than ‘least concern’, according to national red lists, were recorded via Q-sampling.

Given the presence of Annex I floating river vegetation [3260], the aquatic ecological evaluation of site D3 was of **county importance** (**Table 4.3**).



Plate 4.20 Representative image of site D3 on the Breegagh River at Archerstown Bridge, September 2023

4.1.21 Site E1 – River Goul, Fennor

Site E1 was located on the upper reaches of the River Goul (15G02) at a local road and proposed GCR crossing. The narrow lowland depositing river (FW2) had been extensively straightened and deepened (embankments & spoil heaps evident), resulting in a typically homogenous trapezoidal channel with poor hydromorphology, especially upstream of the bridge. The heavily modified river flowed under the road via 3 x pipe culverts (fish passable). The profile comprised slow-flowing glide and pool although faster glide was located downstream of the culverts. The substrata were dominated by clay-dominated soft sediment up to 0.2m in depth with scattered angular boulder and discarded house bricks. The littorals supported silted mixed gravels and cobble but were typically exposed clay/mud. Given high riparian shading, macrophytes were limited to fool's watercress, blue water speedwell and brooklime in open areas. Aquatic bryophyte coverage was low with localised *Leptodictyum riparium* on larger substrata. Large woody debris and trash was frequent instream and resulted in a number of blockages to flow (although this increased habitat heterogeneity). The site was heavily shaded by mature grey willow, elder and hawthorn treelines with nettle, great willowherb, bindweed and bramble-dominated scrub. The site was bordered by improved pasture (GA1) and a residential property.

Brown trout, stone loach and lamprey (*Lampetra* sp.) were recorded via electro-fishing at site E1 (**Appendix A**). The site was a moderate quality salmonid habitat, at best, supporting a low density of brown trout only, given significant siltation pressures and poor hydromorphology. The quality of salmonid nursery habitat was poor with an absence of suitable spawning habitat (due to siltation). The narrow channel featured frequently undercut clay banks and these coupled with LWD and occasional

pools provided some holding habitat for small adult salmonids. European eel habitat was moderate overall although none were recorded. Whilst soft sediment accumulations were dominant, these supported only a low density of lamprey ammocoetes due to the clay nature of the sediment. Despite some low suitability for white-clawed crayfish, none were recorded and no evidence of the species (e.g. burrows in clay banks) were noted. No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids and lamprey (*Lampetra* sp.), the aquatic ecological evaluation of site E1 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.21 Representative image of site E1 on the River Goul, September 2023

4.1.22 Site E2 – Ardreagh River, Lisduff

Site E2 was located on the Ardreagh River (15A03) at a local road and proposed GCR crossing. The small swift-flowing lowland river (FW2) had been locally straightened and deepened upstream of the bridge but retained some semi-natural features downstream (e.g. meanders). The small calcareous stream was 1-2m wide and 0.1-0.2m deep, with a paucity of deeper areas. The profile comprised swift glide and riffle with only localised, small pools. The substrata were dominated by calcified cobble and coarser gravels with scattered boulder. Soft sediment accumulations were present but these were shallow and flocculent. Siltation was higher than expected for the river type. Linear stands of fool's watercress and water mint were frequent along channel margins, with occasional watercress and lesser water parsnip. Common duckweed was also present locally in slacks. Aquatic bryophyte coverage as low although some *Pellia endiviifolia* and *Chiloscyphus polyanthos* were present on larger

substrata. Downstream of the bridge the river was heavily shaded by mature treelines of hawthorn, alder and grey willow, with the banks cleared historically upstream. The site was bordered by improved pasture (GA1) with wet grassland (GS4) upstream of the bridge on the west bank.

Atlantic salmon, brown trout, European eel and three-spined stickleback were recorded via electro-fishing at site E2 (**Appendix A**). The site was a moderate quality salmonid nursery and spawning habitat due to evident siltation pressures. A low density of juvenile trout and salmon were present. Holding opportunities were typically absent given the shallow nature of the site. The site was of moderate value for European eel. Although some limited lamprey spawning habitat was present, calcification of the bed and siltation pressures and the predominance of larger substrata reduced the value overall. Suitable ammocoete habitat was absent. Despite some suitability, no white-clawed crayfish were recorded. However, a regular otter spraint site was recorded on a boulder underneath the bridge arch that contained recent crayfish remains (ITM 629612, 660282).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids (including Atlantic salmon) and European eel, utilisation by otter and the likely presence of white-clawed crayfish, the aquatic ecological evaluation of site E2 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.22 Representative image of site E2 on the Ardreagh River, September 2023

4.1.23 Site E3 – Lisduff Stream, Lisduff

Site E3 was located on the Lisduff Stream (15L08), a tributary of the Ardreagh River, at a local road and proposed GCR crossing. The small calcareous lowland stream (FW2) crossed under the road via a pipe culvert and had been straightened and deepened historically, resulting in a trapezoidal channel with poor hydromorphology and steep banks of >2m in height. The stream was 1-1.5m wide and 0.05-0.1m deep and suffered from low summer flows at the time of survey. The profile comprised slow-flowing riffle and glide with an absence of pool. The substrata were dominated by heavily calcified mixed gravels and cobble with scattered small boulder. Flocculent soft sediment beds were associated with instream macrophytes. With the exception of a small area at the culvert, the stream was very heavily vegetated with near 100% cover of fool's watercress and watercress. Terrestrial encroachment of the very shallow channel was high with herbaceous vegetation also growing from the bed. Aquatic bryophytes were limited to occasional *Leptodictyum riparium* and *Pellia endiviifolia*. The stream was lined by a stockproof hedgerow of hawthorn with an open banktop to the east. The site was bordered by improved pasture (GA1).

No fish were recorded via electro-fishing at site E3. The site was not of fisheries value at the time of survey given its very shallow (possibly ephemeral) nature, historical modifications and poor quality aquatic habitats. There was no suitability for white-clawed crayfish. No otter signs were recorded in the vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site E3 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.23 Representative image of site E3 on the Lisduff Stream, September 2023

4.1.24 Site E4 – Tincashel River, Lisduff

Site E4 was located on the Tincashel Stream (15T05) at a local road and proposed GCR crossing. The small swift-flowing lowland stream (FW2) had been straightened and deepened throughout (especially upstream of road culvert), although some good instream recovery had occurred. The stream flowed in a trapezoidal channel and was 2-2.5m wide and 0.1-0.2m deep, with a paucity of deeper areas. The profile comprised swift shallow glide and riffle with only occasional small pool, typically associated with macrophyte beds or instream trash/debris. The substrata were dominated by calcified cobble and coarse gravels although fine to medium gravel patches were present locally. Small boulders were locally frequent. Soft sediment accumulations were present but were shallow and flocculent. Siltation was light overall. Linear stands of fool's watercress were frequent along the stream margins with frequent water mint and occasional brooklime and watercress. Cover of aquatic bryophytes was locally high with *Pellia endiviifolia* and *Leptodictyum riparium* on larger substrata and calcified areas of bed. Whilst the east bank had been historically cleared (along a farm access track), the west bank supported a mature treeline dominated by hawthorn, elder and sycamore. The site was bordered by improved pasture (GA1).

Brown trout was the only fish species recorded via electro-fishing at site E4 (**Appendix A**). The site was a good quality salmonid nursery, despite its generally shallow and historically modified nature. Natural bed calcification reduced the capacity of the site as a salmonid/lamprey spawning habitat although some good quality substrata were present locally. The shallow site was also of poor value as a salmonid holding habitat. Good quality lamprey spawning habitat (fine gravels) was present locally although suitable ammocoete habitat was absent in vicinity of the survey site. Despite some moderate

suitability, no European eel or white-clawed crayfish were recorded. No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids, the aquatic ecological evaluation of site E4 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.24 Representative image of site E4 on the Tincashel River, September 2023

4.1.25 Site E5 – Clomantanagh Lower Stream, Clomantanagh Lower

Site E5 was located on the Clomantagh Lower Stream (15C91) at a local road and proposed GCR crossing. In contrast to EPA mapping, the stream had been extensively realigned along field boundaries and was culverted under the local road before grading into a large, shallow drainage channel of 3m width and <0.1m depth which ran parallel to the road. Flowing water was absent (i.e. stagnant). The substrata comprised exclusively of deep, anoxic soft sediment (up to 0.3m in depth) with sands, scattered boulder and abundant woody debris. The channel supported locally frequent fool's watercress and watercress in open areas, with scattered iris. Aquatic bryophytes were absent. The channel was very heavily shaded by mature treelines dominated by alder and sycamore. The site was bordered by improved pasture (GA1).

No fish were recorded via electro-fishing at site E5. The site was not of fisheries value given its very heavily silted and modified nature, an absence of flows and poor connectivity with downstream

habitats. There was no suitability for white-clawed crayfish. No otter signs were recorded in the vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q2 (bad status)** (**Appendix B**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site E5 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.25 Representative image of site E5 on the Clomantanagh River, September 2023

4.1.26 Site E6 – unnamed stream, Kilrush

Site E6 was located on an unnamed, unmapped tributary of the Nuenna River at a local road and proposed GCR crossing. The upland eroding watercourse (FW1) had been locally deepened and straightened along field boundaries but retained many semi-natural characteristics in vicinity of the single arch masonry bridge. The stream flowed over a moderate gradient in a trapezoidal channel with bank heights of up to 3m. The stream was 1.5-2.5m wide and 0.1-0.15m deep. The profile comprised riffle and cascades with frequent small pool. The substrata were dominated by angular boulder and cobble with frequent interstitial sands and fine gravels. Despite eroding conditions, siltation was high overall (high clay fraction) although soft sediment accumulations were absent. Given high shading and mobile substrata, macrophytes and aquatic bryophytes were absent. The stream was heavily shaded with dense scrub of grey willow, bramble, hazel (*Corylus avellana*) and ferns. The site was bordered by improved pasture (GA1).

No fish were recorded via electro-fishing at site E6. The site was of poor fisheries value given its heavily silted and shallow nature and poor connectivity with downstream habitats. The stream showed some ephemeral characteristics and may run dry, seasonally. There was no suitability for white-clawed crayfish. No otter signs were recorded in the vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (good status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site E6 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.26 Representative image of site E6 on an unmapped Nuenna River tributary, September 2023

4.1.27 Site E7 – Gorteenahilla River, Ballyguider Bridge

Site E7 was located on the Gorteenahilla River (15G08) at Ballyguider Bridge, a proposed GCR crossing. The upland eroding river (FW1) had been straightened and deepened locally in vicinity of the twin arch masonry bridge (cobbled apron, perched, <0.1m) but retained some good semi-natural characteristics. The river was 4-5m wide and 0.1-0.3m deep, with occasional deeper areas to 1.2m. The profile comprised a series of riffles, deep slow-flowing glides and occasional pools. A deep pool was located immediately downstream of the bridge apron. The substrata were dominated by angular cobble and boulder with frequent mixed gravels (though no extensive areas). Patches of sand and fine gravels were present but rare overall. Soft sediment accumulations were not present given high energy characteristics although siltation was moderate and higher than expected for river type. Cover of floc[1] was high (30%). The site was well shaded and macrophyte cover was sparse with only

[1] floc is defined as an aggregation of (mostly dead) organic material, mainly from algae and diatoms, but also with potential origins from decaying macrophytes and associated decomposers (bacteria and fungi) (Moorkens & Killeen, 2020)

occasional fool's watercress present. Aquatic bryophyte coverage was also low with occasional *Fontinalis antipyretica*, *Rhynchostegium riparioides* and Fissidens sp. The red algae *Hildenbrandia* sp. was present locally on boulder. The river was lined by mature treelines of horse chestnut (*Aesculus hippocastanum*), sycamore with abundant blackthorn and bramble. The site was bordered by a residential property and improved pasture with narrow borders (GA1).

Atlantic salmon and brown trout were the only fish species recorded via electro-fishing at site E7 (**Appendix A**). The site was of very high value as a salmonid nursery, with abundant Atlantic salmon parr and a low density of brown trout. The site also provided some localised good quality holding areas for adult salmonids (e.g. pool downstream of apron). However, the site was of moderate value only as a spawning habitat given the predominance of larger substrata in addition to siltation and enrichment pressures (i.e. floc cover). The high energy site was unsuitable for lamprey. Despite some good suitability, no European eel or white-clawed crayfish were recorded. An otter spraint site was recorded on a ledge under the eastern bridge arch (ITM 638980, 666779).

Biological water quality, based on Q-sampling, was calculated as **Q4 (good status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids (including Atlantic salmon) and utilisation by otter, in addition to Q4 (good status) water quality, the aquatic ecological evaluation of site E7 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.27 Representative image of site E7 on the Gorteenahilla River, September 2023

4.1.28 Site E8 – Lismaine Stream, Clone

Site E8 was located on the Lismaine Stream (15L16), a tributary of the River Nore, at a local road and proposed GCR crossing. The stream (FW1) crossed under the road via a box culvert (rendered bed) and suffered from low flows at the time of survey. The small stream had been extensively straightened and deepened historically with poor recovery evident in the steep-sided trapezoidal channel. The stream was 2m wide and 0.05-0.1m deep. The profile comprised very slow flowing glide and riffle with occasional near stagnant pool. The banks were typically undercut/scoured, indicating spate tendencies of the modified channel. The substrata were dominated by mixed gravels and cobble which were heavily silted. Boulder was scattered throughout. Siltation was high overall (depositional habitat at time of survey). Livestock poaching was present upstream. Given high shading and poor flows, macrophytes were not present. Aquatic bryophyte coverage was also low with only very occasional *Rhynchostegium riparioides* and *Pellia epiphylla*. The liverwort *Conocephalum conicum* was locally frequent on muddy banks. The stream was lined by mature treelines of sycamore and ash with hawthorn and blackthorn. The site was bordered by improved pasture (GA1).

Three-spined stickleback were the only fish recorded via electro-fishing at site E8 (**Appendix A**). With the exception of low densities of this species, the site was not of fisheries value at the time of survey given very poor flows in addition to the shallow nature of the site and siltation pressures. However, there was some physical suitability for small salmonids (known further downstream - Triturus 2021 data). The site was unsuitable for white-clawed crayfish. No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids (including Atlantic salmon) and utilisation by otter, the aquatic ecological evaluation of site E8 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.20 Representative image of site E8 on the Lismaine Stream, September 2023

4.1.29 Site E9 – Lisdowney Stream, Grange Bridge

Site E9 was located on the Lisdowney Stream (15L02), a tributary of the River Nore at Grange Bridge, a proposed GCR crossing. The high energy lowland river (FW1) had been historically straightened and deepened, with bank modifications in vicinity of the bridge, but demonstrated some good instream recovery. The river was 6-8m wide and 0.3-0.5m deep, with localised deeper areas to >1m. The profile comprised swift glide and pool. A small weir was present under the bridge with a larger weir (1.5m fall) located 50m downstream of the bridge. Given high energy conditions, the substrata were dominated by compacted and calcified cobble and boulder with more localised mixed gravels. Larger boulder were scattered. Cyanobacterial deposits were widespread on larger substrata. This resulted in low coverage of aquatic vegetation. Macrophytes were limited to occasional marginal stands of fool's watercress. Aquatic bryophyte coverage was low with only very occasional *Leptodictyum riparium* and *Rhynchostegium riparioides*. The river was shaded by mature mixed woodland and treelines supporting hawthorn, sycamore, ash, beech (*Fagus sylvatica*) and holly (*Ilex aquifolium*). The site was bordered by improved pasture (GA1) and a residential property upstream.

Atlantic salmon, brown trout, European eel and three-spined stickleback were recorded via electro-fishing at site E9 (**Appendix A**). The site was of good value for salmonids supporting moderate densities of Atlantic salmon and brown trout. The site was of highest value as a salmonid nursery with frequent swift glide although the paucity of instream refugia reduced the value overall. Localised pool and deep glide/undercuts provided some valuable holding habitat for adult salmonids (especially downstream of the large weir). The site was of some value for spawning salmonids and lamprey but high calcification/compaction rates reduced the capacity of the site. The high energy site was unsuitable as a lamprey nursery habitat. European eel suitability was locally good in deep pools/glide

with a low density recorded. Despite some suitability, no white-clawed crayfish were recorded. A regular otter spraint site was recorded on boulder revetment under the bridge (ITM643579, 668675).

Biological water quality, based on Q-sampling, was calculated as **Q4 (good status)** (**Appendix B**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of salmonids (including Atlantic salmon) and European eel, in addition to utilisation by otter and Q4 (good status) water quality, the aquatic ecological evaluation of site E9 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.29 Representative image of site E9 on the Lisdowney Stream, September 2023

4.1.30 Site E10 – River Nore, Parksgrove

Site E10 was located on the River Nore (15N01) at a proposed GCR crossing approximately 0.7km upstream of Ballyragget Bridge. The large lowland depositing river (FW2) had been historically modified and was 15-20m wide and >1.5m deep, with a profile dominated by deep glide with associated pool (no riffles). The substrata comprised abundant compacted sands with scattered, bedded boulder and cobble. Small patches of mixed gravels were present along the steep margins of the channel, alongside some depositional soft sediment areas. Siltation was high. Given the high average depth, macrophyte coverage was low with intermittent linear stands of branched bur-reed and rare common clubrush. Aquatic bryophytes were limited to rare *Fontinalis antipyretica* and *Rhynchostegium riparioides*. Cover of filamentous algae (*Cladophora* sp.) was high, indicating significant enrichment. The steep, near vertical margins were lined by abundant reed canary grass with only scattered grey willow and hawthorn. The site was bordered by dry meadow habitat on the

west bank (GS2) with heavily improved pasture (GA1) on the east.

Electro-fishing was not undertaken at site E10 due to prohibitive depths and water volumes. However, the river in the vicinity of Ballyragget is known to support Atlantic salmon, brown trout, *Lampetra* sp., European eel, minnow, stone loach and rudd (*Scardinius erythropthalmus*) (Triturus 2021 data). The deep glide at the proposed crossing was of value only as a salmonid holding habitat, with little suitability as spawning or nursery areas. Lamprey spawning habitat was also largely absent although marginal soft sediment deposits provided some moderate quality nursery areas. Suitability for white-clawed crayfish was low. Whilst of value as an occasional foraging habitat, no otter signs were recorded in vicinity of the site (few marking opportunities).

Biological water quality, based on Q-sampling, was calculated as **Q3 (good status)** (**Appendix B**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the location of the site within the River Barrow and River Nore SAC (002162) and River Nore SPA (004233), the aquatic ecological evaluation of site E10 was of **international importance** (**Table 4.3**).



Plate 4.30 Representative image of site E10 on the River Nore, September 2023

4.2 Lacustrine survey site results

4.2.1 Site L1 – lake/wetland, Longfordpass South

Site L1 was a small, interconnected twin-basin lake of c.1ha located in the vicinity of proposed turbine T1 in Littleton Bog. The small heavily peat-stained lake was shallow, averaging <0.5m deep with very

shallow sloping margins and a base comprised exclusively of peat (often deep, >0.2m). The open waterbody, which evidently reduced in area and depth during dry periods, supported sparse macrophyte growth with scattered bottle sedge and bulrush, rare bog pondweed (*Potamogeton polygonifolius*) and a single stand (in north basin) of common reed. Small stands of bent grass (*Agrostis* sp.) were frequent around the margins and extended into the basins. The exposed peat littorals supported abundant spike-rush (*Eleocharis palustris*), bog cotton (*Eriophorum angustifolium*) and deer grass (*Trichophorum cespitosum*) with scattered rushes (*Juncus* spp.) and stunted downy birch, lodgepole pine (*Pinus contorta*) and willow (*Salix* sp.). The lake was bordered by extensive, heavily degraded cutover bog (PB4) with multiple (maintained) drainage channels adjoining the lake.

With the exception of three-spined stickleback (recorded via sweep sampling), site L1 was of poor fisheries value given its shallow, fluctuating and peat nature. However, there was high suitability for amphibians (albeit none were recorded). No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**). The water stick insect *Ranatra linearis*, a recent discovery in Ireland (Nelson, 2018), was recorded in the sample (**Plate 4.49**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L1 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.31 Representative image of site L1, October 2023

4.2.2 Site L2 – lake/wetland, Bawnreagh

Site L2 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary. The large, shallow linear cutover lake covered an area of c.1ha and ranged from 0.2-0.5m deep. The bed was comprised entirely of bare soft silt (peat). Peat staining was high at the time of

survey. Macrophyte coverage was low with scattered stands of bog pondweed, broad-leaved pondweed, bulbous rush (*Juncus bulbosus*). Stonewort (*Chara* sp.), *Sphagnum* sp. mosses and bladderwort (*Utricularia* sp.) were present along the margins but rare overall. Cottongrass and bottle sedge were abundant in the peaty littorals. The southern part of the lake was more of a wetland habitat (likely dries out, on occasion) and supported abundant *Sphagnum cuspidatum*, broad-leaved and bog pondweed, cotton grass and frequent bottle sedge. The lake was situated in cutover bog (PB4) with heath and scattered pre-thicket lodgepole pine.

With the exception of three-spined stickleback (considered likely present), site L2 was of poor fisheries value given its very shallow, peat nature and lack of connectivity to superior fisheries habitats (e.g. flowing watercourses). However, the site was of high suitability for amphibians, although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L2 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.32 Representative image of site L2, October 2023

4.2.3 Site L3 – lake/wetland, Bawnreagh

Site L3 was located within an extensive area of cutover bog (Littleton Bog), within the proposed site boundary and adjacent to site L2. The shallow linear cutover lake covered an area of c.0.5ha and ranged from 0.2-0.6m deep. The bed was comprised entirely of bare soft silt (peat). Peat staining was high at the time of survey. Given the typically flocculent bed, macrophyte growth was sparse with very scattered stands of bog pondweed and broad-leaved pondweed and rare bulbous rush. Cottongrass,

Sphagnum cuspidatum and bottle sedge were abundant in the exposed peaty littorals. The shallow sloping, bare peat littorals, supported sparse but widespread bladderwort (*Utricularia* sp.) and more localised stonewort (*Nitella* sp.). The lake was bordered by (locally regenerating) cutover bog (PB4) with abundant lodgepole pine, downy birch, purple moor grass (*Molinia caerulea*) and heather (*Calluna vulgaris*).

With the exception of three-spined stickleback (considered likely present), site L3 was of poor fisheries value given its very shallow, peat nature and lack of connectivity to superior fisheries habitats (e.g. flowing watercourses). However, the site was of high suitability for amphibians, although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L3 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.33 Representative image of site L3, October 2023

4.2.4 Site L4 – lake/wetland, Bawnreagh

Site L4 was a small lake located between proposed turbines T1 & T2. The 1.3ha heavily peat-stained lake was shallow, averaging <0.5m deep with shallow sloping margins and a base comprised exclusively of peat (often compacted but locally deep, >0.2m). The waterbody was somewhat sheltered from prevailing winds but supported sparse macrophyte growth with scattered small stands of common reed, bulrush, broad-leaved pondweed and bog pondweed, typically in marginal areas, with abundant bog cotton in the inundated littorals. These areas also supported occasional

bladderwort (*Utricularia* sp.). The lake was bordered by cutover bog (PB4) supporting abundant heather and stunted lodgepole pine with frequent downy birch and scattered gorse.

With the exception of three-spined stickleback (considered likely present), site L4 was of poor fisheries value given its very shallow, peat nature and lack of connectivity to superior fisheries habitats (e.g. flowing watercourses). However, there was high suitability for amphibians, although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L4 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.34 Representative image of site L4, October 2023

4.2.5 Site L5 – lake/wetland, Bawnreagh

Site L5 was a small, irregularly shaped cutover lake located in the vicinity of proposed turbine T2. The 1.4ha heavily peat-stained lake was shallow, averaging 0.5-1m deep with quickly shelving margins and a base comprised exclusively of peat (often compacted but locally deep, >0.3m). The largely open waterbody supported sparse macrophyte growth with scattered small stands of broad-leaved pondweed and common reed throughout the lake. Bog pondweed was rare. The northern shoreline supported a large bed of water horsetail (*Equisetum fluviatile*) with bottle sedge frequent along all margins. The shallow bare peat littorals supported frequent stonewort (*Chara* sp.) with rare bladderwort (*Utricularia* sp.). Bottle sedge and cotton grass were locally abundant along the lake margins with occasional marsh pennywort (*Hydrocotyle vulgaris*). The lake was bordered by cutover

bog (PB4) supporting abundant heather, stunted lodgepole pine and downy birch with abundant purple moor grass.

With the exception of three-spined stickleback (recorded in sweep sample), site L5 was of poor fisheries value given its shallow, peat nature and lack of connectivity to superior fisheries habitats (e.g. flowing watercourses). However, there was some low suitability for European eel and the site was of high suitability for amphibians, although none were recorded during the site visit. No otter signs were recorded in vicinity of the site. Mute swan (*Cygnus olor*) were present on the lake.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L5 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.35 Representative image of site L5, October 2023

4.2.6 Site L6 – lake/wetland, Bawnreagh

Site L6 was a large wetland complex with a small central ponding area. Although the pond held water at the time of survey, the depth was <0.05m with a bed comprised entirely of flocculent peat (up to 0.3m in depth). The depth was often greater in the surrounding wetland (although this too was shallow, <0.1m). The ephemeral pond featured sparse macrophyte growth with scattered bulrush and water mint with rare bladderwort (*Utricularia* sp.) on the exposed peat bed. The wetland was dominated by bottle sedge and was fringed by abundant cotton grass and purple moor grass with scattered downy birch, willow and heather.

The site was not of fisheries value given its very shallow, peat nature, lack of connectivity to superior fisheries habitats (e.g. flowing watercourses) and likely ephemeral nature. However, there was some good suitability in the wider wetland for amphibians (although none were recorded). No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L6 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.36 Representative image of site L6, October 2023

4.2.7 Site L7 – lake/wetland, Bawnreagh

Site L7 was a small pond located adjacent to site L6. The small 200m^2 pond was situated in a larger wetland area. The depth averaged <0.1m (wetland was often deeper) with a bed comprised entirely of soft, often flocculent peat up to a depth of 0.5m. The pond basin supported frequent bog pondweed, occasional bulrush and dominant bottle sedge. Bladderwort (*Utricularia* sp.) was locally abundant in the shallow littorals of the pond and wetland, with occasional water mint and marsh pennywort and rare stonewort (*Nitella* sp.). The wetland was dominated by bottle sedge with abundant cotton grass and was bordered by wet areas of purple moor grass with localised tussock sedge (*Carex* sp.), downy birch and grey willow.

The site was not of fisheries value given its very shallow, peat nature, lack of connectivity to superior fisheries habitats (e.g. flowing watercourses) and likely ephemeral nature. However, there was some good suitability in the wider wetland for amphibians (although none were recorded). No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L7 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.37 Representative image of site L7, October 2023

4.2.8 Site L8 – lake/wetland, Lanespark

Site L8 was a small pond and wetland complex located approximately 150m south of proposed turbine T3. A small pond of c. 40m^2 was situated in a larger (0.2ha) seasonally flooded wetland area. The pond was 0.2-0.3m deep with a bed of compacted peat (as per the adjoining wetland). The pond supported sparse growth of broad-leaved pondweed with rare bog pondweed and bladderwort (*Utricularia* sp.). Filamentous algal and floc cover was very high (>70% of the bed). The surrounding wetland was dominated by bottle sedge with scattered small stands of bulrush. Common duckweed was present locally in the flooded wetland. The pond and wetland adjoined wet areas supporting abundant lodgepole pine and downy birch with scattered willow (*Salix* sp.). The site was bordered by cutover bog (PB4), some of which was regenerating locally.

Given the small, shallow size of the pond and seasonal nature of the supporting wetland area, site L8 was not of fisheries value. However, the site was of high suitability for amphibians, although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L8 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.38 Representative image of site L8, October 2023

4.2.9 Site L9 – lake/wetland, Clonoura

Site L9 was a small seasonal cutover peatland pool c. 120m^2 with a small pocket of open water 0.1-0.2m deep. Located adjacent to proposed turbine T5, the oligotrophic pool had an exposed peat base with no *Sphagnum* mosses or macrophytes. It was bordered exclusively by bog cotton that formed extensive swards in the historical cutover recess. The bordering areas of pest embankments supported scattered downy birch and lodgepole pine.

Given the small, shallow size of the pond and seasonal nature of the supporting wetland area, site L9 was not of fisheries value. However, the site was of high suitability for amphibians, although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L9 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.39 Representative image of site L9, October 2023

4.2.10 Site L10 – lake/wetland, Clonoura

Site L10 was located adjacent to proposed turbine T5. The small lake covered c. 0.1ha and ranged from 0.2m to 0.5m in depth with a bed comprised entirely of soft silt (peat). The cutover peatland basin had shallow sloping margins and a peat base supporting occasional bulrush with abundant bog cotton and occasional *Juncus* species. The peat embankments and margins supported scattered downy birch and lodgepole pine.

The site was not of fisheries value given its shallow, peat nature and lack of connectivity to superior fisheries habitats (e.g. flowing watercourses. As the pond supported no submerged macrophytes it had poor suitability for smooth newt. However it had good suitability for common frog (none recorded) given the species breeds in a broad range of wetlands. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L10 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.40 Representative image of site L10, October 2023

4.2.11 Site L11 – lake/wetland, Clonoura

Site L11 was located within the proposed site boundary, 250m south of site proposed turbine T5. The large, shallow cutover lake covered an area of c.3.5ha and ranged from 0.2m to 1m in depth with a bed comprised entirely of soft silt (peat). The eastern margin was steeper and deeper than the western and northern margins which had more gradual sloping shorelines. Peat staining was high at the time of survey, exacerbated by significant wind fetch. Macrophyte coverage was low with only occasional bog pondweed in open water. Stands of bottle sedge and bulrush were scattered around the lake margins. Abundant cotton grass was present on the peaty littorals The lake was situated in cutover bog (PB4) with localised bog woodland (WN7) support downy birch and willow (*Salix* sp.).

The cutover peat lake was of poor fisheries value given its heavily silted, generally shallow nature and isolation from other aquatic habitats. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L11 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.41 Representative image of site L11

4.2.12 Site L12 – lake/wetland, Noard

Site L12 was located within the proposed site boundary 175m west of proposed turbine T6. The small, shallow cutover lake covered an area of c.0.4ha and averaged 0.2-0.3m deep. The bed was comprised entirely of bare soft silt (peat). Peat staining was high at the time of survey. Macrophyte coverage was low with only occasional bog pondweed and water horsetail in open water. Frequent stands of bottle sedge and bulrush were present in the margins with abundant cotton grass on the peaty littorals. The lake was situated in cutover bog (PB4) with downy birch and willow (*Salix* sp.) growing along the low gradient and cutover shorelines.

The cutover peat lake was not considered of fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L12 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.42 Representative image of site L12

4.2.13 Site L13 – lake/wetland, Noard

Site L13 was located within the proposed site boundary <300m north of proposed turbine T7. The small, shallow cutover lake covered an area of c.0.2ha and was 0.1-0.3m deep. The bed was comprised entirely of bare soft silt (peat). Peat staining was high at the time of survey. Macrophyte coverage was low with only occasional bog pondweed. The peaty littorals (including exposed lakebed) supported abundant cotton grass in addition to rushes (*Juncus* spp.). The lake was situated in cutover bog (PB4) with immature downy birch and willow (*Salix* sp.) growing along the shoreline.

The cutover peat lake was considered of poor fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. However, there was some low potential for European eel given the presence of the species in the nearby tributary of the Clover River (recorded in 2021). The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L13 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.43 Representative image of site L13

4.2.14 Site L14 – lake/wetland, Noard

Site L14 was located within the proposed site boundary and immediately west of site L13. The small, shallow elliptical cutover lake covered an area of c.0.3ha and was 0.1-0.3m deep. The bed was comprised entirely of bare soft silt (peat). Peat staining was high at the time of survey. Macrophyte coverage was low with only occasional bog pondweed. The peaty littorals (including exposed lakebed) supported abundant cotton grass in addition to rushes (*Juncus* spp.). The lake was situated in cutover bog (PB4) with immature downy birch and willow (*Salix* sp.) growing along the shoreline.

The cutover peat lake was considered of poor fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. However, there was some low potential for European eel given the presence of the species in the nearby tributary of the Clover River (recorded in 2021). The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L14 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.44 Representative image of site L14

4.2.15 Site L15 – lake/wetland, Noard

Site L15 was a small 200m^2 cutover peat basin waterbody located 300m south-west of proposed turbine T7. The lake was a homogenous 0.3 to 0.4m deep with shallow sloping margins. The site was bordered by abundant bog cotton and bottle sedge but supported no submerged macrophytes apart from bulbosus rush due to the heavily peat stained water. Small pockets of *Sphagnum cuspidatum* were present in the margins. The pond was bordered by extensive bog cotton on exposed peat with immature birch woodland on the peatland escarpments.

The cutover lake was of poor fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. The site was of high value for common frog but not smooth newt due to sparse macrophyte cover. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L15 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.45 Representative image of site L15, October 2023

4.2.16 Site L16 – lake/wetland, Derryhogan

Site L16 was located within the proposed site boundary approximately 300m south of turbine T7. The shallow linear cutover lake and wetland covered an area of c.1.4ha and ranged from 0.1-0.3m deep. The bed was comprised entirely of bare soft silt (peat). Turbidity was low at the time of survey (i.e. low peat staining). The site was heavily vegetated with abundant water mint, bulrush, marsh horsetail (*Equisetum palustre*) in wetland areas and occasional bog pondweed in open water sections. Water starwort (*Callitriche* sp.) was also occasional. Spike rush, rushes (*Juncus* spp.) and bottle sedge were present along the margins. Abundant cotton grass was present on the peaty littorals. The lake was situated in cutover bog (PB4) with downy birch, willow (*Salix* sp.) and lodgepole pine growing along the low gradient shorelines.

The site was not considered of fisheries value given its heavily silted, shallow nature and isolation from other aquatic habitats. However, the site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L16 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.46 Representative image of site L16

4.2.17 Site L17 – lake/wetland, Lanespark

Site L17 was located at the southern extent of the proposed site boundary near Lanespark Bog, adjacent to Loch Doire Bhile and the North Glengoole Stream, and approximately 500m from both proposed turbine T9 and T10. As with Loch Doire Bhile, the site had been excavated as part of habitat creation on cutover bog. The shallow, clear-water lake covered an area of c.0.7ha and ranged from 0.2m to 1m deep. The substrata comprised gravels and clay. The lake was fringed by common reed with occasional stands of broad-leaved pondweed. Stonewort (*Chara* sp.) was abundant on the lakebed. The open, gravelly banks supported scattered willow (*Salix* sp.) with coniferous afforestation (WD4) present to the north of the site.

The artificial lake was not considered of fisheries value given its shallow nature, isolation from other aquatic habitats and absence of fish stocking history (in contrast to the nearby Loch Doire Bhile which supports stocked brown and rainbow trout). Whilst there was some good suitability for white-clawed crayfish, none were recorded. The species is known from the adjoining Loch Doire Bhile. The site was of high value for amphibians although none were recorded during the site visit. No otter signs were recorded in vicinity of the site.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix B**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L17 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.47 Representative image of site L17

4.3 White-clawed crayfish survey

No live white-clawed crayfish were recorded via hand-searching and sweep netting of instream refugia during the surveys undertaken at 30 no. riverine and 17 no. lacustrine sites in September and October 2023, respectively.

However, recent crayfish remains were recorded in otter spraint at site E2 on the Ardreagh River (proposed GCR crossing) (**Plate 4.48**).



Plate 4.48 White-clawed crayfish remains identified in otter spraint site at site E2 on the Ardreagh River, September 2023

4.4 Otter signs

A total of 7 no. otter signs were recorded across 47 no. survey sites during the course of aquatic surveys undertaken in September-October 2023. All were recorded from riverine sites. Spraint sites (mostly regular) were recorded at sites on the Clover River (A6) and unnamed tributary (A4), Breegagh River (D1 & D3), Ardreagh River (E2), Gorteenahilla River (E7) and the Lisdowney Stream (E9).

No breeding (holts) or resting (couch) areas were identified in the vicinity of the survey sites in September and October 2023.

4.5 Invasive aquatic species

No aquatic invasive species were recorded in vicinity of the survey sites in September and October 2023.

4.6 Biological water quality (macro-invertebrates)

No rare or protected macro-invertebrate species (according to national red lists) were recorded in the biological water quality samples taken from a total of 28 no. wetted riverine sites in September 2023 (**Figure 4.1, Appendix B**).

Sites B5 on the Drish River, E7 on the Gorteenahilla River and E9 on the Lisdowney Stream achieved **Q4 (good status)** water quality and thus met the target good status (≥Q4) requirements of the European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2019 and the Water Framework Directive (2000/60/EC) (**Figure 4.1**). This was given the presence of one group A

taxa in fair numbers (5% of total abundance), namely the mayflies *Ecdyonurus dispar* or *Heptagenia sulphurea* (**Appendix B**).

Sites A7 on the Clover River, D1 on the Drish River, D3 on the Breegagh River and E10 on the River Nore achieved **Q3-4 (moderate status)** water quality (**Figure 4.1**). This was given the low numbers (<5%) of group A species mayflies *Ecdyonurus dispar* or *Heptagenia sulphurea* (**Appendix B**).

A total of 21 no. sites on the Clover River (A5 & A6) and unnamed tributaries (A1, A2, A3 & A4), Drish River (B1, B2, B3 & B4), Black River (C2, C4 & C5), North Glengoole River (C3), Breegagh River (D2), Goul River (E1), Ardreagh River (E2), Lisduff River (E3), Tincashel River (E4), unnamed Nuenna River tributary (E6) and the Lismaine Stream (E8) achieved **Q2-3 or Q3 (poor status)** based on an absence of group A species, low numbers or an absence of group B species and a dominance of group C species such as the mayfly *Baetis rhodani*, freshwater shrimp (*Gammarus duebeni*), New Zealand mud snail (*Potamopyrgus antipodarum*) and blackfly larvae (Simuliidae) (**Appendix B**).

Site E5 on the historically realigned Clomantanagh Lower Stream achieved Q2 (bad status) given the dominance of pollution tolerant group D and E taxa such as *Asellus aquaticus* and *Chironomus* sp. (**Appendix B**).

It should be noted that the ratings for sites A1, A2, A3, A4, A5, B1, E5 and E10 were tentative due to low flows and or a lack of suitable riffle areas for sampling (Toner et al., 2005).

4.7 Lacustrine macro-invertebrates

No rare or protected macro-invertebrate species were recorded in the sweep samples taken from 17 no. lake/wetland sites in October 2023 (**Appendix B**). However, whilst not protected, the nationally uncommon water stick insect *Ranatra linearis*, a recent discovery in Ireland (Nelson, 2018), was recorded at site L1 (**Plate 4.49**).

The shallow, peat lakes and wetlands supported a varied diversity of species, typically dominated by mayflies (*Cloeon* sp.), bluet damselflies (Coenagrionidae), water boatmen (*Hesperocorixa* spp.) and freshwater hoglouse (*Asellus aquaticus*) and a low diversity of Sphaeriidae and Planorbidae molluscan species (**Appendix B**).

4.8 Macrophytes and aquatic bryophytes

No rare or protected macrophytes or aquatic bryophytes were recorded at the 47 no. riverine and lacustrine survey sites in September-October 2023.

The Annex I habitat 'Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation or aquatic mosses [3260]' (aka floating river vegetation) was recorded on the Black River at site C5 and the Breegagh River at site D3. Several indicator species (EC, 2013) were present, such as water crowfoot (*Ranunculus* sp.) with a particularly high coverage of aquatic bryophytes, including abundant *Fontinalis antipyretica*, *Chiloscyphus polyanthos* and or *Leptodictyum riparium*.



Plate 4.49 The water stick insect (*Ranatra linearis*) recorded from lake site L1, October 2023



Plate 4.50 A darter dragonfly (*Sympetrum* sp.) ovipositing at site L2, October 2023

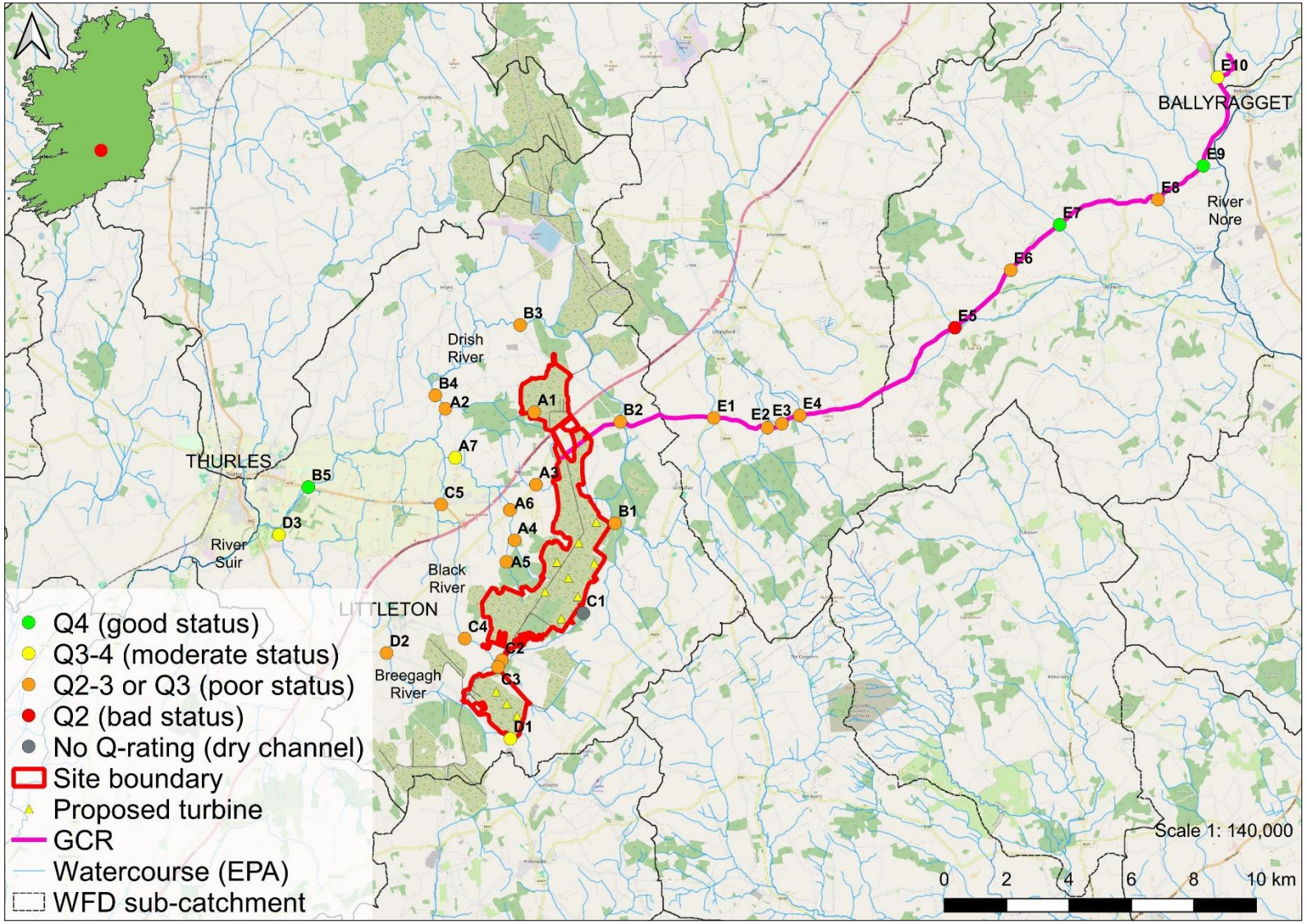


Figure 4.1 Overview of the biological water quality status in the vicinity of the proposed Littleton wind farm project, September 2023

4.9 Aquatic ecological evaluation

An aquatic ecological evaluation of each survey site was based on the results of fisheries surveys, white-clawed crayfish surveys, otter surveys, macrophyte and aquatic bryophyte surveys, macroinvertebrate surveys and biological water quality (**Table 4.3**).

Site E10 on the River Nore (proposed GCR crossing) was evaluated as **international importance** given its location with both the River Barrow and River Nore SAC (002162) and River Nore SPA (004233), sites designated for a range of aquatic species and habitats (NPWS, 2022, 2011).

Sites B2 on the Drish River, C5 on the Black River and D3 on the Breegagh River were evaluated as **county importance** given the presence of the Annex I habitats 'Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]' (site B2) and 'Water courses of plain to montane levels, with submerged or floating vegetation of *Ranunculion fluitantis* and *Callitricho-Batrachion* (low water level during summer) or aquatic mosses [3260]' (sites C5 & D3).

A total of 17 no. sites on the Clover River (A6 & A7) and unnamed tributary (A4), Drish River (B3, B4 & B5), Black River (C2 & C4), North Glengoole River (C3), Breegagh River (D1 & D2), River Goul (E1), Ardreagh River (E2), Tincashel River (E4), Gorteenahilla River (E7), Lismaine Stream (E8) and Lisdowney Stream (E9) were evaluated as **local importance (higher value)** in terms of their aquatic ecology due to the presence of species of higher conservation value (**Table 4.3**).

The remaining 9 no. riverine sites (i.e. sites A1, A2, A3, A5, B1, C1, E3, E5 & E6) as well as all 18 no. lake/wetland sites were evaluated as **local importance (lower value)** given the absence of aquatic species or habitats of high conservation value (**Table 4.3**).

Table 4.1 Summary of fish species of higher conservation value and relative abundances (low, medium, high & very high) recorded via **electro-fishing** per riverine survey site in the vicinity of the proposed Littleton wind farm, September 2023

Site	Watercourse	Relative abundance				Other species
		Atlantic salmon	Brown trout	*Lampetra* sp.	European eel	
A1	Unnamed stream	No fish recorded				
A2	Unnamed stream	No fish recorded				
A3	Unnamed stream	No fish recorded				
A4	Unnamed stream		Low			Perch, stone loach, three-spined stickleback
A5	Clover River					Three-spined stickleback
A6	Clover River		Medium			Perch, stone loach, three-spined stickleback
A7	Clover River	Low	Medium	Low		Pike, stone loach
B1	Drish River					Three-spined stickleback
B2	Drish River	Low			Low	Three-spined stickleback
B3	Drish River		Low	Low		Pike, stone loach, three-spined stickleback
B4	Drish River	Very high	High			Stone loach
B5	Drish River	High	Low	Medium	Low	Minnow, stone loach
C1	Black River	No fish recorded – dry channel				
C2	Black River		Low			Three-spined stickleback
C3	North Glengoole River		Low			Three-spined stickleback
C4	Black River		Low			Stone loach
C5	Black River	Medium	Medium	Medium	Medium	Stone loach
D1	Breegagh River	Medium	High			
D2	Breegagh River	Medium	Medium	Medium		Stone loach
D3	Breegagh River	High	Very high		Low	Minnow, stone loach
E1	River Goul		Low	Low		Stone loach
E2	Ardreagh River	Low	Low		Low	Three-spined stickleback
E3	Lisduff Stream	No fish recorded				
E4	Tincashel River		Medium			
E5	Clomantanagh Lower Stream	No fish recorded				
E6	Unnamed stream	No fish recorded				

Site	Watercourse	Relative abundance				Other species
		Atlantic salmon	Brown trout	*Lampetra* sp.	European eel	
E7	Gorteenahilla River	Very high	Medium			
E8	Lismaine Stream					Three-spined stickleback
E9	Lisdowney Stream	High	Medium		Low	Three-spined stickleback
E10	River Nore	Fisheries appraisal only				

Conservation value: Atlantic salmon (*Salmo salar*), brook lamprey (L*ampetra planeri*) and river lamprey (*Lampetra fluviatilis*) are listed under Annex II of the Habitats Directive [92/42/EEC]. Atlantic salmon and river lamprey are also listed under Annex V of the Habitats Directive [92/42/EEC]. European eel are 'critically endangered' according to most recent ICUN red list (Pike et al., 2020) and listed as 'critically engendered' in Ireland (King et al., 2011). With the exception of the Inland Fisheries Acts 1959 to 2017, brown trout and coarse fish species have no legal protection in Ireland.

Table 4.2 Summary of aquatic species & habitats of higher conservation value recorded in the vicinity of the proposed Laurclavagh wind farm, July 2022

Site	Watercourse	White-clawed crayfish	Otter signs[4]	Annex I aquatic habitats	Rare or protected macrophytes/ aquatic bryophytes	Rare or protected macro-invertebrates	Other species/habitats of high conservation value
Riverine sites							
A1	Unnamed stream	None recorded	No signs	Not present	None recorded	None recorded	None recorded
A2	Unnamed stream	None recorded	No signs	Not present	None recorded	None recorded	None recorded
A3	Unnamed stream	None recorded	No signs	Not present	None recorded	None recorded	None recorded
A4	Unnamed stream	None recorded	**Regular spraint site**	Not present	None recorded	None recorded	None recorded
A5	Clover River	None recorded	No signs	Not present	None recorded	None recorded	None recorded
A6	Clover River	None recorded	**Regular spraint site**	Not present	None recorded	None recorded	None recorded
A7	Clover River	None recorded	No signs	Not present	None recorded	None recorded	**Atlantic salmon, lamprey (*Lampetra* sp.)**
B1	Drish River	None recorded	No signs	Not present	None recorded	None recorded	None recorded
B2	Drish River	None recorded	No signs	Not present	None recorded	None recorded	**Atlantic salmon, European eel**
B3	Drish River	None recorded	No signs	Not present	None recorded	None recorded	**Lamprey (*Lampetra* sp.)**
B4	Drish River	None recorded	No signs	Not present	None recorded	None recorded	**Atlantic salmon**
B5	Drish River	None recorded	No signs	Not present	None recorded	None recorded	**Atlantic salmon, lamprey (*Lampetra* sp.), European eel**
C1	Black River	None recorded	No signs	Not present	None recorded	None recorded	None recorded
C2	Black River	None recorded	No signs	Not present	None recorded	None recorded	None recorded
C3	North Glengoole River	None recorded	No signs	Not present	None recorded	None recorded	None recorded
C4	Black River	None recorded	No signs	Not present	None recorded	None recorded	None recorded

Site	Watercourse	White-clawed crayfish	Otter signs[4]	Annex I aquatic habitats	Rare or protected macrophytes/ aquatic bryophytes	Rare or protected macro-invertebrates	Other species/habitats of high conservation value
C5	Black River	None recorded	No signs	**Floating river vegetation [3260]**	None recorded	None recorded	**Atlantic salmon, lamprey (*Lampetra* sp.), European eel**
D1	Breegagh River	None recorded	**Regular spraint site**	Not present	None recorded	None recorded	**Atlantic salmon**
D2	Breegagh River	None recorded	No signs	Not present	None recorded	None recorded	**Atlantic salmon, lamprey (*Lampetra* sp.)**
D3	Breegagh River	None recorded	**Regular spraint site**	**Floating river vegetation [3260]**	None recorded	None recorded	**Atlantic salmon, European eel**
E1	River Goul	None recorded	No signs	Not present	None recorded	None recorded	**Lamprey (*Lampetra* sp.)**
E2	Ardreagh River	**None recorded but crayfish remains in otter spraint**	**Regular spraint site**	Not present	None recorded	None recorded	**Atlantic salmon, European eel**
E3	Lisduff Stream	None recorded	No signs	Not present	None recorded	None recorded	None recorded
E4	Tincashel River	None recorded	No signs	Not present	None recorded	None recorded	None recorded
E5	Clomantanagh Lower Stream	None recorded	No signs	Not present	None recorded	None recorded	None recorded
E6	Unnamed stream	None recorded	No signs	Not present	None recorded	None recorded	None recorded
E7	Gorteenahilla River	None recorded	**Regular spraint site**	Not present	None recorded	None recorded	**Atlantic salmon**
E8	Lismaine Stream	None recorded	No signs	Not present	None recorded	None recorded	None recorded
E9	Lisdowney Stream	None recorded	**Regular spraint site**	Not present	None recorded	None recorded	**Atlantic salmon, European eel**
E10	River Nore	None recorded	No signs	Not present	None recorded	None recorded	None recorded but Atlantic salmon, *Lampetra* sp. & European eel known
Lacustrine sites							
L1	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L2	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded

Site	Watercourse	White-clawed crayfish	Otter signs[4]	Annex I aquatic habitats	Rare or protected macrophytes/ aquatic bryophytes	Rare or protected macro-invertebrates	Other species/habitats of high conservation value
L3	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L4	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L5	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L6	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L7	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L8	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L9	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L10	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L11	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L12	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L13	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L14	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L15	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L16	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded
L17	Lake/wetland	None recorded	No signs	Not present	None recorded	None recorded	None recorded

Conservation value: White-clawed crayfish (*Austropotamobius pallipes*), Atlantic salmon (*Salmo salar*), brook lamprey (L*ampetra planeri*), river lamprey (*Lampetra fluviatilis*) and Eurasian otter (*Lutra lutra*) are listed under Annex II and Annex V of the Directive on the Conservation of Natural Habitats of Wild Fauna and Flora (92/43/EEC) ('EU Habitats Directive'). White-clawed crayfish and otter are also protected under the Irish Wildlife Acts 1976-2023. White-clawed crayfish (Füreder et al., 2010) are listed as 'Endangered' according to the IUCN Red List. European eel are 'critically endangered' according to most recent ICUN red list (Pike et al., 2020) and listed as 'critically engendered' in Ireland (King et al., 2011). With the exception of the Inland Fisheries Acts 1959 to 2017, brown trout and coarse fish species have no legal protection in Ireland.

[4] Otter signs within 150m of the survey site

Table 4.3 Aquatic ecological evaluation summary of the Littleton wind farm survey sites according to NRA (2009) criteria

Site no.	Watercourse	EPA code	Evaluation of importance	Rationale summary
Riverine sites				
A1	Unnamed stream	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value; Q3 (poor status) water quality (tentative)
A2	Unnamed stream	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value; Q2-3 (poor status) water quality (tentative)
A3	Unnamed stream	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value; Q2-3 (poor status) water quality (tentative)
A4	Unnamed stream	n/a	**Local importance (higher value)**	Salmonids recorded; site utilised by otter
A5	Clover River	16C04	Local importance (lower value)	No aquatic species or habitats of high conservation value; Q3 (poor status) water quality (tentative)
A6	Clover River	16C04	**Local importance (higher value)**	Salmonids recorded; site utilised by otter
A7	Clover River	16C04	**Local importance (higher value)**	Salmonids (including Atlantic salmon) & lamprey (*Lampetra* sp.) recorded; site utilised by otter
B1	Drish River	16D02	Local importance (lower value)	No aquatic species or habitats of high conservation value; Q3 (poor status) water quality (tentative)
B2	Drish River	16D02	**County importance**	Annex I hydrophilous tall herb [6430] present
B3	Drish River	16D02	**Local importance (higher value)**	Salmonids & lamprey (Lampetra sp.) recorded
B4	Drish River	16D02	**Local importance (higher value)**	Salmonids (including Atlantic salmon) recorded
B5	Drish River	16D02	**Local importance (higher value)**	Salmonids (including Atlantic salmon), lamprey (*Lampetra* sp.) & Red-listed European eel recorded; site utilised by otter; Q4 (good status) water quality
C1	Black River	16B01	Local importance (lower value)	No aquatic species or habitats of high conservation value (dry ephemeral site)
C2	Black River	16B01	**Local importance (higher value)**	Salmonids recorded
C3	North Glengoole River	16N28	**Local importance (higher value)**	Salmonids recorded

Site no.	Watercourse	EPA code	Evaluation of importance	Rationale summary
C4	Black River	16B01	**Local importance (higher value)**	Salmonids recorded
C5	Black River	16B01	**County importance**	Annex I floating river vegetation [3260] present
D1	Breegagh River	16B03	**Local importance (higher value)**	Salmonids (including Atlantic salmon) recorded; site utilised by otter
D2	Breegagh River	16B03	**Local importance (higher value)**	Salmonids (including Atlantic salmon) & lamprey (*Lampetra* sp.) recorded
D3	Breegagh River	16B03	**County importance**	Annex I floating river vegetation [3260] recorded
E1	River Goul	15G02	**Local importance (higher value)**	Salmonids (including Atlantic salmon) & lamprey (*Lampetra* sp.) recorded
E2	Ardreagh River	15A03	**Local importance (higher value)**	Salmonids (including Atlantic salmon) & Red-listed European eel recorded; site utilised by otter; white-clawed crayfish likely present (based on inclusion in otter spraint)
E3	Lisduff Stream	15L08	Local importance (lower value)	No aquatic species or habitats of high conservation value; Q3 (poor status) water quality
E4	Tincashel River	15T05	**Local importance (higher value)**	Salmonids recorded
E5	Clomantanagh Lower Stream	15C91	Local importance (lower value)	No aquatic species or habitats of high conservation value; Q2 (bad status) water quality (tentative)
E6	Unnamed stream	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value; Q3 (poor status) water quality

Site no.	Watercourse	EPA code	Evaluation of importance	Rationale summary
E7	Gorteenahilla River	15G08	**Local importance (higher value)**	Salmonids (including Atlantic salmon) recorded; site utilised by otter; Q4 (good status) water quality
E8	Lismaine Stream	15L16	**Local importance (higher value)**	Salmonids (including Atlantic salmon) recorded; site utilised by otter
E9	Lisdowney Stream	15L02	**Local importance (higher value)**	Salmonids (including Atlantic salmon) & Red-listed European eel recorded; site utilised by otter; Q4 (good status) water quality
E10	River Nore	15N01	**International importance**	Located within the River Barrow and River Nore SAC (002162) and River Nore SPA (004233)
Lacustrine sites				
L1	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L2	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L3	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L4	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L5	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L6	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L7	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L8	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L9	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L10	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value

Site no.	Watercourse	EPA code	Evaluation of importance	Rationale summary
L11	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L12	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L13	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L14	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L15	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L16	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L17	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value

Conservation value: White-clawed crayfish (*Austropotamobius pallipes*), Atlantic salmon (*Salmo salar*), brook lamprey (L*ampetra planeri*), river lamprey (*Lampetra fluviatilis*) and Eurasian otter (*Lutra lutra*) are listed under Annex II and Annex V of the Directive on the Conservation of Natural Habitats of Wild Fauna and Flora (92/43/EEC) ('EU Habitats Directive'). White-clawed crayfish and otter are also protected under the Irish Wildlife Acts 1976-2023. White-clawed crayfish (Füreder et al., 2010) are listed as 'Endangered' according to the IUCN Red List. European eel are 'critically endangered' according to most recent ICUN red list (Pike et al., 2020) and listed as 'critically engendered' in Ireland (King et al., 2011). With the exception of the Inland Fisheries Acts 1959 to 2017, brown trout and coarse fish species have no legal protection in Ireland.

5. Discussion

The riverine watercourses in the vicinity of the proposed Littleton wind farm, inclusive of those crossed by the proposed GCR, were typically lowland channels which had been extensively straightened and or deepened historically as part of arterial drainage and land reclamation works, resulting in poor hydromorphology and reduced habitat heterogeneity. Whilst some good instream recovery had occurred locally (e.g. Drish River, Black River, Breegagh River, Lisdowney Stream), significant siltation and hydromorphological pressures were evident throughout the survey area. Nevertheless, the majority of the riverine survey sites were evaluated as at least **local importance (higher value)** in terms of their aquatic ecology due to the presence of high conservation value species (including Atlantic salmon, lamprey (*Lampetra* sp.), European eel and otter) or habitats (i.e. sites B2, C5 & D3) (**Table 4.2**). Site E10 on the River Nore (proposed GCR crossing) was evaluated as **international importance** given its location with both the River Barrow and River Nore SAC (002162) and River Nore SPA (004233).

The lakes and wetlands located within the proposed site boundary typically originate from historical cutover bog activities and as such are shallow, highly turbid (peat stained), poorly vegetated and of lower productivity, providing relatively poor habitat for many higher conservation value species or habitats. Nevertheless these sites supported a range of macroinvertebrate species and many were of high suitability for amphibians[2]. None of these lake/wetland sites corresponded to Annex I lake habitats (e.g. natural dystrophic lakes and ponds, 3160). All 18 no. lacustrine sites were of **local importance (lower value)** given the absence of aquatic species or habitats of high conservation value[2].

5.1 Fisheries

A typical diversity of fish species for Irish midland rivers – namely Atlantic salmon, brown trout, lamprey (*Lampetra* sp.), European eel, stone loach, minnow, pike, perch and three-spined stickleback – were recorded during the electro-fishing survey (**Table 4.1; Appendix A**). The recorded assemblages were in keeping with previous surveys of the area (Triturus, 2023).

Salmonid populations were widespread with the survey area, being present at 19 no. riverine sites. Atlantic salmon were recorded from a total of 11 no. sites[3] on the Clover River (A7), Drish River (B2, B4, B5), Black River (C5), Breegagh River (D1, D2, D3), Ardreagh River (E2), Gorteenahilla River (E7) and the Lisdowney Stream (E9). The quality of salmonid habitat was typically poor due to significant hydromorphological pressures resulting from arterial drainage (i.e. extensive straightening & deepening). However, particularly high densities of juvenile salmonids were recorded at sites B4, D3 and E7 (excellent quality salmonid nurseries) (**Appendix A**).

Lamprey ammocoetes (*Lampetra* sp.) were recorded from 6 no. sites on the Clover River (A7), Drish River (B3 & B5), Black River (C5), Breegagh River (D2) and River Goul (E1) during targeted electro-fishing (low to medium densities only). An early stage *Lampetra* sp. transformer were also recorded

[2] Many sites had high suitability for amphibians although a dedicated survey for smooth newt and common frog was beyond the scope of this survey. An environmental DNA approach would help to clarify the status of amphibians in these sites

[3] Atlantic salmon are also known from the River Nore in the vicinity of Ballyragget but electro-fishing was not feasible at site E10 due to prohibitive depths

at site A7. The restricted distribution of lamprey reflected the paucity of suitable nursery and or spawning habitat, primarily due to significant arterial drainage pressures (**Appendix A**).

Red-listed European eel were recorded in low densities at a total of 6 no. sites on the Drish River (B2 & B5), Black River (C5), Breegagh River (D3), Ardreagh River (E2) and the Lisdowney Stream (E9) (**Table 4.1; Appendix A**). The paucity of eel recorded during the electro-fishing surveys was considered to reflect a combination sub-optimal habitat and widespread migration barriers in the survey catchments (**Appendix A**).

Whilst some of the more mature cutover lake/wetland survey sites had inherently more aquatic value, none were considered of significant fisheries value (stickleback only) due to their generally very shallow nature, peat substrata, lower pH and poor connectivity or isolation from other aquatic habitats supporting fish populations. There was some low European eel potential in those lakes situated in close proximity to the riverine watercourses found to or known to support the species (e.g. sites L13, L14, L17).

5.2 Otter

Despite widespread suitability, only a low number of otter signs (7 no.) were recorded across 47 no. survey sites. All were recorded from riverine sites with the lakes surveyed providing poor otter habitat, primarily due to insufficient prey resources. Spraint sites (mostly regular) were recorded at sites on the Clover River (A6) and unnamed tributary (A4), Breegagh River (D1 & D3), Ardreagh River (E2), Gorteenahilla River (E7) and the Lisdowney Stream (E9).

This paucity of signs was considered to mainly reflect the influence of historical instream modifications (straightening, deepening) on the health and distribution of fish populations, the key prey resource of otter (Krawczyk et al., 2016; Ruiz-Olmo & Jiménez, 2009). Otters are food-limited and prey availability is a crucial factor in determining mortality, breeding success and the status of local populations (Sittenthaler et al., 2019; Ruiz-Olmo et al., 2002). Furthermore, otter sign marking is routinely associated with prominent features such as large instream boulders and tree root systems (Almeida et al., 2012). Historical drainage, such as that carried out historically in the vicinity of the proposed project, significantly reduces instream habitat heterogeneity (O'Grady, 2017) and the availability or marking areas (outposts), which therefore results in the deposition and detection of fewer otter signs such as spraints, irrespective of watercourse utilisation (e.g. for foraging).

No breeding (holt) or couch (resting) areas were identified in the vicinity of the survey sites in September-October 2023.

5.3 White-clawed crayfish

Despite suitability at numerous sites, no live white-clawed crayfish were recorded during targeted surveys in September-October 2023. However, recent crayfish remains were identified in otter spraint at site E2 on the Ardreagh River, a tributary of the River Goul (**Plate 4.48**). This would indicate the presence of crayfish in the vicinity of the site. Indeed, contemporary and historic records are available for the downstream-connecting River Goul, including the capture of a juvenile crayfish downstream of Urlingford in 2022 (Triturus data) (**Figure 3.1**). Incidentally, white-clawed crayfish eDNA was

detected at sites on the Clover River, Black River, Drish River and Breegagh River in 2021 (Triturus, 2023).

Most of the 17 no. survey lakes/wetlands were inherently unsuitable for the white-clawed crayfish given their unsuitable peat geologies, water chemistry (humic/acidic) and physical habitat attributes (Demers et al., 2005; Lucey & McGarrigle, 1987). However, there was good suitability at site L17, a small artificial alkaline lake adjacent to Loch Doire Bhile, a site known to support crayfish (NPWS data). No crayfish were recorded from site L17 via hand searching or sweep netting in the current survey.

5.4 Macrophytes and Annex I habitats

No rare or protected macrophytes or aquatic bryophytes were recorded at the riverine or lacustrine survey sites in September-October 2023.

Sites C5 on the Black River and D3 on the Breegagh River supported the Annex I habitat 'Water courses of plain to montane levels, with submerged or floating vegetation of *Ranunculion fluitantis* and *Callitricho-Batrachion* (low water level during summer) or aquatic mosses [3260]' (aka floating river vegetation, FRV). This was based on the presence of several key indicator species including water crowfoot (*Ranunculus* sp.), water starwort (*Callitriche* sp.) and a high coverage of aquatic bryophytes such as *Fontinalis antipyretica* and *Chiloscyphus polyanthos.* Numerous studies have shown that both *Ranunculus*-dominated and bryophyte-rich areas provide particularly valuable habitat for juvenile salmonids (e.g. Marsh et al., 2020) and this was observed at this site during the survey.

Based on the presence of several indicator species (EC, 2013; Devaney, 2013), including *Lythrum salicaria, Epilobium hirsutum, Solanum dulcamara*, *Calystegia sepium, Myosotis scorpioides, Mentha aquatica* and *Galium palustre,* the heavily modified Drish River at site B2 supported the Annex I habitat 'Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]'. This habitat often forms along unmanaged margins of lowland rivers (Devaney et al., 2013).

The presence of these Annex I habitats resulted in the evaluation of these sites as **county importance** (as per NRA, 2009).

5.5 Macroinvertebrates & biological water quality

No rare or protected macro-invertebrate species (according to national red lists) were recorded in the biological water quality samples taken from 28 no. wetted riverine sites in September 2023 or 17 no. sweep samples from lake sites in October 2023 (**Appendix B**). Whilst not protected, the nationally uncommon water stick insect *Ranatra linearis*, a recent discovery in Ireland (Nelson, 2018), was recorded at site L1 (**Plate 4.49**).

A total of 3 no. sites on the Drish River (B5), Gorteenahilla River (E7) and Lisdowney Stream (E9) achieved **Q4 (good status)** water quality and thus met the target good status (≥Q4) requirements of the European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2019 and the Water Framework Directive (2000/60/EC) (**Figure 4.1**). The remaining 25 no. riverine sample sites achieved **Q3-4 (moderate status)** (sites A7, D1, D3 & E10), **Q2-3 or Q3 (poor status)** (sites A1, A2, A3,

A4, A5, A6, B1, B2, B3, B4, C2, C3, C4, C5, D2, E1, E2, E3, E4, E6 &E8) or Q2 (bad status) (site E5) in September 2023.

With the exception of sites B5, E7 and E9, the biological water quality in the vicinity of the proposed project was unsatisfactory and was not meeting good status targets. Peat extraction (leading to siltation) and forestry are the significant threats to water quality in the survey area (EPA, 2019). Furthermore, low summer flows and widespread hydromorphological modifications also influenced biological water quality in September 2023.

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7. Appendix A – fisheries assessment report

Please see accompanying fisheries assessment report

8. Appendix B – Q-sample results (biological water quality) & lacustrine macroinvertebrates

Table 8.1 Macro-invertebrate Q-sampling results for riverine sites A1-A7 & B1-B5 in the vicinity of Littleton wind farm, September 2023

Group	Family	Species	A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	B5	EPA group
Ephemeroptera	Heptageniidae	*Heptagenia sulphurea*							2					14	**A**
Ephemeroptera	Baetidae	*Alainites muticus*							2				5	10	**B**
Plecoptera	Leuctridae	*Leuctra fusca*						2	8					12	**B**
Trichoptera	Cased caddis pupa	sp. indet.	1						2						**B**
Trichoptera	Glossosomatidae	*Agapetus fuscipes*											22	1	**B**
Trichoptera	Goeridae	*Silo pallipes*							1				1		**B**
Trichoptera	Lepidostomatidae	*Lepidostoma hirtum*											13		**B**
Trichoptera	Limnephilidae	*Halesus radiatus*							1						**B**
Trichoptera	Limnephilidae	*Limnephilus marmoratus*	2				6								**B**
Trichoptera	Limnephilidae	*Potamophylax cingulatus*						5	18	1	1				**B**
Trichoptera	Phryganeidae	*Agrypnia obsoleta*								2	1				**B**
Trichoptera	Sericostomatidae	*Sericostoma personatum*						22					5	10	**B**
Odonata	Calopterygidae	*Calopteryx splendens*				3									**B**
Odonata	Coenagrionidae	sp. indet.	5			6	8			4	2				**B**
Odonata	Libellulidae	*Orthetrum cancellatum*								3	1				**B**
Ephemeroptera	Baetidae	*Baetis rhodani*		3				16	7				62	79	**C**
Ephemeroptera	Ephemerellidae	*Serratella ignita*						6	1				18	1	**C**
Trichoptera	Hydropsychidae	*Hydropsyche instabilis*						13	11				8		**C**
Trichoptera	Polycentropodidae	*Polycentropus flavomaculatus*							6					1	**C**
Trichoptera	Polycentropodidae	*Polycentropus kingi*							6						**C**
Trichoptera	Rhyacophilidae	*Rhyacophila dorsalis*											1	1	**C**
Crustacea	Gammaridae	*Gammarus duebeni*	6			26		55	14	102	181	77	82	76	**C**
Coleoptera	Dytiscidae	*Colymbetes fuscus*					1								**C**
Coleoptera	Dytiscidae	Dytiscidae larva	1			1					3				**C**
Coleoptera	Dytiscidae	*Hyphydrus ovatus*									1				**C**

Group	Family	Species	A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	B5	EPA group
Coleoptera	Dytiscidae	*Ilybius fuliginosus*								1	1				**C**
Coleoptera	Dytiscidae	*Stictotarsus duodecimpustulatus*				1									C
Coleoptera	Elmidae	*Brychius elevatus*									2		24		C
Coleoptera	Elmidae	*Elmis aenea*							8				10	4	**C**
Coleoptera	Elmidae	*Limnius volckmari*							5				9	18	C
Coleoptera	Gyrinidae	Gyrinidae larva		1		2			2						C
Coleoptera	Gyrinidae	*Gyrinus substriatus*	2	2		5					1				C
Coleoptera	Haliplidae	*Haliplus ruficollis* group				9	2								**C**
Coleoptera	Hydrophilidae	*Helophorus grandis*					1								C
Diptera	Chironomidae	Non-*Chironomus* spp.	1	2	4	14			6					1	C
Diptera	Dixidae	sp. indet.			8		1								C
Diptera	Tipulidae	*Tipula* sp.	1	3											C
Diptera	Simuliidae	sp. indet.			16				37					5	C
Hemiptera	Corixidae	Corixidae nymph				1									C
Hemiptera	Corixidae	*Hesperocorixa linnaei*	3			9									C
Hemiptera	Gerridae	*Gerris* sp.	3	3		1			1	6				1	C
Hemiptera	Gerridae	Gerridae nymph		1						1			1		C
Hemiptera	Hydrometridae	*Hydrometra stagnorum*					1								C
Hemiptera	Nepidae	*Nepa cinerea*				2	3								C
Hemiptera	Notonectidae	*Notonecta viridis*									12				C
Gastropoda	Lymnaeidae	*Stagnicola fuscus*				6				1					C
Gastropoda	Lymnaeidae	*Lymnaea stagnalis*									4	2			C
Gastropoda	Planorbidae	*Bathyomphalus contortus*				1									C
Gastropoda	Planorbidae	*Planorbis planorbis*	1			15	31			41	11	5			C
Gastropoda	Planorbidae	*Ancylus fluviatilis*											8	3	C
Gastropoda	Tateidae	*Potamopyrgus antipodarum*				16		34	87		1	2	12	10	C
Platyhelminthes	Tricladida	sp. indet.		1								142	1		C

Group	Family	Species	A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	B5	EPA group
Arachnida	Hydrachnidiae	sp. indet.	5			1	1								**C**
Crustacea	Asellidae	*Asellus aquaticus*	1	17	25	7	22		6		84	103	1		**D**
Mollusca	Lymnaeidae	*Ampullacaena balthica*				18	6	4					3	6	**D**
Mollusca	Physidae	*Physa fontinalis*								64	54	32			**D**
Mollusca	Sphaeriidae	sp. indet.	3	2				12	5		1	21			**D**
Hirudinidae	Glossiphoniidae	*Glossiphonia complanata*					1	4			2				**D**
Hirudinidae	Glossiphoniidae	sp. indet.		1					1						**D**
Megaloptera	Sialidae	*Sialis lutaria*									3				**D**
Diptera	Chironomidae	*Chironomus* spp.			8	5						2			**E**
Annelidae	Oligochaeta	sp. indet.			2								10	7	**n/a**
Abundance			**35**	**36**	**63**	**149**	**84**	**173**	**237**	**226**	**366**	**386**	**296**	**260**	
Q-rating			*Q3	*Q2-3	*Q2-3	*Q3	*Q3	Q3	Q3-4	*Q3	Q2-3	Q2-3	Q3	Q4	
WFD status			Poor	Poor	Poor	Poor	Poor	Poor	Mod	Poor	Poor	Poor	Poor	Good	

* tentative rating due to poor flows and or lack of suitable riffle areas for sampling (as per Toner et al., 2005)

Table 8.2 Macro-invertebrate Q-sampling results for riverine sites C2-C5, D1-D3 & E1-E5 in the vicinity of Littleton wind farm, September 2023

Group	Family	Species	C2	C3	C4	C5	D1	D2	D3	E1	E2	E3	E4	E5	EPA group
Ephemeroptera	Heptageniidae	*Ecdyonurus dispar*					4		1						**A**
Ephemeroptera	Baetidae	*Alainites muticus*				2	6	6	6				5		**B**
Plecoptera	Leuctridae	*Leuctra fusca*					4								**B**
Trichoptera	Cased caddis pupa	sp. indet.						1					1		**B**
Trichoptera	Glossosomatidae	*Agapetus fuscipes*					16	39	46	32			12		**B**
Trichoptera	Goeridae	*Silo pallipes*					1	3	2	1			23		**B**
Trichoptera	Lepidostomatidae	*Lepidostoma hirtum*									1				**B**
Trichoptera	Limnephilidae	*Drusus annulatus*					4					1			**B**
Trichoptera	Limnephilidae	*Halesus radiatus*				2									**B**
Trichoptera	Limnephilidae	*Limnephilus marmoratus*							1						**B**
Trichoptera	Limnephilidae	*Potamophylax cingulatus*	6	1	3	1				1	1				**B**
Trichoptera	Limnephilidae	*Stenophylax permistus*											11		**B**
Trichoptera	Sericostomatidae	*Sericostoma personatum*	5	13	1			5	9	9	5				**B**
Ephemeroptera	Baetidae	*Baetis rhodani*		66	21	32	59	39	81	18	12	8	55		**C**
Ephemeroptera	Ephemerellidae	*Serratella ignita*					12	1	14	5			6		**C**
Trichoptera	Hydropsychidae	*Hydropsyche instabilis*	7	2	2	6	11	8							**C**
Trichoptera	Polycentropodidae	*Plectrocnemia conspersa*				2									**C**
Trichoptera	Polycentropodidae	*Polycentropus kingi*				1			1						**C**
Trichoptera	Rhyacophilidae	*Rhyacophila dorsalis*		4					1		3		2		**C**
Crustacea	Gammaridae	*Gammarus duebeni*	24	31	23	42	25	92	42	16	48	3	35		**C**
Coleoptera	Dytiscidae	Dytiscidae larva			1										**C**
Coleoptera	Dytiscidae	*Ilybius fuliginosus*									1				**C**
Coleoptera	Elmidae	*Brychius elevatus*							2						**C**
Coleoptera	Elmidae	*Elmis aenea*		9	2	12	20	12	4		10		14		**C**
Coleoptera	Elmidae	*Limnius volckmari*						5	1		2		12		**C**

Group	Family	Species	C2	C3	C4	C5	D1	D2	D3	E1	E2	E3	E4	E5	EPA group
Coleoptera	Gyrinidae	Gyrinidae larva			1	2									C
Diptera	Chironomidae	Non-*Chironomus* spp.			2			3	2			4	1	1	C
Diptera	Dixidae	sp. indet.										1		2	C
Diptera	Tipulidae	*Tipula* sp.									1	1			C
Diptera	Limoniidae	*Antocha sp.*		3							4				C
Diptera	Pediciidae	*Dicranota sp.*					5	1					1		C
Diptera	Simuliidae	sp. indet.	10		14	223	5	48	29	13	18	14	2		C
Hemiptera	Gerridae	*Gerris* sp.				2			10	4				2	C
Hemiptera	Gerridae	Gerridae nymph								1					C
Gastropoda	Planorbidae	*Planorbis planorbis*			1										C
Gastropoda	Planorbidae	*Ancylus fluviatilis*	2								3				C
Gastropoda	Tateidae	*Potamopyrgus antipodarum*	44	41	12	65	5	21	26		11	6	10		C
Platyhelminthes	Tricladida	sp. indet.			1										C
Arachnida	Hydrachnidiae	sp. indet.			2	4		5		3					C
Crustacea	Asellidae	*Asellus aquaticus*			2	4		1		15		23	4	12	D
Mollusca	Sphaeriidae	sp. indet.	8	1	13	2								3	D
Hirudinidae	Glossiphoniidae	*Glossiphonia complanata*		2	1					9				1	D
Hirudinidae	Glossiphoniidae	sp. indet.											1		D
Diptera	Chironomidae	*Chironomus* spp.		1	1	4	1	3						14	E
Annelidae	Oligochaeta	sp. indet.	4	4	3	1	7	8	1		2	2	3	4	n/a
Abundance			**110**	**178**	**106**	**407**	**185**	**301**	**279**	**127**	**122**	**63**	**198**	**39**	
Q-rating			Q3	Q3	Q3	Q3	Q3-4	Q3	Q3-4	Q3	Q3	Q3	Q3	*Q2	
WFD status			Poor	Poor	Poor	Poor	Mod	Poor	Mod	Poor	Poor	Poor	Poor	Bad	

* tentative rating due to poor flows and or lack of suitable riffle areas for sampling (as per Toner et al., 2005)

Table 8.3 Macro-invertebrate Q-sampling results for riverine sites E6, E7, E8 & E9 in the vicinity of Littleton wind farm, September 2023

Group	Family	Species	E6	E7	E8	E9	E10	EPA group
Ephemeroptera	Heptageniidae	*Ecdyonurus dispar*		7		4		**A**
Ephemeroptera	Heptageniidae	*Rhithrogena semicolorata*		1			1	**A**
Ephemeroptera	Baetidae	*Alainites muticus*		1			1	**B**
Plecoptera	Leuctridae	*Leuctra fusc*		4	2	3	6	**B**
Trichoptera	Cased caddis pupa	sp. indet.	2					**B**
Trichoptera	Glossosomatidae	*Agapetus fuscipes*	11	2				**B**
Trichoptera	Goeridae	*Silo pallipes*	4	5	4			**B**
Trichoptera	Limnephilidae	*Drusus annulatus*		1				**B**
Trichoptera	Limnephilidae	*Potamophylax cingulatus*			6			**B**
Trichoptera	Sericostomatidae	*Sericostoma personatum*	2	2	10	4	3	**B**
Odonata	Coenagrionidae	sp. indet.					1	**B**
Ephemeroptera	Baetidae	*Baetis rhodani*	16	23	12	14	21	**C**
Ephemeroptera	Caenidae	*Caenis rivulorum*		1		1	1	**C**
Ephemeroptera	Ephemerellidae	*Serratella ignita*	1	2		1	4	**C**
Trichoptera	Hydropsychidae	*Hydropsyche instabilis*	1			2		**C**
Trichoptera	Hydropsychidae	*Hydropsyche siltalai*		1			2	**C**
Trichoptera	Rhyacophilidae	*Rhyacophila dorsalis*		5				**C**
Crustacea	Gammaridae	*Gammarus duebeni*		5	21	16	16	**C**
Coleoptera	Elmidae	*Elmis aenea*		3		4		**C**
Diptera	Dixidae	sp. indet.	1					**C**
Diptera	Pediciidae	*Dicranota sp.*		1		2		**C**
Diptera	Simuliidae	sp. indet.	65	22	15			**C**
Hemiptera	Gerridae	Gerridae nymph		1				**C**
Gastropoda	Lymnaeidae	*Stagnicola fuscus*			3			**C**
Gastropoda	Lymnaeidae	*Lymnaea stagnalis*					2	**C**

Group	Family	Species	E6	E7	E8	E9	E10	EPA group
Gastropoda	Planorbidae	*Bathyomphalus contortus*			3		1	**C**
Gastropoda	Tateidae	*Potamopyrgus antipodarum*	11	1	8		9	**C**
Platyhelminthes	Tricladida	sp. indet.	2					**C**
Arachnida	Hydrachnidiae	sp. indet.			2		1	**C**
Crustacea	Asellidae	*Asellus aquaticus*			10	2	6	**D**
Mollusca	Lymnaeidae	*Ampullacaena balthica*			5			**D**
Mollusca	Sphaeriidae	sp. indet.			3		6	**D**
Annelidae	Oligochaeta	sp. indet.	2		3			**n/a**
Abundance			**118**	**88**	**107**	**53**	**81**	
Q-rating			Q3	Q4	Q3	Q4	Q3-4	
WFD status			Poor	Good	Poor	Good	Mod	

Table 8.4 Macro-invertebrate sweep sample results for lake sites L1-L10 no. lake/wetland sites in the vicinity of Littleton wind farm, October 2023

Group	Family	Species	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
Ephemeroptera	Baetidae	*Cloeon* sp.	8		21	16			14		21	4
Ephemeroptera	Caenidae	*Caenis horaria*					3					
Ephemeroptera	Caenidae	*Caenis rivulorum*	1									
Trichoptera	Leptoceridae	*Athripsodes aterrimus*					5					1
Trichoptera	Leptoceridae	*Mystacides longicornis*					2					
Trichoptera	Limnephilidae	sp. indet. (early instar)			4		1					
Trichoptera	Phryganeidae	*Agrypnia obsoleta*	1	19	1	3						3
Trichoptera	Polycentropodidae	*Plectrocnemia conspersa*	5		2	6						
Odonata	Aeshnidae	*Anax imperator*	3	4	5				1			
Odonata	Libellulidae	*Sympetrum* sp.	4	4	3	4			4			3
Odonata	Coenagrionidae	sp. indet.	54	73	64	41	21	2	29	8	2	8
Coleoptera	Dytiscidae	*Acilius canaliculatus*							1			
Coleoptera	Dytiscidae	Dytiscidae larva	2			1						
Coleoptera	Dytiscidae	*Hydroporus palustris*							1			
Coleoptera	Dytiscidae	*Hyphydrus ovatus*	3				2					
Coleoptera	Dytiscidae	*Nebrioporus depressus*					2					
Coleoptera	Gyrinidae	*Gyrinus aeratus*	2	6			3					2
Coleoptera	Gyrinidae	*Gyrinus substriatus*		2				3		4		
Coleoptera	Halipliidae	*Haliplus ruficollis* group					6		1			
Coleoptera	Hydrophilidae	*Helophorus brevipalpis*							1	1		
Coleoptera	Hydrophilidae	*Laccobius minutus*							1			
Coleoptera	Noteridae	*Noterus clavicornis*					4		3			
Diptera	Chaoboridae	sp. indet.				22		2				
Diptera	Chironomidae	*Chironomus* spp.		8	6	16	10	16	4	8		6
Diptera	Chironomidae	Non-*Chironomus* spp.		3	1	5	4	1			2	2

Group	Family	Species	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
Diptera	Dixidae	sp. indet.							18			1
Mollusca	Lymnaeidae	*Ampullacaena balthica*	7		3		2	109	46			
Mollusca	Lymnaeidae	*Galba truncatula*			6		1					
Mollusca	Planorbidae	*Gyraulis crista*							1			
Mollusca	Planorbidae	*Planorbis planorbis*								8		
Mollusca	Sphaeriidae	sp. indet.	11	42	104	108		2	20	5		
Mollusca	Tateidae	*Potamopyrgus antipodarum*							39			
Hemiptera	Corixidae	*Corixa panzeri*								53		
Hemiptera	Corixidae	*Corixa punctata*							4			
Hemiptera	Corixidae	*Cymatia bonsdorfii*	3	26								
Hemiptera	Corixidae	*Hesperocorixa linnaei*	19		53	42	16		32	1		3
Hemiptera	Corixidae	*Hesperocorixa sahlbergi*								1	8	
Hemiptera	Gerridae	*Gerris* sp.								1		1
Hemiptera	Nepidae	*Ranatra linearis*	2									
Arachnida	Hydrachnidiae	sp. indet.					7					
Arachnida	Dictynidae	*Argyroneta aquatica*					2		1			1
Hirudinidae	Glossiphoniidae	sp. indet.			1							
Crustacea	Asellidae	*Asellus aquaticus*	22				1		1			
Abundance			**147**	**187**	**274**	**264**	**92**	**135**	**222**	**90**	**33**	**35**

Table 8.5 Macro-invertebrate sweep sample results for lake sites L11-L17 no. lake/wetland sites in the vicinity of Littleton wind farm, October 2023

Group	Family	Species	L11	L12	L13	L14	L15	L16	L17
Ephemeroptera	Baetidae	*Centroptilum luteolum*							13
Ephemeroptera	Baetidae	*Cloeon simile*							2
Ephemeroptera	Baetidae	*Cloeon* sp.			3		38		
Ephemeroptera	Caenidae	*Caenis horaria*							19
Trichoptera	Limnephilidae	*Limnephilus marmoratus*							
Odonata	Aeshnidae	*Aeshna* sp.							1
Odonata	Aeshnidae	*Anax imperator*							2
Odonata	Libellulidae	*Sympetrum* sp.		6	2		1	2	5
Odonata	Coenagrionidae	sp. indet.	6	12	16	5	8	26	11
Coleoptera	Dytiscidae	Dytiscidae larva				3			
Coleoptera	Dytiscidae	*Graptodytes pictus*							
Coleoptera	Dytiscidae	*Nebrioporus depressus*		1					
Coleoptera	Gyrinidae	*Gyrinus aeratus*	6			1			
Coleoptera	Gyrinidae	*Gyrinus substriatus*			3	1		1	
Coleoptera	Haliplidae	*Haliplus ruficollis* group	1					4	1
Coleoptera	Noteridae	*Noterus clavicornis*			1				
Diptera	Chaoboridae	sp. indet.	2	1					
Diptera	Chironomidae	*Chironomus* spp.		1	3		2		3
Diptera	Chironomidae	Non-*Chironomus* spp.	6	9			2	16	1
Mollusca	Lymnaeidae	*Ampullacaena balthica*		4					
Mollusca	Lymnaeidae	*Lymnaea stagnalis*		2					
Mollusca	Sphaeriidae	sp. indet.							1
Mollusca	Tateidae	*Potamopyrgus antipodarum*							7
Hemiptera	Notonectidae	*Notonecta marmorea viridis*				2	1	3	
Hemiptera	Corixidae	*Corixa panzeri*					2	1	

Group	Family	Species	L11	L12	L13	L14	L15	L16	L17
Hemiptera	Corixidae	*Corixa punctata*		2					
Hemiptera	Corixidae	*Hesperocorixa linnaei*						1	
Hemiptera	Corixidae	*Hesperocorixa sahlbergi*	3	1	14	12	5	1	
Hemiptera	Corixidae	*Sigara* sp.							
Hemiptera	Gerridae	*Gerris* sp.				2			
Arachnida	Hydrachnidiae	sp. indet.		2	3	6		6	
Arachnida	Dictynidae	*Argyroneta aquatica*	2					2	
Crustacea	Asellidae	*Asellus aquaticus*	9	6					
Abundance			**35**	**47**	**45**	**32**	**59**	**63**	**66**



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FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

APPENDIX 6

Triturus Aquatic Survey Report 2025

Aquatic baseline report for Littleton wind farm, Co. Tipperary (2025)

Prepared by Triturus Environmental Ltd. for Fehily Timoney

November 2025

Please cite as:

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1. Introduction

1.1 Background

Triturus Environmental Ltd. were commissioned by Fehily Timoney to undertake baseline aquatic surveys to inform EIAR preparation for the proposed Littleton wind farm project, located near Littleton, Co. Tipperary (**Figure 2.1**).

Undertaken on a catchment-wide scale, this report provides a baseline assessment of the aquatic ecology, including fisheries and biological water quality as well as protected species and habitats in the vicinity of the proposed project, inclusive of the proposed grid cable route (GCR). The surveys would serve to update previous surveys of the site (by Triturus in 2021 and 2023) whilst also accounting for any changes in proposed infrastructure and site layout in the interim period. Aquatic surveys were undertaken in September 2025.

1.2 Project description

A full description of the proposed project will be provided in any Environmental Impact Assessment Report (EIAR) used to support consenting applications.

2. Methodology

2.1 Selection of watercourses for assessment

All freshwater watercourses which could be affected directly or indirectly by the proposed wind farm project and associated infrastructure were considered as part of the current baseline. This included sites in the vicinity of the proposed turbine array, in addition to watercourse crossings of the proposed grid cable route (GCR). Thus, a total of 35 no. individual sites were selected for detailed aquatic assessment (see **Table 2.1, Figure 2.1** below). The courses and nomenclature for the watercourses surveyed followed Environmental Protection Agency (EPA) mapping.

Riverine survey sites survey sites were present on the Clover River (EPA code: 16C04), Drish River (16D02), River Suir (16S02), Black River (16B01), North Glengoole River (16N28), Breegagh River (16B03), River Goul (15G02), Ardreagh River (15A03), Borrisbeg River (15B18), Clomantagh Lower Stream (15C91), Gorteenahilla River (15G08), Lismaine Stream (15L16), Lisdowney Stream (15L02), River Nore (15N01) and several unnamed watercourses (**Table 2.1**). Additionally, a total of 4 no. lakes/wetlands located at Littleton Bog were also surveyed in September 2025 (**Table 2.1; Figure 2.3**). The aquatic survey sites were located within the Suir_SC_040, Goul_SC_010 and Nore_SC_070 river sub-catchments. The proposed wind farm site did not overlap with any European sites. However, there was potential downstream hydrological connectivity between the proposed project and the Lower River Suir SAC (002137), a site designated for a range of aquatic qualifying interests. A single GCR watercourse crossing of the River Nore (at site G11) traversed the River Barrow and River Nore SAC (002162) and River Nore SPA (004233).

Please note that this aquatic report should be read in conjunction with the final Environmental Impact Assessment Report (EIAR) prepared for the proposed project.

2.2 Aquatic site surveys

Aquatic surveys of the watercourses within the vicinity of the proposed wind farm project were conducted on the 2nd , 3rd, 4th and 19th September 2025. Survey effort focused on both instream and riparian habitats at each aquatic sampling location and included a fisheries habitat appraisal, white-clawed crayfish survey, otter survey (within 150m of the survey site), macrophyte and aquatic bryophyte survey and biological water quality (Q-sampling at riverine sites) or invertebrate sweep sampling (lacustrine sites). This holistic approach informed the overall aquatic ecological evaluation of each site in the context of the proposed project and ensured that any habitats and species of high conservation value would be detected to best inform mitigation.

In addition to the ecological characteristics of the site, a broad aquatic and riparian habitat assessment was conducted utilising elements of the methodology given in the Environment Agency's 'River Habitat Survey in Britain and Ireland Field Survey Guidance Manual 2003' (EA, 2003) and the Irish Heritage Council's 'A Guide to Habitats in Ireland' (Fossitt, 2000). This broad characterisation helped define the watercourses' conformity or departure from naturalness. All sites were assessed in terms of:

- Physical watercourse/waterbody characteristics (i.e. width, depth, channel form), including associated evidence of historical drainage

- Substrate type, listing substrate fractions in order of dominance (i.e. bedrock, boulder, cobble, gravel, sand, silt, etc.)
- Flow type by proportion of riffle, glide and pool in the sampling area
- An appraisal of the macrophyte and aquatic bryophyte community at each site
- Riparian vegetation composition and bordering land use practices

Table 2.1 Summary of *n*=20 riverine survey sites in the vicinity of the proposed Littleton wind farm

2023 site no.	2025 site no.	Watercourse	EPA code	Location	X (ITM)	Y (ITM)
A4	A1	Unnamed stream	n/a	Noard	621499	656663
A5	A2	Clover River	16C04	Noard	621241	655973
A6	A3	Clover River	16C04	R639 road crossing, Leigh	621356	657637
A3	A4	Unnamed stream	n/a	R639 road crossing, Leigh	622188	658445
A7	A5	Clover River	16C04	Noard	619601	659306
B1	B1	Drish River	16D02	Longfordpass South	624723	657212
n/a	B2	Unnamed stream	n/a	Longfordpass South	623872	658080
B2	B3	Drish River	16D02	Bridge 100m u/s Longfordpass Bridge	624889	660463
B3	B4	Drish River	16D02	Castletown Bridge	621680	663563
B5	B5	Drish River	16D02	Drish Bridge	614891	658369
n/a	B6	River Suir	16S02	Thurles Bridge	613217	656936
C1	C1	Black River	16B01	Clonoura	623707	654329
C2	C2	Black River	16B01	Derryvella	621096	652818
n/a	C3	Unnamed stream	n/a	Lanespark	621774	650932
C3	C4	North Glengoole River	16N28	Derryvella	620969	652602
C4	C5	Black River	16B01	Derryhogan	619908	653512
C5	C6	Black River	16B01	N75 crossing, Two Mile Borris	619148	657810
D1	D1	Breegagh River	16B03	Kileen	621369	650304
D2	D2	Breegagh River	16B03	Ballymurreen Bridge	617399	653051
D3	D3	Breegagh River	16B03	Archerstown Bridge	613950	656841

Table 2.2 Summary of *n*=11 watercourse crossings along the proposed grid cable route (GCR)

2023 site no.	2025 site no.	Watercourse	EPA code	Location	X (ITM)	Y (ITM)
B2	G1	Drish River	16D02	Bridge 100m u/s Longfordpass Bridge	624889	660463
n/a	G2	River Goul	15G02	Urlingford	627557	662814
n/a	G3	Ardreagh River	15A03	Urlingford	628129	663283
n/a	G4	Borrisbeg River	15B18	R693 road crossing, Borrismore	630026	663573
n/a	G5	Borrisbeg River	15B18	R693 road crossing, Borrismore	631586	663278

2023 site no.	2025 site no.	Watercourse	EPA code	Location	X (ITM)	Y (ITM)
n/a	G6	Clomantagh Lower Stream	15C91	R693 road crossing, Clomantagh Lower	635291	663867
n/a	G7	Gorteenahilla River	15G08	R693 road crossing, Freshford	640307	664969
n/a	G8	Unmapped stream	n/a	R694 road crossing	640626	665400
E8	G9	Lismaine Stream	15L16	L694 road crossing	642120	667578
E9	G10	Lisdowney Stream	15L02	Grange Bridge	643572	668666
n/a	G11	River Nore	15N01	Moatpark	643930	671951

Table 2.3 Summary of *n*=4 lake/wetland survey sites in the vicinity of the proposed Littleton wind farm (sites not previously covered in 2023 surveys)

2023 site no.	2025 site no.	Watercourse	EPA code	Location	X (ITM)	Y (ITM)
n/a	L18	Lake/wetland	n/a	Bawnreagh	623852	656260
n/a	L19	Lake/wetland	n/a	Clonoura	623732	655408
n/a	L20	Lake/wetland	n/a	Clonoura	623482	655235
n/a	L21	Lake/wetland	n/a	Clonoura	623580	655191

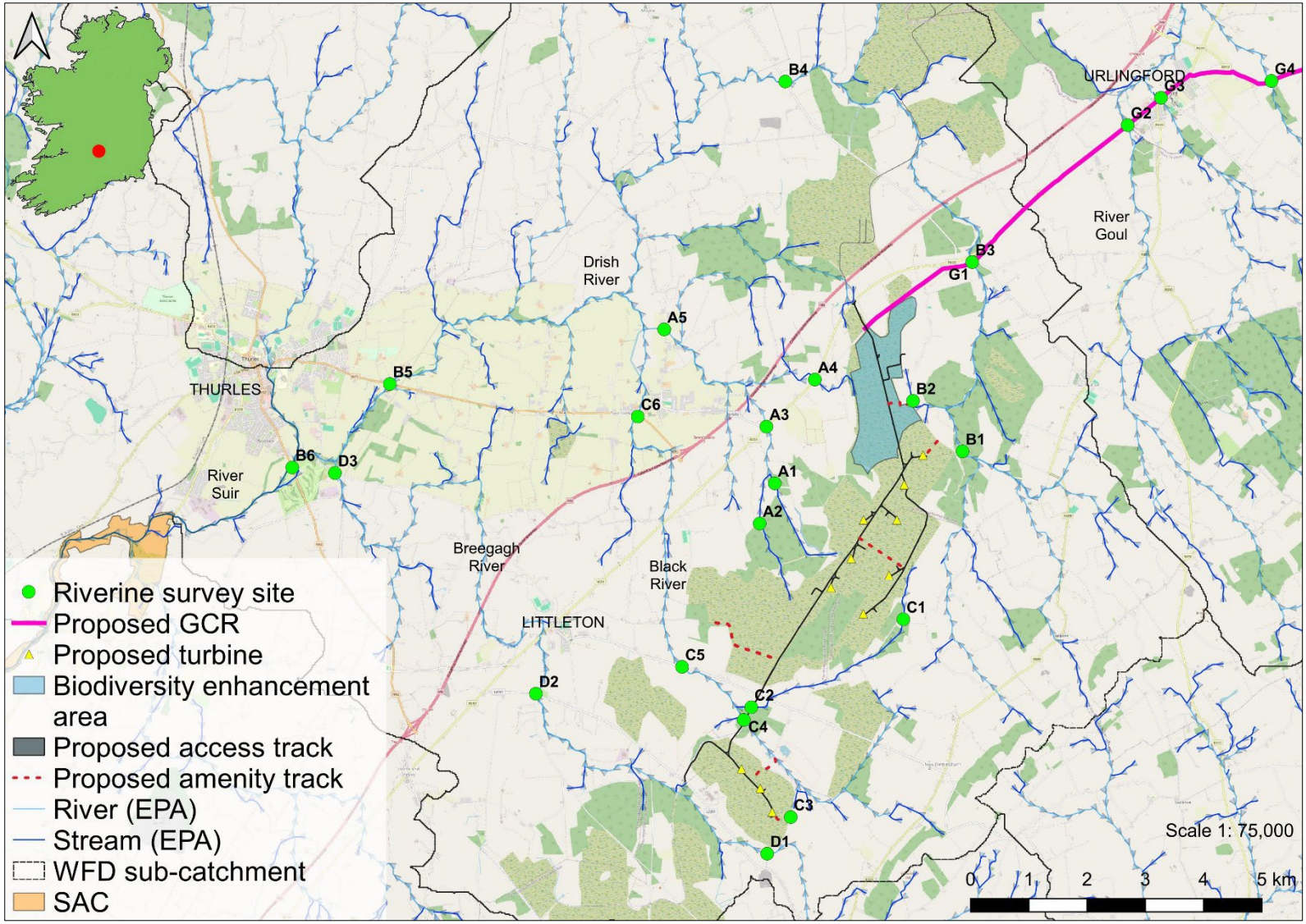


Figure 2.1 Overview of the riverine survey sites in the vicinity of the proposed Littleton wind farm, 2025

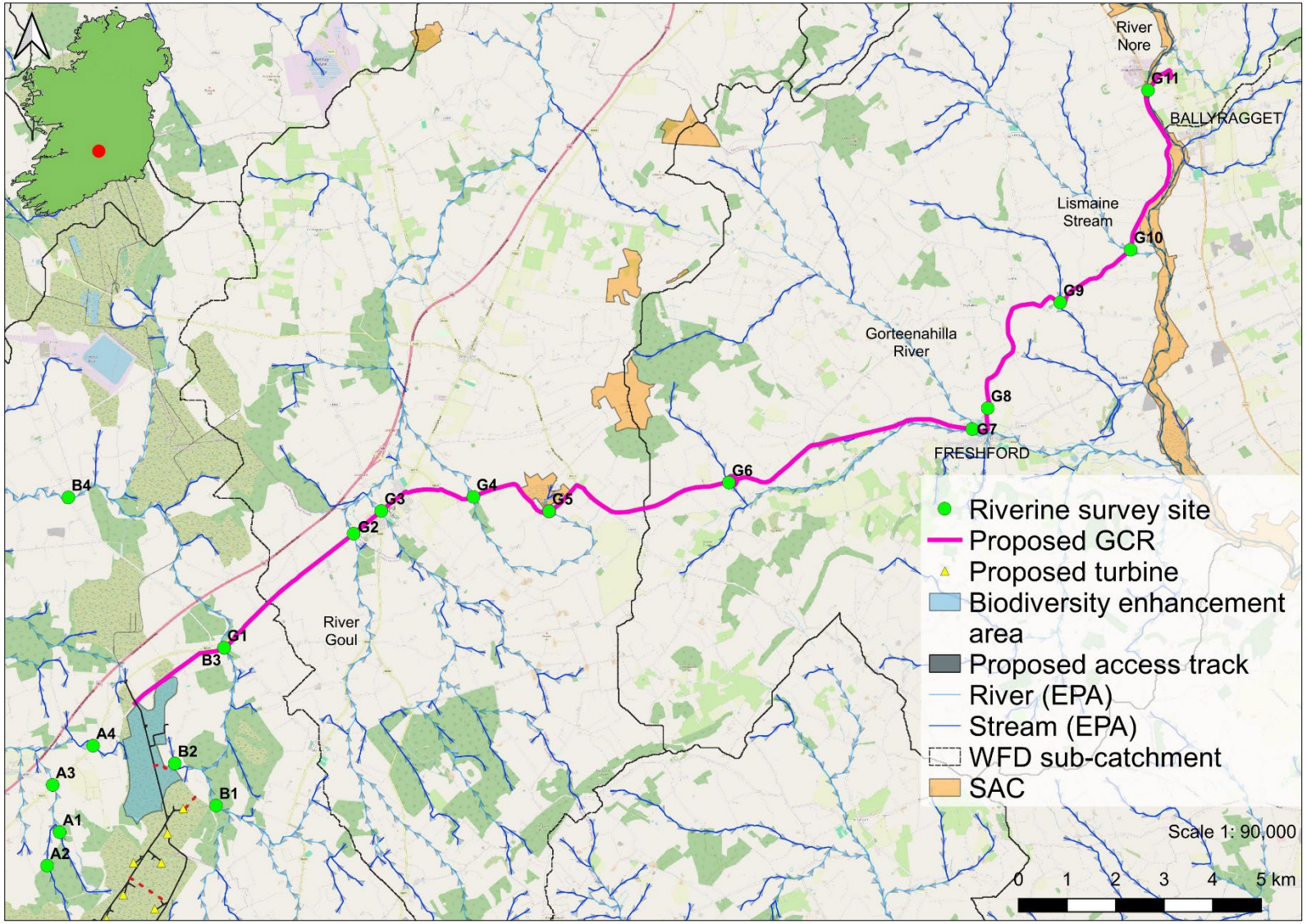


Figure 2.2 Overview of the GCR survey sites (watercourse crossings), 2025

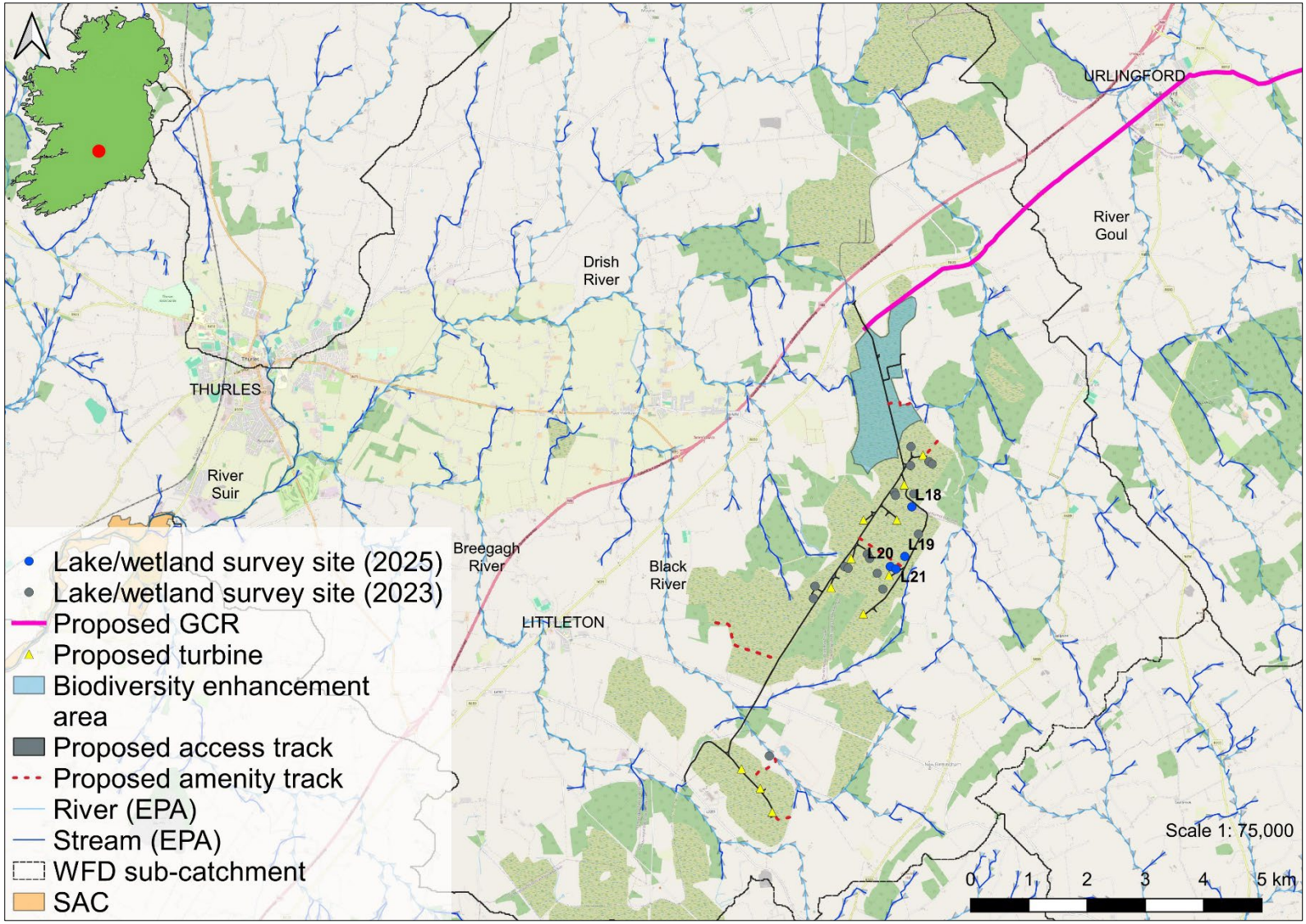


Figure 2.3 Overview of the lacustrine survey sites in the vicinity of Littleton wind farm, 2025

2.3 Fisheries habitat appraisal

A fisheries habitat appraisal of the 34 no. individual riverine and lacustrine sites was undertaken to establish their importance for salmonid, lamprey, European eel and other fish species in terms of spawning, nursery and or holding habitat. The appraisals of salmonids and lamprey were cognisant of species-specific habitat requirements and preferences as outlined in O'Grady (2006), Hendry et al. (2003), Armstrong et al. (2003), Harvey & Cowx (2003), Maitland (2003) and Hendry & Cragg-Hine (1997). River habitat surveys and fisheries assessments were also carried out utilising elements of the approaches in the River Habitat Survey Methodology (EA, 2003) and Fishery Assessment Methodology (O'Grady, 2006) to broadly characterise the channel (i.e. profile, substrata etc.).

2.4 White-clawed crayfish survey

White-clawed crayfish (*Austropotamobius pallipes*) surveys were undertaken at the aquatic survey sites in September 2025 under a National Parks and Wildlife (NPWS) open national licence (no. C164/2025), as prescribed by Sections 9, 23 and 34 of the Wildlife Act (1976-2023), to capture and release crayfish to their site of capture. As per Inland Fisheries Ireland aquatic biosecurity recommendations, the crayfish sampling started at the uppermost site(s) of the wind farm catchment/sub-catchments in the survey area to minimise the risk of transferring invasive propagules (including crayfish plague) in an upstream direction.

Hand-searching of instream refugia and sweep netting was undertaken according to Reynolds et al. (2010). An appraisal of white-clawed crayfish habitat at each site was conducted based on physical habitat attributes (Gammell et al., 2021; Peay, 2003), water chemistry and incidental records in mustelid spraint. Additionally, a desktop review of crayfish records within the wider survey area was completed.

2.5 Biological water quality (Q-sampling)

A total of 30 no. individual riverine survey sites were assessed for biological water quality through Q-sampling in September 2025 (**Table 2.1, 2.2**). All samples were taken with a standard kick sampling hand net (250mm width, 500µm mesh size) from areas of riffle/glide utilising a 2-minute kick sample, as per Environmental Protection Authority (EPA) methodology (Feeley et al., 2020). Large cobble was also washed at each site for 1 minute (where present) to collect attached macro-invertebrates (as per Feeley et al., 2020). Samples were elutriated and fixed in 70% ethanol for subsequent laboratory identification. Samples were converted to Q-ratings as per Toner et al. (2005) and assigned to WFD status classes (**Table 2.4**). Any rare invertebrate species were identified from the NPWS Red List publications for beetles (Foster et al., 2009), mayflies (Kelly-Quinn & Regan, 2012), stoneflies (Feeley et al., 2020) and other relevant taxa (i.e. Byrne et al., 2009; Nelson et al., 2011).

Table 2.4 Reference categories for EPA Q-ratings (Q1 to Q5)

Q value	WFD status	Pollution status	Condition
Q5 or Q4-5	High status	Unpolluted	Satisfactory
Q4	Good status	Unpolluted	Satisfactory
Q3-4	Moderate status	Slightly polluted	Unsatisfactory
Q3 or Q2-3	Poor status	Moderately polluted	Unsatisfactory
Q2, Q1-2 or Q1	Bad status	Seriously polluted	Unsatisfactory

2.6 Lacustrine macro-invertebrate communities

The 4 no. lake/wetland sites were sampled for macro-invertebrates via sweep netting in September 2025. A standard lake net (250mm width, mesh size 500µm) was used to sweep macrophytes to capture macro-invertebrates. The net was also moved along the lake/lake bed to collect epibenthic and epiphytic invertebrates from the substratum (as per Cheal et al., 1993). A 3-minute sampling period was employed. To ensure appropriate habitat coverage, the sampling period was also divided amongst the range of meso-habitats present at the survey site to get a representative sample for sub-habitats.

2.7 Macrophytes and aquatic bryophytes

Surveys of the macrophyte and aquatic bryophyte community were conducted by instream wading at each of the survey sites, with specimens collected (by hand or via grapnel) for on-site identification. An assessment of the aquatic vegetation community helped to identify any rare macrophyte species listed under the Flora (Protection) Order, 2022, Irish Red list for vascular plants (Wyse-Jackson et al., 2016) and or aquatic bryophytes (Lockhart et al., 2012), or habitats corresponding to Annex I habitats, such as floating river vegetation (3260) or hydrophilous tall herb (6430).

2.8 Otter signs

The presence of otter (*Lutra lutra*) was determined through the recording of otter signs within 150m radius of each survey site. Notes on the age and location of signs (ITM coordinates) were made, in addition to the quantity and visible constituents of spraint (i.e. remains of fish, crustaceans, molluscs etc.).

2.9 Aquatic ecological evaluation

The evaluation of aquatic ecological receptors contained within this report uses the geographic scale and criteria defined in the 'Guidelines for Assessment of Ecological Impacts of National Road Schemes' (NRA, 2009).

2.10 Biosecurity

A strict biosecurity protocol following IFI (2010) and the Check-Clean-Dry approach was adhered to during surveys for all equipment and PPE used. Disinfection of all equipment and PPE before and after use with Virkon™ was conducted to prevent the transfer of pathogens or invasive propagules between survey sites. Surveys were undertaken at sites in a downstream order to minimise the risk of upstream propagule mobilisation. Care was given towards preventing the spread or introduction of highly virulent crayfish plague (*Aphanomyces astaci*). Any aquatic invasive species or pathogens recorded within or adjoining the survey areas were geo-referenced. All Triturus staff are certified in 'Good fieldwork practice: slowing the spread of invasive non-native species' by the University of Leeds.

3. Desktop review

3.1 Survey area description

The proposed Littleton wind farm is located in an extensive area of cutover bog within the townlands of Noard, Kileen, Derryhogan, Lanespark, Derryvella, Leigh, Clonoura, Longfordpass South, Two Mile Borris, Ballymurreen, Archerstown, Urlingford, Borrismore, Clomantagh Lower, Freshford and Moatpark (**Figure 2.1**). The proposed wind farm site is within the South Eastern River Basin District and within hydrometric areas 15 (Nore) and 16 (Suir). The watercourses and aquatic surveys sites in the vicinity of Littleton wind farm are typically small, historically modified lowland depositing channels (FW2; Fossitt, 2000) which flow over areas of Tournaisian and Visean limestone and calcareous shale (Geological Survey of Ireland data). Land use practices in the wider survey area comprise peat bogs (CORINE 412), transitional woodland scrub (324) with localised coniferous forests (312), adjoining pastures (231) and built land (BL3).

3.2 Fisheries

The Drish River, a tributary of the River Suir, is known to support *Lampetra* sp. (O'Connor, 2007; Kurz & Costello, 1999) as well as Atlantic salmon (*Salmo salar*), brown trout (*Salmo trutta*), European eel (*Anguilla anguilla*), pike (*Esox lucius*), stone loach (*Barbatula barbatula*), minnow (*Phoxinus phoxinus*) and three-spined stickleback (*Gasterosteus aculeatus*) (Triturus 2023 data). The trout and pike in the Drish were found to be fast-growing and similar to those in comparable rivers in the Irish midlands (CFB data referenced in AECOM, 2020). The river suffered significant pollution from a zinc and lead mine at Lisheen until the recent past (AECOM, 2020; O'Connor, 2007).

The Clover River, a tributary of the Drish River, is known to support brown trout, lamprey (*Lampetra* sp.), three-spined stickleback, pike, perch (*Perca fluviatilis*) and stone loach (Triturus 2021 & 2023 data). The Breegagh River, another Drish River tributary, also supports Atlantic salmon, brown trout, lamprey (*Lampetra* sp.), European eel, minnow, stone loach and three-spined stickleback (Triturus 2021 & 2023 data). The Black River (Two Mile Borris) is known to support Atlantic salmon, brown trout, lamprey (*Lampetra* sp.), European eel and stone loach (Triturus 2021 & 2023 data; O'Connor, 2007). The North Glengoole River, a Black River tributary, supports Atlantic salmon, brown trout, European eel and three-spined stickleback (Triturus 2021 & 2023 data).

In terms of the proposed GCR option, the route crosses the River Nore, Drish River, River Goul, Borrisbeg River, Gorteenahilla River, Lisdowney Stream and the Ardreagh River, which are known to support Atlantic salmon, brown trout, stone loach and three-spined stickleback (Triturus 2021 & 2023 data; IFI 2021 data). The Gorteenahilla River, a tributary of the Nuenna River, supports Atlantic salmon, brown trout, *Lampetra* sp. and three-spined stickleback (Triturus 2021-2023 data). The Clomantagh Lower Stream and the Lismaine Stream frequently run dry and provide poor-quality fisheries habitat, often only supporting

three-spined stickleback (Triturus data). The Lisdowney Stream, a River Nore tributary, supports Atlantic salmon, brown trout, European eel and three-spined stickleback (Triturus 2021 & 2023 data; IFI 2021 data). The River Nore in the vicinity of Ballyragget supports a range of fish species, including Atlantic salmon, brown trout, *Lampetra* sp., European eel, minnow (*Phoxinus phoxinus*), stone loach and rudd (*Scardinius erythropthalmus*) (Triturus 2021 & 2023 data).

Fisheries data for the lake/wetland waterbodies surveyed was not available prior to this survey.

3.3 Protected & rare aquatic species

A comprehensive desktop review of available data from the National Parks and Wildlife Service (NPWS), National Biodiversity Data Centre (NBDC), Inland Fisheries Ireland (IFI), Botanical Society of Britain and Ireland (BSBI), National Crayfish Plague Surveillance Programme (NCPSP), Environmental Protection Agency (EPA) and Triturus databases for the 10km grid squares containing and adjoining the project (i.e. S15, S16, S25, S26, S36, S46 & S47) identified records for a low number of rare and or protected aquatic species within the vicinity of the proposed wind farm.

A high number of contemporary white-clawed crayfish (*Austropotamobius pallipes*) records (>75) were available for the respective grid squares in the 2005-2023 period (**Figure 3.1**), with a further c.50 historical records (pre-2005). A low number of records were available for the Drish River, Clover River (single record), Black River, River Goul, and the River Nore (**Figure 3.1**). The previous 2023 surveys (Triturus, 2024) did not record live crayfish although crayfish remains were identified in otter spraint on the Ardreagh River at the currently proposed GCR crossing.

A low number of contemporary otter (*Lutra lutra*) records (2005-2023) were available for the relevant grid squares, with records from the Black River, Drish River and River Nore (**Figure 3.1**). Otter signs were recorded during the 2023 surveys at sites on the Clover River and unnamed tributary, Breegagh River, Ardreagh River, Gorteenahilla River and the Lisdowney Stream (Triturus, 2024).

A low number of records were available for freshwater pearl mussel (M*argaritifera margaritifera*) for the River Nore located between the River Erkina confluence and Ballyragget in the 1993 to 2007 period (i.e. downstream of the proposed project). However, no live mussel have been recorded in this area of the River Nore since 2007 (Pascal Sweeney pers. comm.), including during a survey completed in May 2023 (Triturus data).

A low number of records for lamprey (*Lampetra* sp.) (reported as brook lamprey) were available for the River Nore downstream of Durrow (data not shown). *Lampetra* sp. are also known from the Nuenna River (Gordon et al., 2021; Matson et al., 2018) and several survey watercourses (see section 3.2 above).Historical records (1968 & 1972) for spawning sea lamprey (*Petromyzon marinus*) were available for the River Nore in the vicinity of Ballyragget (data not shown).

Two records for Flora (Protection) Order 2022 macrophyte species opposite-leaved pondweed (*Groenlandia densa*), were available from a former pond in the vicinity of Urlingford, but these were historical only (i.e. pre-1900, data not shown). No contemporary NPWS records for macrophytes or aquatic bryophytes protected under the Flora (Protection) Order, 2022 were available for the respective grid squares.

A single record for smooth newt (*Lissotriton vulgaris*) was available for bog habitat at Derryvella, adjacent to the North Glengoole River from 2010 (data not shown).

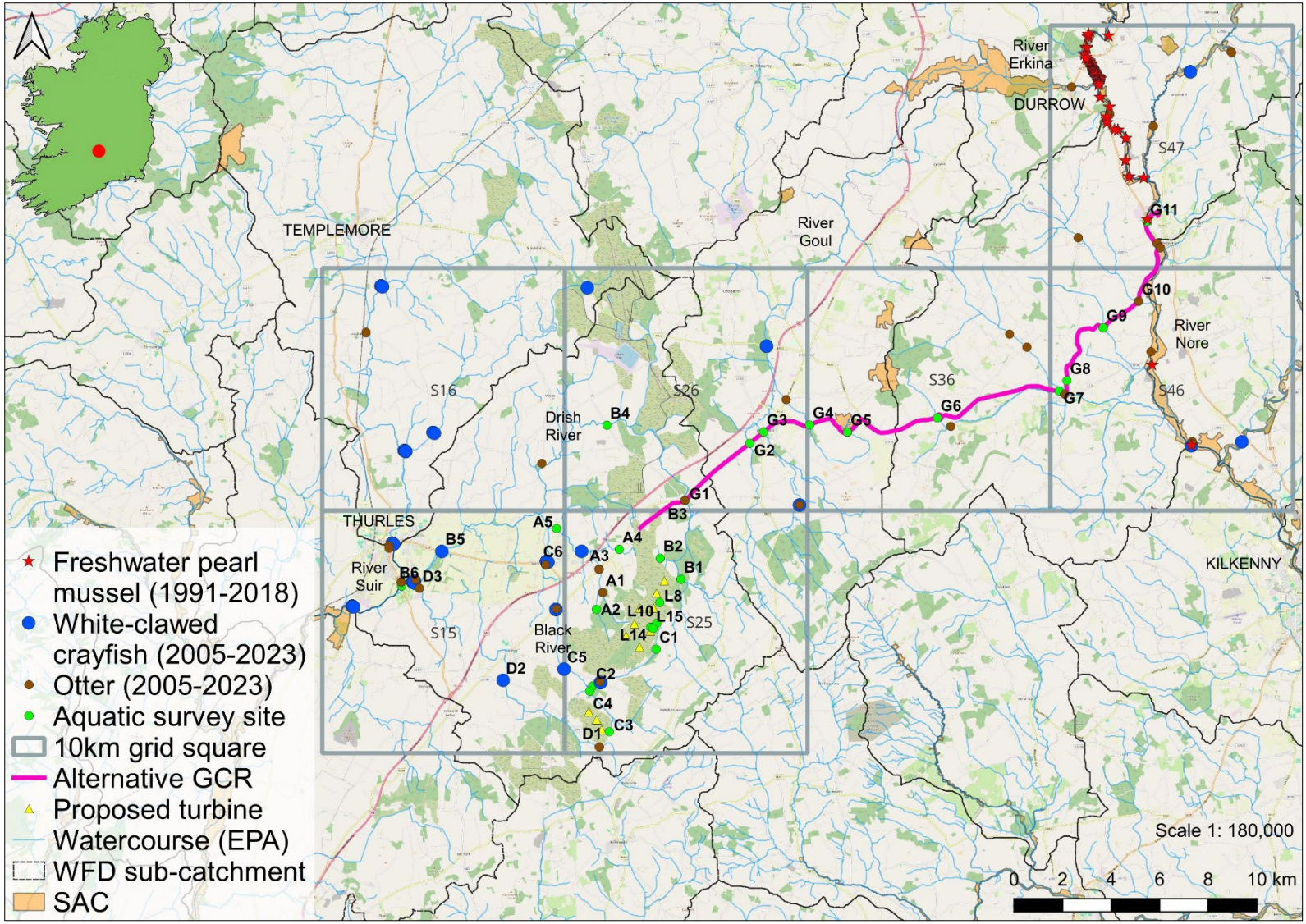


Figure 3.1 Distribution of selected protected species records in the vicinity of the proposed Littleton wind farm (source: NPWS, EPA, NBDC & Triturus data)

4. Results of aquatic surveys

The following section summarises each of the 30 no. riverine and 4 no. lake/wetland survey sites in terms of aquatic habitats, physical characteristics and overall value for fish, white-clawed crayfish, otter and macrophyte/aquatic bryophyte communities. Biological water quality (Q-sample) and macro-invertebrate sweep sample results are summarised for each site and provided in full in **Appendix A**. A summary of the aquatic species and habitats of high conservation concern recorded during the surveys is provided in **Table 4.2**. An evaluation of the aquatic ecological importance of each survey site based on these aquatic surveys is provided and summarised in **Table 4.3**.Habitat codes are according to Fossitt (2000). Scientific names are provided at first mention only. Sites were surveyed in September 2025. Where relevant, survey site numbers from the 2023 survey have been provided for context and are also outlined in **Tables 2.1-2.3** above.

4.1 Riverine survey site results

4.1.1 Site A1 – unnamed stream, Noard

Site A1 (2023 site code: A4) was located on an unnamed tributary of the Clover River (no EPA code) near the proposed turbine array. The lowland depositing channel (FW2) had been extensively straightened and deepened throughout, resulting in a deep trapezoidal channel with 2-3m high banks and poor hydromorphology. The stream was 3-4m wide and 0.4-0.6m deep with a profile of deep, slow-flowing glide with occasional pool. Riffle was absent. The substrata were dominated by deep peat/silt and sands with scattered boulder. Cobble was present but highly localised and bedded in silt. Peat staining was present at the time of the survey. Macrophyte cover was high with frequent branched bur-reed (*Sparganium erectum*) and lesser pondweed (*Potamogeton pusillus*). Localised stands of bulrush (*Typha latifolia*), broad-leaved pondweed (*Potamogeton natans*) and common reed (*Phragmites australis*) were present with frequent encroachment of floating sweet-grass (*Glyceria fluitans*) along the margins. Aquatic bryophytes were absent. The steep banks supported abundant bramble (*Rubus fruticosus* agg.) scrub and intermittent treelines of grey willow (*Salix cinerea* subsp. *oleifolia*), dog rose (*Rosa canina*), hawthorn (*Crataegus monogyna*) and ash (*Fraxinus excelsior*). The site was bordered by coniferous afforestation (WD4), scrub (WS1), reclaimed wet grassland (GS4) and improved pasture (GA1).

In the previous 2023 survey (2023 site code: A4) a low density of adult brown trout (*Salmo trutta*) were recorded via electro-fishing (Triturus, 2024). Spawning habitat was absent, given very significant siltation, with slow-flowing glide resulting in poor quality nursery habitat. Despite abundant soft sediment accumulations, the site was unsuitable for lamprey, given the flocculent, humic nature of the sediment and absence of suitable spawning gravels. The site was also of poor suitability for European eel and white-clawed crayfish, with no crayfish recorded. No otter signs were recorded in vicinity of the site although the species is known to utilise the area for sprainting (Triturus, 2024).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value

greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the known presence of salmonids and utilisation by otter, the aquatic ecological evaluation of site A1 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.1 Representative image of site A1 on an unnamed Clover River tributary, September 2025

4.1.2 Site A2 – Clover River, Noard

Site A2 (2023 site code: A5) was located on the upper reaches of the Clover River (16C04) near the proposed turbine array. The small lowland channel (FW2) had been extensively straightened and deepened, resulting in a trapezoidal channel with very poor hydromorphology. The 2m wide channel was dry at the time of survey with a base of argillaceous mud on top of compacted gravels. The ephemeral channel supported scattered water mint (*Mentha aquatica*) blue water speedwell (*Veronica anagallis-aquatica*), bottle sedge (*Carex rostrata*) and watercress (*Nasturtium officinale*). The banks had been historically cleared and were fenced to the bank top with only rank grass vegetation. The site was bordered by improved pasture (GA1) with coniferous afforestation (WD4) upstream.

The site was not of fisheries value at this location, given its ephemeral nature in addition to siltation and enrichment pressures, very poor hydromorphology (maintained channel and intermittent connectivity with downstream habitats (instream blockages). There was no suitability for white-clawed crayfish. No otter signs were recorded in the vicinity of the site.

It was not possible to collect a biological water quality sample due to the dry nature of the channel.

Given the absence of aquatic species or habitats of higher conservation value, the aquatic ecological evaluation of site A2 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.2 Representative image of site A2 on the upper reaches of the Clover River, September 2025 (ephemeral channel)

4.1.3 Site A3 – Clover River, Leigh

Site A3 (2023 site code: A6) was located on the Clover River (16C04) at the R639 crossing, c. 1.7km downstream of site A2. The lowland depositing river (FW2) at this location had been historically straightened and extensively deepened, with steep bank of 5-6m in height. The river was 6-8m wide (narrower upstream of bridge) and 0.3-0.7m deep and suffered from low summer flows at the time of survey. Upstream of the bridge, shallower riffles and glide was present (0.1-0.2m deep). The profile was of slow-flowing, deep, homogenous glide with riffle and shallower glide present only upstream. The substrata were dominated by cobble and mixed gravels with scattered boulder. These were heavily silted (exacerbated by low flows). Large woody debris (LWD) dams were frequent, improving habitat heterogeneity. Riparian shading was high, with macrophytes restricted to more open areas of channel. Unbranched bur-reed (*Sparganium emersum*) was occasional, with frequent marginal stands of fool's watercress (*Helosciadium nodiflorum*), localised lesser water parsnip (*Berula erecta*), blue water speedwell and common water starwort (*Callitriche stagnalis*). Common duckweed (*Lemna minor*) was also frequent. Aquatic bryophytes were rare and limited to occasional *Leptodictyum riparium* on larger substrata. The channel was lined by mature treelines of sycamore (*Acer psuedoplatanus*), ash and elder (*Sambucus nigra*) with scrubby understories. The site was bordered by buildings and artificial surfaces (BL3) and improved pasture (GA1).

The previous survey recorded brown trout, stone loach (*Barbatula barbatula*) and three-spined stickleback (*Gasterosteus aculeatus*) via electro-fishing (Triturus, 2024). Despite significant siltation

pressures, the site was of value for salmonids. However, due to significant siltation pressures, salmonid spawning habitat was highly localised but nonetheless present. Although suitable lamprey spawning areas were located upstream of the bridge, no suitable nursery habitat was identified. There as some moderate suitability for European eel with ample instream refugia. Despite some suitability for white-clawed crayfish none were recorded although remains of the species have been identified at this site previously (Triturus 2021 data). No otter signs were recorded in vicinity of the site although the species is known to utilise the area for sprainting (Triturus, 2024).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the known presence of salmonids and utilisation by otter, the aquatic ecological evaluation of site A3 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.3 Representative image of site A3 on the Clover River, September 2025

4.1.4 Site A4 – unnamed stream, Leigh

Site A4 (2023 site code: A3) was located on an unnamed Clover River tributary (no EPA code) draining to the north-west of the proposed turbine array. The small lowland channel (FW2) had been historically straightened and deepened along field boundaries and was dry at the time of survey (as per 2023 survey). The stream passed under the local road via a pipe culvert. The channel featured a base of cobble and mixed gravels bedded in silt/mud. Leaf litter and woody debris was abundant on the bed. No aquatic vegetation was present in the ephemeral channel, which was very heavily shaded by mature treelines and hedgerows supporting bramble, ivy (*Hedera helix*), ash and elder. Non-native snowberry (*Symphoricarpos albus*) was frequent along the banks near the culvert. The site was bordered by heavily improved pasture (GA1).

The site was not of fisheries value, given its dry, ephemeral nature and poor quality aquatic habitats with no flows. There was no suitability for white-clawed crayfish. No otter signs were recorded in the vicinity of the site.

It was not possible to collect a biological water quality sample due to the dry nature of the channel.

Given the absence of aquatic species or habitats of higher conservation value, the aquatic ecological evaluation of site A4 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.4 Representative image of site A4 on an unnamed Clover River tributary, September 2025 (dry, ephemeral channel)

4.1.5 Site A5 – Clover River, Noard

Site A5 (2023 site code: A7) was located on the lower reaches of the Clover River (16C04) at a local road crossing c. 2.8km downstream of site A3. The lowland river (FW2) had been historically straightened and, although some good instream recovery was evident. The river was 3-4m wide and 0.2-0.4m deep, with very localised deeper areas to 0.75m. The profile comprised peat-stained slow-flowing glide with localised riffle and pool. Woody debris dams were frequent instream.. The substrata were dominated by mixed gravels and sands with localised boulder and cobble only. Soft sediment accumulations were present but shallow and flocculent. Siltation was high overall (peat-derived). Given high shading, macrophyte growth was sparse with localised fool's watercress (and ivy-leaved duckweed (*Lemna trisulca*) along channel margins. Small stands of branched bur-reed were present locally. Bittersweet (*Solanum dulcamara*) and reed canary grass (*Phalaris arundinacea*) were locally abundant in open areas of the channel. Aquatic bryophyte coverage was low, with rare *Fontinalis antipyretica* and *Leptodictyum riparium*. The river was well shaded by dense grey willow and ash with abundant bramble scrub on the steep banks. The site was bordered by a residential property (BL3,

GA2) and improved pasture (GA1).

Atlantic salmon (*Salmo salar*), brown trout, stone loach, lamprey (*Lampetra* sp.) and pike (*Esox lucius*) were recorded via electro-fishing at site A5 (2023 site code: A7) during the previous survey (Triturus, 2024). The site was of moderate value for salmonids given evident siltation pressures which impacted the quality of spawning habitat. The generally shallow nature of the site also reduced the value as a nursery habitat. Some moderate quality holding habitat was present locally due to undercut banks, overhanging vegetation and pools associated with debris dams. Whilst a low density of *Lampetra* sp. ammocoetes were recorded in a previous survey (Triturus, 2024), the site was considered sub-optimal due to the flocculent and humic nature of the soft sediment deposits. The site offered some good suitability for European eel and white-clawed crayfish. However, no crayfish were recorded via hand-searching and sweep netting. No otter signs were recorded in vicinity of the site although the species is known to utilise the area (Triturus, 2024).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the known presence of salmonids (including Atlantic salmon) and lamprey (*Lampetra* sp.), in addition to utilisation by otter, the aquatic ecological evaluation of site A5 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.5 Representative image of site A5 on the lower reaches of the Clover River, September 2025

4.1.6 Site B1 – Drish River, Longfordpass South

Site B1 (2023 site code: B1) was located on the upper reaches of the Drish River (16D02). The lowland river (FW2) had been extensively straightened and deepened throughout, resulting in a homogenous trapezoidal channel with very poor hydromorphology and low summer flows. The channelised river was 3-4m wide and 0.5-0.8m deep, with locally deeper glide to >1m. The profile was of stagnant glide and pool at the time of survey. The substrata were dominated by sand and heavily silted mixed gravels. Cobble and small boulder were scattered. The site was very heavily vegetated with near total cover of macrophytes. Fool's watercress and branched bur-reed was abundant with frequent common duckweed, ivy-leaved duckweed and lesser water parsnip (*Berula erecta*). Spiked water milfoil (*Myriophyllum spicatum*), blue water speedwell and water mint were occasional. River water dropwort (*Oenanthe fluviatilis*) Semi-floating mats of reed canary grass were abundant along the channel margins and sloping banks. The banks had been cleared historically and supported scattered grey willow, alder (*Alnus glutinosa*), blackthorn (*Prunus spinosa*) and downy birch (*Betula pubescens*). The site was bordered by dry meadow habitat (GS2) and scrub (WS1) with intermittent treelines of ash, grey willow and alder.

Three-spined stickleback was the only fish species recorded via electro-fishing at site B1 during the previous survey (Triturus, 2024). The river at this location was of very poor value for salmonids, given heavy siltation, poor hydromorphology, poor flows and noxious macrophyte cover. The site exhibited some good suitability for European eel with scattered boulder and abundant macrophyte refugia. There was some low suitability for white-clawed crayfish, although none were recorded. No otter signs were recorded in vicinity of the site (although there were few marking opportunities).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than ‘least concern’, according to national red lists, were recorded via Q-sampling.

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site B1 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.6 Representative image of site B1 on the Drish River, September 2025

4.1.7 Site B2 – Unnamed stream, Longfordpass South

Site B2 (not surveyed in 2023) was located on the uppermost reaches of an unnamed Drish River tributary adjacent to the proposed biodiversity enhancement area. The heavily modified, lowland depositing stream (FW2 was dry at the time of survey, with a mud base covered in leaf litter. The channel was broadly U-shaped and was 1.5-2m wide with bank heights of 1-2m. The channel was heavily scrubbed over with dense scrub vegetation (WS1), which included grey willow bramble and gorse (*Ulex europaeus*). The site was bordered by a broad-leaved plantation (WS2) with cutover bog (PB4) to the west and improved pasture (GA1) to the north.

Site B2 was not of fisheries value given its dry, ephemeral nature and absence of aquatic habitats. No otter signs were recorded in the vicinity of the site.

It was not possible to collect a biological water quality sample due to the dry nature of the channel.

Given the absence of aquatic species or habitats of higher conservation value, the aquatic ecological evaluation of site B2 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.7 Representative image of site B2 on an unnamed stream, September 2025 (dry, ephemeral channel)

4.1.8 Site B3/G1 – Drish River, Longfordpass North

Site B3/G1 (2023 site code: B2) was located on the Drish River (16D02) at a local road and proposed GCR crossing upstream of Longfordpass Bridge. The lowland depositing river (FW2) had been extensively straightened and deepened historically, resulting in very poor hydromorphology. The river suffered from low water levels at the time of survey (typical of this location, pers. obs.), with an imperceptible flow and ponding of water between macrophyte beds. The channel was a homogenous 10-12m wide and 0.1-0.4m deep with deep silt deposits of >0.3m locally. Boulder and cobble with mixed gravels were present near the bridge but absent elsewhere. The site was very heavily vegetated (near 100% cover), with open ponding areas very localised. These supported a diverse range of macrophytes, including abundant spiked water milfoil, branched bur-reed, lesser water parsnip, fool's watercress and both common and ivy-leaved duckweed. Blue water speedwell and yellow water lily (*Nuphar lutea*) were locally frequent, with more occasional lesser pondweed, river water dropwort (*Oenanthe fluviatilis*) and water-forget-me-not (*Myosotis scorpioides*). The moss *Cinclidotus fontinaloides* was abundant on instream boulder and the dry bridge apron. The mosses *Fontinalis antipyretica*, *Leptodictyum riparium* and *Hygroamblystegium* sp. were present but rare. The channel was lined and encroached by reed canary grass with frequent bittersweet, purple loosestrife (*Lythrum salicaria*), hedge bindweed (*Calystegia sepium*) and willowherbs (*Epilobium* spp.). Given the presence of numerous indicator species (EC, 2013; Devaney et al., 2013), the littoral herb community downstream of the crossing was representative of the Annex I hydrophilous tall herb (6430) habitat. The site was bordered by amenity grassland (GA2) and improved pasture (GA1) with narrow buffers.

Atlantic salmon, European eel and three-spined stickleback were recorded via electro-fishing at site B3/G1 (2023 site code: B2) during the previous survey (Triturus, 2024). The site was of poor salmonid value given known flow issues in addition to poor hydromorphology and poor connectivity with downstream habitats (i.e. the site is typically stagnant in the summer months). Boulder-dominated areas in vicinity of the bridge apron provided good suitability for European eel. There was some low suitability for white-clawed crayfish, although none were recorded. No otter signs were recorded in vicinity of the site (although the species is known to utilise the site, Triturus data).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of Annex I hydrophilous tall herb habitat (6430), the aquatic ecological evaluation of site B3/G1 was of **county importance** (**Table 4.3**).



Plate 4.8 Representative image of site B3/G1 on the Drish River facing upstream, September 2025

4.1.9 Site B4 – Drish River, Castletown Bridge

Site B4 (2023 site code: B3) was located on the Drish River (16D02) at Castletown Bridge, c. 6km downstream of site B3. The lowland alkaline river (FW2) at this location had been deepened historically but retained some good semi-natural features. Recent clearance of adjoining drains has occurred upstream of the bridge. The river was 5-6m wide in a heavily vegetated channel up to 8-10m wide. The depth ranged 0.5-1m with deeper pool areas to 1.5m locally. The profile was of slow-flowing glide, with localised faster runs between macrophyte beds exposing gravel substrata. The substrata were dominated by cobble and mixed gravels with scattered boulder. However, these were bedded

in silt and moderately calcified (compacted). The compacted bed was also moderately silted with soft sediment deposits frequent. The site was very heavily vegetated (>90% cover) with abundant heterophyllous common clubrush (*Schoenoplectus lacustris*), common duckweed, ivy-leaved duckweed and fool's watercress. Yellow lily, various-leaved water starwort (*Callitriche platycarpa*), river dropwort, branched bur-reed, lesser water parsnip and broad-leaved pondweed were occasional with localised common reed and mare's-tail (*Hippuris vulgaris*). The moss *Rhynchostegium riparium* was occasional. Filamentous algae was present locally. Adjoining the river margins was a sparse herbaceous community supporting reed canary grass, bittersweet, marsh willowherb (*Epilobium palustre*), great willowherb (*Epilobium hirsutum*), water mint and water-forget-me-not. The site was bordered by improved pasture (GA1) and, downstream, an intermittent treeline (WL2) of ash, hawthorn and sycamore (*Acer pseudoplatanus*).

Brown trout, lamprey (*Lampetra* sp.), pike, stone loach and three-spined stickleback were recorded via electro-fishing at site B4 (2023 site code: B3) during the previous survey (Triturus, 2024). Salmonid nursery and spawning habitat quality was poor with evident water quality pressures. Some very limited salmonid and lamprey spawning habitat was present (but sub-optimal). Deeper glide areas provided some good suitability as holding habitat for adult salmonids. Soft sediment deposits were shallow and provided poor quality lamprey nursery habitat (although a low density were recorded in the previous survey (Triturus, 2024)). The site provided good suitability for European eel (i.e. glide, pool and scattered boulder). Despite some good suitability, no white-clawed crayfish were recorded, although the value of the site was reduced given compaction of substrata and poorly accessible boulder refugia. No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the known presence of salmonids and lamprey (*Lampetra* sp.), the aquatic ecological evaluation of site B4 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.9 Representative image of site B3 on the Drish River at Castletown Bridge, September 2025

4.1.10 Site B5 – Drish River, Drish Bridge

Site B5 (2023 site code: B5) was located on the Drish River (16D02) at Drish Bridge (N75), c.12km downstream of site B4. The swift-flowing lowland depositing river (FW2) had been locally straightened historically with some local bank works, but good instream recovery was evident. The river was 6-8m wide (channel up to 10m) and 0.3-0.8m deep, with locally deeper areas to 1.5m. The profile comprised swift, deep glide and pool with only very localised riffle upstream of the bridge. The substrata were dominated by relatively clean, mobile coarse gravels and cobble, with frequent boulder. Sands and finer gravels were also present locally in pool slacks and along channel margins. Soft sediment accumulations were sand-dominated where present (rare overall). Siltation was low to moderate. Macrophyte cover was relatively high with locally abundant common clubrush, water crowfoot (*Ranunculus* sp.) and ivy-leaved duckweed. The margins also supported occasional fool's watercress, blue water speedwell and water mint with scattered iris (*Iris pseudacorus*) and branched bur-reed. The sloping margins supported abundant reed canary grass. Aquatic bryophyte coverage was locally high with *Fontinalis antipyretica* and *Fissidens* sp. on larger boulder. However, given the fragmented nature of the aquatic vegetation community, the site *did not* represent Annex I floating river vegetation (3260). Filamentous algae was present, indicating eutrophication pressures. The historically modified and grazed banks supported abundant reed canary grass with scattered bramble scrub, grey willow, osier (*Salix viminalis*) and immature oak (*Quercus* sp.). The site was bordered by semi-improved pasture (GA1).

Atlantic salmon, brown trout, European eel, lamprey (*Lampetra* sp.), minnow and stone loach were recorded via electro-fishing at site B5 (2023 site code: B5) during the previous survey (Triturus, 2024). The site was of very high value for salmonids with excellent quality nursery habitat present (especially

for Atlantic salmon), given an abundance of refugia. The site also provided excellent quality holding habitat for salmonids by way of deeper pool (e.g. under bridge) and overhanging marginal vegetation. Such areas, in addition to frequent large boulder, were also of high suitability for European eel. Although localised, good quality salmonid and lamprey spawning habitat was present upstream of the bridge. The site was also of value as a lamprey nursery with soft sediment deposits (sand-dominated) associated with macrophyte beds, providing some suitability (although sub-optimal). Despite some good suitability for white-clawed crayfish, none were recorded. No otter signs were recorded in vicinity of the site, although marking opportunities were poor.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the known presence of salmonids (including Atlantic salmon), *Lampetra* sp. and Red-listed European eel,, the aquatic ecological evaluation of site B5 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.10 Representative image of site B5 on the Drish River upstream of Drish Bridge, September 2025

4.1.11 Site B6 – River Suir, Thurles Bridge

Site B6 (not surveyed in 2023) was located on the River Suir (16S02) at Thurles Bridge, downstream of the Drish River confluence. The swift-flowing lowland depositing river (FW2) was semi-natural in character. The river was 10m-12m wide, 0.3-0.6m deep, with banks ranging from 0.3m to 2m high on the southern bank. The flow profile was of fast-flowing glide with localised pool. Siltation was low. The substrata comprised occasional partially bedded boulder and frequent cobble with mixed gravels and

sand. Finer sandy deposits were also occasional in the margins. Siltation was low overall but present. Common club-rush and branched bur-reed was occasional. Depositing margins supported rare yellow water lily. The moss *Fontinalis antipyretica* was frequent on boulder and cobble,. The banks supported reed canary grass, with the southern bank also supporting gorse, bramble, nettle (*Urtica dioica*), snowberry and dog rose. Treeline on both banks supported willow species (*Salix* spp.), ash, horse chestnut (*Aesculus hippocastanum*) and beech (*Betula* sp.).

Site B6 was a moderate-quality salmonid spawning habitat with mixed gravels offering some spawning opportunities (though quality reduced by siltation). The site was a good quality salmonid nursery habitat with boulder and cobble providing refugia for juveniles. Deeper glide and pool areas were limited but of value as holding habitat for adult salmonids. Physical suitability was present for white-clawed crayfish, but was compromised by the partially bedded nature of larger substrata. The site had some suitability for European eel; however, as with crayfish, the presence of bedded larger substrata reduced the overall suitability. Marginal sand deposits provided some sub-optimal nursery habitat for lamprey ammocoetes. No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the importance of the River Suir as an ecological corridor in a regional context, the aquatic ecological evaluation of site B6 was of **county importance** (**Table 4.3**).



Plate 4.11 Representative image of site B6 on the River Suir upstream of Thurles Bridge, September 2025

4.1.12 Site C1 – Black River, Clonoura

Site C1 (2023 site code: C1) was located on the uppermost reaches of the Black River (16B01) that drained to the south of the proposed wind farm site. As per previous surveys, the river was dry at this location at the time of survey, with no pools of standing water and a dry mud base in a remnant channel. The channel had been straightened and deepened historically and was 1.5-2m wide with bank heights of 1-2m. Evidently, the channel was ephemeral, likely only conveying water during wetter periods. The channel was heavily scrubbed over with high levels of terrestrial plant encroachment and willow scrub. The site was bordered by a broad-leaved plantation (WS2) with arable crops (BC1) to the east.

Site C1 was not of fisheries value given its dry, ephemeral nature and absence of aquatic habitats. No otter signs were recorded in the vicinity of the site.

It was not possible to collect a biological water quality sample due to the dry nature of the channel.

Given the absence of aquatic species or habitats of higher conservation value, the aquatic ecological evaluation of site C1 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.12 Representative image of site C1 on the Black River, September 2025 (dry, ephemeral channel)

4.1.13 Site C2 – Black River, Derryvella

Site C2 (2023 site code: C2) was located on the upper reaches of the Black River (16B01) within Derryvella Bog, c. 3km downstream from site C1. The lowland depositing river (FW2) had been straightened and deepened historically but showed some instream recovery. The river was 2-2.5m

wide and 0.1-0.5m deep with a profile of slow-flowing glide and riffle with occasional pool. The stream was culverted underneath a Bord na Móna rail line via a large corrugated pipe culvert. The substrata were dominated by humic silt deposits (peat) with scattered heavily-silted small cobble and mixed gravels with occasional small boulder. The river was very heavily shaded by willow and bramble scrub. As a result, macrophytes were limited to water mint and fool's watercress, in addition to localised iris and common reed. Some *Pellia* sp. liverwort grew on sections of muddy bank. The site was bordered by an area of cutover bog (PB4) and semi-improved pasture (GA1) with abundant scrub (WS1).

Brown trout and three-spined stickleback were recorded via electro-fishing at site C2 (2023 site code: C2) during previous surveys (Triturus, 2024). Atlantic salmon were also recorded in the 2021 survey (Triturus, 2021). Despite historical modifications, poor flows and siltation pressures (peat escapement), the site was of some moderate value as a salmonid nursery. The quality of salmonid spawning habitat was significantly reduced by siltation, but the value likely improved during higher flows. Submerged tree roots and bank scours provided valuable holding areas for adult salmonids. Whilst some limited lamprey spawning habitat was present, ammocoete habitat was unsuitable given the humic, flocculent nature of the silt. The site offered some suitability for European eel and white-clawed crayfish. However, no crayfish were recorded via hand searching and sweep netting (limited refugia). No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the known presence of salmonids, the aquatic ecological evaluation of site C2 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.13 Representative image of site C2 on the Black River, September 2025

4.1.14 Site C3 – Unnamed Stream, Lanespark

Site C3 (not surveyed in 2023) was located on a heavily modified tributary of the Glengoole North River adjacent to the proposed turbine array. The small lowland depositing stream (FW2) was <1m wide and broadly U-shaped with 2-3m high banks. The channel was dry at the time of survey, with a mud base covered with leaf litter. The instream vegetation comprised occasional common reed and wild angelica (*Angelica sylvestris*). The riparian areas supported dense scrub vegetation (WS1). This included abundant grey willow, bramble, gorse , and bracken (*Pteridium aquilinum*). The site was bordered by improved pasture (GA1) and cutover bog (PB4).

The site was not of fisheries value, given its dry, ephemeral nature and absence of aquatic habitats. There was no suitability for white-clawed crayfish. No otter signs were recorded in the vicinity of the site.

It was not possible to collect biological water quality due to the dry nature of the channel.

Given the absence of aquatic species or habitats of higher conservation value, the aquatic ecological evaluation of site C3 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.14 Representative image of site C3 on an unnamed stream, September 2025 (dry, ephemeral channel)

4.1.15 Site C4 – North Glengoole River, Derryvella

Site C4 (2023 site code: C3) was located on the North Glengoole River (16N28) at a Bord na Móna rail crossing (culvert), 250m upstream of the Black River confluence. The lowland depositing river (FW2) had been historically straightened and deepened with trapezoidal banks of up to 4m in height and old embankments evident along the channel. The river was 2-2.5m wide and 0.1-0.4m deep,. Shallow glide predominated with only localised riffle and pool. In shallower areas near the culvert, the substrata comprised mixed gravels and small cobble with occasional boulder. However, outside of this area, depositional silt dominated (up to 0.2m deep). Hard substrata were exposed to moderate siltation and partial bedding. Cover of macrophytes was locally high in open areas of channel with abundant fool's watercress, frequent water mint and brooklime (*Veronica beccabunga*) and localised bulrush (*Typha latifolia*). Aquatic bryophytes were not present. The river channel became heavily shaded downstream of the culvert with grey willow, hawthorn and gorse. The site was bordered by dry meadows habitat (GS2) and improved pasture (GA1) in a wider landscape of cutover bog (PB4).

Brown trout and three-spined stickleback were recorded via electro-fishing at site C4 (2023 site code: C3) in the previous survey (Triturus, 2024). Atlantic salmon were also recorded in the 2021 survey (Triturus, 2021). The site was of moderate value only for salmonids due to significant siltation pressures. The shallow stream provided some suitable spawning habitat (exposed gravels), although these were heavily silted. Localised small pools associated with the culvert, bank scours and macrophyte stands provided some holding habitat for adult salmonids. Soft sediment accumulations whilst widespread were humic in nature and poorly suited for lamprey ammocoetes. The site provided some suitability for European eel with occasional boulder, bank sours and pool providing refugia. Despite some suitability for white-clawed crayfish, none were recorded. No otter sign were recorded in vicinity of the site (few marking opportunities).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the known presence of salmonids, the aquatic ecological evaluation of site C4 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.16 Representative image of site C4 on the North Glengoole River, September 2025

4.1.16 Site C5 – Black River, Derryhogan

Site C5 (2023 site code: C4) was located on the Black River (16B01) at a local road crossing, c. 1.5km downstream of site C2. The river had been extensively straightened and deepened historically, resulting in a characteristic trapezoidal channel with steep banks of up to 5m in height. The river flowed under the local road via a corrugated pipe culvert (fish passable). The homogenous river section was 3-4m wide and 0.2m to 0.5m deep, with occasional pool areas to 1m. The profile was of deep, slow-flowing glide with riffle restricted to upstream of the culvert. The substrata comprised compacted and heavily silted mixed gravels and cobble, with occasional boulder (near culvert only). Bank erosion was frequent (exposed clay) and contributed to the silt loading. Siltation was high overall (largely peat-derived) with deep silt-sand deposits present along channel margins (up to 0.2m deep). The site was heavily shaded by mature treelines of ash, elder, hawthorn and cypress (*Cupressaceae* family). As a result, macrophytes were absent. Aquatic bryophytes were not recorded, with the liverworts *Pellia endiviifolia* and *Conocephalum conicum* on muddy banks. The site was bordered by improved pasture (GA1).

Brown trout and stone loach were recorded via electro-fishing at site C5 (2023 site code: C3) during previous surveys (Triturus, 2021, 2024). Due to significant siltation and hydromorphological pressures, the site was of moderate value only for salmonids. However, some good quality holding areas for adult salmonids were present in deeper glide and pool. Soft sediment accumulations were largely humic or argillaceous in nature and were sub-optimal for lamprey ammocoetes. Some very limited superficial spawning gravels suitable for lamprey were present in the vicinity of the culvert, although spawning habitat improved upstream, where riffles were more frequent. Aside from submerged tree root

systems, suitability for European eel and white-clawed crayfish was relatively poor, given limited accessible instream refugia (no crayfish recorded). No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3-4 (moderate status)** (**Appendix A**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the known presence of salmonids, the aquatic ecological evaluation of site C4 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.16 Representative image of site C5 on the Black River (downstream of culvert), September 2025

4.1.17 Site C6 – Black River, Two Mile Borris

Site C6 (2023 site code: C5) was located on the Black River (16B01) at the N75 road crossing, c. 5km downstream of site C5. The lowland river (FW2) had been extensively straightened and deepened historically with only very localised instream recovery. The river flowed in a steep, 5-8m high trapezoidal channel. The river was 6-8m wide and 0.2-0.6m deep, with locally deeper areas to 1m. The river suffered from low summer flows at the time of survey. Slow-flowing glide predominated, with localised riffles near the road bridge and occasional pools. The substrata were dominated by cobble with frequent boulder and small interstitial patches of mixed gravels. Siltation was moderate overall (peat) but soft sediment accumulations were localised. The substrata were relatively mobile. The site supported frequent lesser water parsnip and occasional common water starwort, water mint, water crowfoot (*Ranunculus* sp.) and watercress. Curled pondweed (*Potamogeton crispus*) was present but rare. Common duckweed and ivy-leaved duckweed were both frequent. Coverage of aquatic bryophytes was high, with abundant *Fontinalis antipyretica* on larger cobble/boulder. Filamentous

algae was present, despite shading. Riparian shading was relatively high given the presence of maturing alder plantations (WS2) along the channel (both banks). The site was bordered by improved pasture (GA1) and grassy verges (GS2).

Atlantic salmon, brown trout, European eel, lamprey (*Lampetra* sp.) and stone loach were recorded via electro-fishing at site C6 (2023 site code: C5) during the previous survey (Triturus, 2024). Despite evident impacts and low summer flows, the site was of good value as a salmonid nursery, with slow-flowing glide and riffle providing suitable habitat for Atlantic salmon parr and juvenile brown trout. Deeper glide with frequent bank scours and submerged tree roots provided valuable holding areas for adult trout in the typically homogenous channel. Salmonid and lamprey spawning substrata were sparse and impacted by siltation pressures. The site was of high value for European eel, with abundant boulder and cobble offering good refuge potential. Soft sediment accumulations were largely confined to the road culvert and provided some suitability as lamprey nursery habitat. Despite some good suitability, no white-clawed crayfish were recorded, though the species is known from the wider river system (Triturus data). A spraint site and abundant otter prints were recorded under the bridge (ITM 619156, 657813).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the utilisation by otter and the known presence of salmonids, lamprey (*Lampetra* sp.) and Red-listed European eel, the aquatic ecological evaluation of site C6 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.17 Representative image of site C6 on the Black River, September 2025

4.1.18 Site D1 – Breegagh River, Killeen

Site D1 (2023 site code: D1) was located on the Breegagh River (16B03) at a local road crossing, where the river flowed through a stacked three-bore box culvert. The small lowland river (FW2) had been straightened and deepened historically, resulting in a homogenous channel with poor hydromorphology and little instream recovery. Boulder revetments were present in the vicinity of the culvert. The river was 2.5-3m wide and 0.3-0.8m deep in deep, slow-flowing glide. Pool was occasional. Riffles were limited to the vicinity of the culvert. The substrata were dominated by compacted cobble with occasional boulder and limited interstitial mixed gravels. The site suffered from heavy siltation, although deposits were flocculent, with only very localised, shallow accumulations. Woody debris was frequent instream, which improved habitat heterogeneity. The river flowed through a maturing broad-leaved plantation, and shading was high. As a result, macrophytes were limited to occasional fool's watercress, water mint and lesser water parsnip along channel margins in more open areas. Reed canary grass was abundant along channel margins. Aquatic bryophytes were limited to localised *Rhynchostegium riparioides* on exposed boulder near the culvert. The site was bordered by a broad-leaved plantation of sycamore, wych elm (*Ulmus glabra*) and alder (WD1), with dense bramble scrub (WS1) and improved pasture (GA1).

Atlantic salmon and brown trout were recorded via electro-fishing at site D1 (2023 site code: D1) during the previous survey (Triturus, 2024). Despite impacts, the site was of good value for salmonids especially as a holding habitat for adult trout, with frequent scoured banks and instream woody debris providing valuable refugia. The site was of poor quality as a salmonid or lamprey spawning habitat given significant siltation pressures. The site was of some suitability for European eel with occasional boulder and scoured banks providing refugia. Despite some suitability, no white-clawed crayfish were recorded. A regular otter spraint site (with fish remains) was recorded under the box culvert (ITM 621364,650303).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the utilisation by otter and the known presence of salmonids (including Atlantic salmon) , the aquatic ecological evaluation of site D1 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.18 Representative image of site D1 on the Breegagh River, September 2025

4.1.19 Site D2 – Breegagh River, Ballymurreen Bridge

Site D2 (2023 site code: D2) was located on the Breegagh River (16B03) at Ballymurreen Bridge, c.5km downstream of site D1. The lowland river (FW2) had been straightened historically but not deepened and retained many good semi-natural characteristics. However, livestock poaching pressures have significantly impacted the quality of aquatic habitats since previous surveys of the site (September 2021 & September 2023; Plate 4.19). The river was 4-5m wide (channel up to 7m wide in places) and 0.2-0.4m deep. Locally deeper glide and pool to 0.8m was present. The profile comprised slow-flowing glide with occasional riffles near the bridge, with pool becoming more frequent downstream. The substrata were dominated by silt with only localised areas of exposed mixed gravels and cobbles (in contrast to 2021, when gravels were widespread). Sand accumulations were also present. The site supported sparse growth of macrophytes with scattered water crowfoot (*Ranunculus* sp.), lesser water parsnip, water forget-me-not, watercress and branched bur-reed. Filamentous algae were present, indicating eutrophication. Aquatic bryophytes were limited to very occasional *Rhynchostegium riparioides* and *Leptodictyum riparium* on larger substrata.. The river was bordered on the east bank by a mature treeline of blackthorn, hawthorn, ash, elder, sycamore and bramble, with improved pasture (GA1) on the west.

Atlantic salmon, brown trout, lamprey (*Lampetra* sp.),stone loach and three-spined stickleback were recorded via electro-fishing at site D2 (2023 site code: D2) during the previous surveys (Triturus, 2021, 2024). Despite evident declines in habitat quality due to livestock poaching and siltation, the site remained of moderate value for salmonids with swift glide and riffle areas providing moderate quality nursery areas. The shallow site was of relatively poor value as a holding habitat for adult salmonids, although some areas were present in bank scours and under overhanging trees. Lamprey ammocoete

habitat was widespread, although much of the soft sediment accumulations were argillaceous in nature and thus sub-optimal. Lamprey spawning habitat by way of finer gravels was present but highly localised (and much reduced over previous surveys). The site was of poor value for European eel, given a paucity of accessible instream refugia and the shallow nature. Despite some suitability for white-clawed crayfish, none were recorded (although positive eDNA recorded at the site in 2021). No otter signs were recorded in vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the known presence of salmonids (including Atlantic salmon) and lamprey (*Lampetra* sp.), the aquatic ecological evaluation of site D2 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.19 Representative image of site D2 on the Breegagh River at Ballymurreen Bridge, September 2023 (top) and September 2025 (bottom), showing evident deterioration in water quality and aquatic habitats due to livestock poaching

4.1.20 Site D3 – Breegagh River, Archerstown Bridge

Site D3 (2023 site code: D3) was located on the lower reaches of the Breegagh River (16B03) at Archerstown Bridge, c.9km downstream of site D2. The lowland depositing river (FW2) was semi-natural in vicinity of the bridge, with some local bank modifications but an otherwise largely natural channel. The river suffered from low summer flows at the time of survey and was 2-3m wide in a 4-5m channel upstream, with braiding around a small island downstream of the bridge (river also wider). The river was 0.2-0.5m deep with locally deeper areas to 1.5m. The profile comprised riffle and deep glide with occasional pool. The substrata of the calcareous river were dominated by cobble and clean, mobile mixed gravels with frequent boulder. Beds of sand were present locally with flocculent soft sediment in slacks and along channel margins. Siltation was low overall.. The site was heavily vegetated with frequent water crowfoot (*Ranunculus* sp.) and lesser water parsnip. Fool's watercress was also frequent with occasional water mint, ivy-leaved duckweed and rare branched bur-reed. Cover of aquatic bryophytes was high with locally abundant *Fontinalis antipyretica*, *Chiloscyphus polyanthos* and *Leptodictyum riparium*. Larger boulders supported *Rhynchostegium riparioides*. Cover of filamentous algae was high (c.10%), indicating enrichment. The channel margins were dominated by reed canary grass with abundant bittersweet. The mature riparian zones supported treelines of sycamore, willow species and ash with abundant bramble and nettle. The site was bordered by residential properties (BL3/GA2) and improved pasture (GA1) with mature buffers.

Atlantic salmon, brown trout, European eel, minnow and stone loach were recorded via electro-fishing at site D3 (2023 site code: D3) during the previous survey (Triturus, 2024). Despite low summer flows (site normally of higher energy), the site was of high value for salmonids with good quality nursery habitat present (especially for Atlantic salmon), given an abundance of macrophyte beds in swift glide. The site also provided high quality holding habitat by way of deeper pool (e.g. downstream of bridge), extensive macrophyte beds and overhanging marginal vegetation. Such areas, in addition to frequent large boulder, were also of high suitability for European eel and white-clawed crayfish (the latter of which was not recorded). Some good quality spawning habitat for both salmonids and lamprey was present upstream and downstream of the bridge. However, there was a paucity of suitable lamprey nursery habitat with soft sediment accumulations, shallow and flocculent in nature. No otter signs were recorded in vicinity of the site although the species is known to utilise the area for sprainting (Triturus, 2024).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the known presence of salmonids (including Atlantic salmon) and Red-listed eel, in addition to utilisation by otter, the aquatic ecological evaluation of site D3 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.20 Representative image of site D3 on the Breegagh River at Archerstown Bridge, September 2025

4.1.21 Site G2 – River Goul, Urlingford

Site G2 (not surveyed in 2023) was located on the River Goul (15G02) at the R639 road and proposed GCR crossing (double pipe culverts with rendered apron). The lowland depositing river (FW2) had been deepened but not straightened historically The river was 1-1.5m wide and 0.5-0.6m deep, with bank heights of 2-3m. The profile was composed exclusively of deeper, slow-flowing glide. The substrata were dominated by heavily silted and compacted mixed gravels. The site featured a low coverage of macrophytes comprising occasional fool's watercress, *common* water starwort and common duckweed. Aquatic bryophytes were absent. The steep banks supported abundant common reed, with occasional reed canary grass, great willowherb, nettle and bramble.. The site was bordered by improved pasture (GA1) and wet grassland (GS4).

The site was of poor value for salmonids given extensive modifications and poor flows. However, deep glide habitat was of some value as holding areas for adult salmonids. However, a concrete apron at the downstream side of the culvert created a barrier to upstream fish passage at low flows. The site supported high numbers of three-spined stickleback (recorded during sweep netting). Suitability for lamprey was also poor with an absence of suitable nursery areas. There was no suitability for white-clawed crayfish given the absence of suitable refugia. No otter signs were recorded in the vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site G2 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.21 Representative image of site G2 on the River Goul, September 2025

4.1.22 Site G3 – Ardreagh River, Urlingford

Site G3 (not surveyed in 2023) was located on the Ardreagh River (15A01) at the R639 road and proposed GCR crossing (double box culvert) in Urlingford. The lowland channel (FW2) was highly modified (held between retaining walls) and had been straightened historically. The river flowed over a low gradient and was 4-5m wide and 0.2-0.5m deep. The profile comprised predominantly shallow slow slow-flowing glide with occasional riffle and pool. The substrata comprised frequent mixed gravels with occasional small to medium boulder. Larger boulder were also present directly upstream of the road crossing. Siltation was moderate to high, with significant flocculent accumulations covering instream vegetation. Filamentous algae cover was considerable in open water areas, indicating eutrophication. Directly upstream of the crossing, the site featured a relatively high coverage of macrophytes, which included abundant curled pondweed, water forget-me-not, fool's watercress, water mint, common water starwort and common duckweed. Reed canary grass and branched burr-reed were present between larger instream boulders. Aquatic bryophytes were limited to *Leptodictyum riparium* on larger instream boulder and retaining walls, with *Cratoneuron filicinum* also present in the splash zone.. Further upstream, the river comprised predominantly deeper glide (c. 0.5m deep) which was heavily shaded by overhanging sycamore, ash, alder, hawthorn and non-native Himalayan honeysuckle (*Leycesteria formosa*). The site was immediately bordered by sub-urban areas and buildings (BL3).

Despite evident impacts, the site was of some value for salmonids with mixed gravels offering moderate-quality salmonid spawning habitat (but impacted by siltation).. The site was of moderate

quality as a salmonid nursery habitat, with instream vegetation and occasional boulders providing some refugia. The upstream shaded section offered some holding habitat for larger salmonids, but its nursery value was reduced by the presence of only very limited refugia (occasional small boulders). This shaded section also offered some suitability for European eel. The silted margins directly upstream of the road crossing provided some nursery suitability for lamprey ammocoetes. White-clawed crayfish suitability was low due to limited available refugia; however, a single crayfish was recorded. No otter signs were recorded in the vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of white-clawed crayfish, the aquatic ecological evaluation of site G3 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.22 Representative image of site G3 on the Ardreagh River, facing downstream, September 2025



Plate 4.23 Representative image of the upstream section of site G3 on the Ardreagh River, facing upstream, September 2025

4.1.23 Site G4 – Borrisbeg River, Borrismore

Site G4 (not surveyed in 2023) was located on the Borrisbeg River (15B18) at the R693 road and proposed GCR crossing. The upland eroding channel (FW1), which had been straightened historically, was 2.5-3m wide and 0.1m-0.2m deep, with deeper pool (0.5m deep) located directly below the road crossing. Bank heights were 1-1.5m. The profile was of slow-flowing, shallow riffle and glide with deeper localised pool. The substrata comprised partially bedded small boulder and cobble with frequent sand accumulations along the littorals and in pools. Some calcification of the bed was evident. Siltation was low. Macrophytes were confined to the pool area where abundant fools watercress, common duckweed and ivy-leaved duckweed were present along with water mint in the margins. Aquatic bryophytes were absent. The watercourse was heavily shaded by bordering trees and scrubby vegetation, which included sycamore, holly (*Ilex aquifolium*), hawthorn, ash, bramble and grey willow. The site was bordered by improved pasture (GA1).

The site was a lower-quality salmonid spawning habitat, given the bedded nature of the substrata and lack of suitable gravels (sand only). Salmonid nursery habitat was of moderate quality with shallow glide and deeper pool with macrophytes providing some refugia. Adult salmonid holding habitat was limited, being confined to the deeper pool downstream of the road crossing. This deeper pool also provided some suitability for European eel, with larger boulder providing refugia. The sand accumulations were of some value as lamprey ammocoete habitat. Suitability for white-clawed crayfish was moderate although none were recorded. No otter signs were recorded in the vicinity of the site.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the presence of suitable salmonid and lamprey habitat, the aquatic ecological evaluation of site G4 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.24 Representative image of site G4 on the Borrisbeg River, September 2025

4.1.24 Site G5 - Borrisbeg River, Borrismore

Site G5 (not surveyed in 2023) was located on the uppermost reaches of the Borrisbeg River (15B18) at the R693 road and proposed GCR crossing immediately south of the Loughans SAC (000407), a large turlough. The lowland channel had been extensively straightened and deepened historically and was dry at the time of the survey (as per previous surveys). Contained in a deep U-shaped channel, the dry river was a homogenous 3m wide with bank heights of up to 2m. The bed comprised damp mud with scattered boulder. This and the presence of *Fontinalis antipyretica* on larger substrata indicated occasional water flows (e.g. winter months). The channel was heavily shaded by mature ash, willow and sycamore treelines. The site was bordered by improved pasture (GA1).

Site G5 was not of fisheries value given its dry, ephemeral nature and absence of aquatic habitats. Under wetted conditions, the river would still provide poor (if any) suitability for fish species or white-clawed crayfish. No otter signs were recorded in the vicinity of the site.

It was not possible to collect a biological water quality sample due to the dry nature of the channel.

Given the absence of aquatic species or habitats of higher conservation value, the aquatic ecological evaluation of site G5 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.25 Representative image of site G5 on the Borrisbeg River, September 2025 (dry channel)

4.1.25 Site G6 – Clomantagh Lower Stream, Clomantagh Lower

Site G6 (not surveyed in 2023) was located on the Clomantagh Lower Stream (15C91) at a local road and proposed GCR crossing. In contrast to EPA mapping, the stream had evidently been historically realigned and, despite extensive searching, no trace of a watercourse could be identified (likely culverted underground). The mapped course of the stream was located in heavily improved pasture (GA1) with hedgerows dominated by bramble and hawthorn.

Site G6 was not of fisheries value given its dry nature and absence of aquatic habitats. No otter signs were recorded in the vicinity of the site.

It was not possible to collect a biological water quality sample due to the dry nature of the channel.

Given the absence of aquatic species or habitats of higher conservation value, the aquatic ecological evaluation of site G6 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.26 Representative image of site G6 on the Clomantagh Lower Stream, September 2025 (no watercourse identified)

4.1.26 Site G7 – Gorteenahilla River, Freshford

Site G7 (not surveyed in 2023) was located on the lowermost reaches of the Gorteenahilla River (15G08) at the R693 road and proposed GCR crossing immediately upstream of the Nuenna River confluence. The river was dry at this location at the time of survey. The lower reaches of the karstic river frequently flow underground in the summer months (pers. obs.). No remnant pools were present and natural gradients prevented water entering the dry channel from the connecting Nuenna River. The semi-natural upland eroding river (FW1) was 4-6m wide with steep banks of up to 3m in vicinity of the road crossing (a perched cobbled apron). Typical of a spate channel, the substrata were dominated by cobble with frequent small boulder and localised coarse gravels. Sand-dominated sediment accumulations were evident on meanders and adjoining putative pool areas. Macrophytes and aquatic bryophytes were not present. The river was lined by mature treelines dominated by ash and sycamore. The site was bordered by improved pasture (GA1) and the peri-urban area of Freshford (BL3).

Site G7 was not of fisheries value given its dry, ephemeral nature and absence of aquatic habitats. No otter signs were recorded in the vicinity of the site.

It was not possible to collect a biological water quality sample due to the dry nature of the channel.

Given the absence of aquatic species or habitats of higher conservation value, the aquatic ecological evaluation of site G7 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.28 Representative image of site G7 on the Gorteenahilla River, September 2025

4.1.27 Site G8 - unmapped stream, R694 road crossing

Site G8 (not surveyed in 2023) was located on an unmapped stream at the R694 road and proposed GCR crossing north of Freshford. The highly modified seasonal channel was dry at the time of survey. The channel was 2m wide with bank heights of 1.5m and was historically straightened. The bed comprised small boulder and cobble, with mixed gravels. The dry bed was strewn with twigs and leaves from bordering trees and did not support any macrophytes. The semi-aquatic bryophyte *Leptodictyum riparium* was present on larger cobble and boulders, with *Pellia* sp. present on embankments. The channel was extensively tunnelled by bordering trees, which included beech (*Betula* sp.), hawthorn, ash and cypress (*Cupressus* sp.). The site was bordered by pasture (GA1), grazed by sheep and built land (BL3).

The highly modified seasonal channel did not contain any water at the time of survey and therefore, was not of fisheries value. Additionally, there was no suitability for species such as otter and white-clawed crayfish.

It was not possible to collect a biological water quality sample due to the dry nature of the channel.

Given the absence of aquatic species or habitats of higher conservation value, the aquatic ecological evaluation of site G8 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.29 Representative image of site G8, September 2025 (dry, ephemeral channel)

4.1.28 Site G9 – Lismaine Stream, Clone

Site G9 (2023 site code: E8) was located on the Lismaine Stream (15L16), a tributary of the River Nore, at a local road and proposed GCR crossing. The stream (FW1) crossed under the road via a box culvert (rendered bed) and was dry at the time of survey. The small stream had been extensively straightened and deepened historically, with poor recovery evident in the steep-sided trapezoidal channel. The stream was 2m wide. The banks were typically undercut/scoured, indicating spate tendencies of the modified channel. The substrata were dominated by mixed gravels and cobble, with scattered boulder. Given high shading, macrophytes were not present. Aquatic bryophyte coverage was also low, with only very occasional *Rhynchostegium riparioides* and *Pellia epiphylla*. The liverwort *Conocephalum conicum* was locally frequent on muddy banks. The stream was lined by mature treelines of sycamore and ash with hawthorn and blackthorn. The site was bordered by improved pasture (GA1).

The site was not of fisheries value at the time of survey given its dry, ephemeral nature . However, there was some physical suitability for salmonids (known further downstream - Triturus 2021 data) and the site (2023 site code: E8) was found to support three-spined stickleback during the previous survey when it supported flowing water (Triturus, 2024). The site was unsuitable for white-clawed crayfish. No otter signs were recorded in vicinity of the site.

It was not possible to collect a biological water quality sample due to the dry nature of the channel.

Given the absence of aquatic species or habitats of higher conservation value, the aquatic ecological evaluation of site G9 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.30 Representative image of site G9 on the Lismaine Stream, September 2025 (dry, ephemeral channel)

4.1.29 Site G10 – Lisdowney Stream, Grange Bridge

Site G10 (2023 site code: E9) was located on the Lisdowney Stream (15L02), a tributary of the River Nore at Grange Bridge, a proposed GCR crossing. The lowland depositing river (FW2) had been historically straightened and deepened, with bank modifications in vicinity of the bridge, but demonstrated some good instream recovery. The river was 6-8m wide and 0.2-0.4m deep, with localised deeper areas to >1m. The stream suffered from very low summer flows at the time of survey with a profile of very slow-flowing glide (i.e. imperceptible flow). A small weir was present under the bridge with a larger weir (1.5m fall) located 50m downstream of the bridge. The substrata were dominated by compacted and calcified cobble and boulder with more localised mixed gravels. Larger boulder were scattered. Bed calcification was widespread. and resulted in low coverage of aquatic vegetation. Macrophytes were limited to occasional marginal stands of fool's watercress. Aquatic bryophyte coverage was low, with only very occasional *Leptodictyum riparium* and *Rhynchostegium riparioides*. The river was shaded by mature mixed woodland and treelines supporting hawthorn, sycamore, ash, beech and holly. The site was bordered by improved pasture (GA1) and a residential property upstream (BL3).

Atlantic salmon, brown trout, European eel and three-spined stickleback were recorded via electro-fishing at site G10 (2023 site code: E9) during the previous survey (Triturus, 2024). Despite low summer flows, the site was of good value for salmonids. The site was of highest value as a salmonid nursery (being more evident in normal flows when swift glide habitat predominates). However, the paucity of instream refugia reduced the value overall. Localised pool and deep glide/undercuts provided some valuable holding habitat for adult salmonids (especially downstream of the large fish passable weir). The site was of some value for spawning salmonids and lamprey, but high calcification/compaction

rates reduced the potential of the site. The compacted bed with limited soft sediment deposition created unsuitable lamprey nursery conditions (none known from site). European eel suitability was locally good in deep pools/glide. Despite some moderate suitability, no white-clawed crayfish were recorded. A regular otter spraint site was recorded under the bridge (ITM 643578, 668668).

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). However, it should be noted that this is a tentative rating given poor flows and lack of suitable riffle areas for sampling (as per Toner et al., 2005). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given utilisation by otter, in addition to the known presence of salmonids (including Atlantic salmon) and Red-listed European eel, the aquatic ecological evaluation of site G10 was of **local importance (higher value)** (**Table 4.3**).



Plate 4.31 Representative image of site G10 on the Lisdowney Stream, September 2025 during low summer flows

4.1.30 Site G11 – River Nore, Moatpark

Site G11 (not surveyed in 2023) was located on the River Nore (15N01) at a proposed GCR crossing upstream of Ballyragget. The large lowland river (FW2) had been historically deepened and was 0.4-1.5m deep with 3m high banks. Although short riffle sections were present immediately downstream of a river island, the 12-15m wide river soon graded into homogenous deep glide and pool with depositing margins. The substrata comprised compacted boulder and cobble with localised areas of sand and silt. Extensive areas of mobile gravels and cobbles were present upstream near the island. Significant eutrophication and siltation was evident. Macrophyte cover was low with only scattered water mint, blue water speedwell and branched bur-reed. Water crowfoot (*Ranunculus* sp.) was rare.

Larger substrata supported occasional *Fontinalis antipyretica*. The riparian areas supported intermittent and narrow treelines of mature crack willow (*Salix fragilis*), grey willow, ash and alder with abundant bramble and reed canary grass. The site was bordered by heavily improved pasture (GA1) and dry meadow areas (GS2).

The River Nore at this location was of good value for salmonids with the riffle and shallow glide areas at the island upstream of the proposed crossing representing a highly valuable salmonid and lamprey spawning area (rare in the wider survey area). However, deep glide downstream (surveyed in 2023, site code: E10) was not of value as a spawning habitat and was a poor quality salmonid nursery. Such habitat was, though, of good value as a holding area for adult salmonids, in addition to coarse fish species and European eel. Soft sediment accumulations along the margins, although often sand dominated, were of some value to lamprey ammocoetes. There was moderate potential for white-clawed crayfish, although bed compaction and modifications reduced suitability – none were recorded. No otter signs were recorded in vicinity of the site although foraging suitability was high.

Biological water quality, based on Q-sampling, was calculated as **Q3 (poor status)** (**Appendix A**). No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via Q-sampling.

Given the location of the site within the River Barrow and River Nore SAC (002162) and the River Nore SPA (004233), the aquatic ecological evaluation of site G11 was of **international importance** (**Table 4.4**).



Plate 4.32 Representative image of site G11 on the River Nore, August 2025

4.2 Lacustrine survey site results

4.2.1 Site L18- lake/wetland, Bawnreagh

Site L18 was an oligotrophic cutover peatland bog lake. The lake was c. 0.8 hectares in size and between 0.3-1m deep. The lake had a fibrous peat base. It supported abundant bog cotton (*Eriophorum angustifolium*) and bottle sedge in the littorals with locally frequent broad-leaved pondweed and bog pondweed (*Potamogeton polygonifolius*). Fen pondweed (*Potamogeton coloratus*) was rare. Bulbous rush (*Juncus bulbosus*) was also locally frequent in the littorals with bog pimpernel (*Lysimachia tenella*). Pockets of *Sphagnum cuspidatum* were also present, submerged in the littorals. *Sphagnum tenellum* and *Sphagnum papillosum* were present on wet hummocks with marsh pennywort (*Hydrocotyle vulgaris*) and extensive bog cotton bordering the littorals. The survey area was bordered by cutover bog (PB4) and heath.

The site was typically too shallow to support significant fish populations apart from likely three spined stickleback. Geographic isolation and a lack of connectivity from other fisheries habitats would further reduce the fisheries potential of the site. No smooth newt (*Lissotriton vulgaris*) were recorded during the survey.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix A**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L18 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.33 Representative image of site L18, September 2025

4.2.2 Site L19 - lake/wetland, Clonoura

Site L19 comprised a mosaic of small interconnected lakes in historical cutover peatland. The wetland complex was c. 0.08 hectares in size and between 0.1 to 0.3m deep. The site had a bed composed exclusively of fibrous peat. The oligotrophic ponds within the wetland complex supported a moderate diversity of macrophytes, including broad-leaved pondweed in open water with expansive bog cotton in the littorals. Shallow pockets of open water also supported occasional *Chara vulgaris* and small pondweed (*Potamogeton berchtoldii*). Common duckweed was locally frequent in standing water. Pockets of bulrush were scattered throughout. The wetland supported scattered downy birch and grey willow in the margins with exposed tracts of bare peat. Immature native woodland (WS2) was present on the escarpments of higher ground.

The site was too shallow to support fish. Geographic isolation and a lack of connectivity from other fisheries habitats would further reduce the fisheries potential of the site. While it had high suitability for smooth newt and frog, none were recorded.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix A**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L19 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.34 Representative image of site L19, September 2025

4.2.3 Site L20 - lake/wetland, Clonoura

Site L20 comprised a large area of open water c. 0.5hectares in size with bordering wetland in a historical peatland cutover hollow between exposed peat. The oligotrophic lake basin was between

0.1m and 0.6m deep. It had a bed composed exclusively of fibrous peat. The lake supported a low diversity of macrophytes characteristic of lowland cutover bog (PB4). This included open water supporting occasional broadleaved pondweed and bog pondweed. The littorals supported expansive bog cotton with tracts of bottle sedge and water horsetail on deeper littorals fronting bog cotton. The lake also supported pockets of emergent bulrush reed swamp (FS1). It was bordered by bare peat with revegetating cutover bog (PB4) with immature native woodland (WS2) on higher ground.

The site was too shallow and silted to support salmonids, but three spined stickleback were recorded via sweep sampling. While it had high suitability for smooth newt and frog, none were recorded.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix A**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L20 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.35 Representative image of site L20, September 2025

4.2.4 Site L21 - lake/wetland, Clonoura

Site L21 comprised a small pocket of open water, c.0.1 hectares in size with bordering wetland in a historical peatland cutover hollow. Located adjacent to site L20, the oligotrophic lake was between 0.1m and 0.3m deep. It had a bed composed exclusively of fibrous peat. The lake supported a low diversity of macrophytes characteristic of lowland cutover bog (PB4). This included open water supporting broadleaved pondweed and bog pondweed. The littorals supported expansive bog cotton with locally frequent bottle sedge on softer peat. The lake also supported pockets of emergent bulrush reed swamp (FS1). It was bordered by bare peat tracks with revegetating cutover bog (PB4) with immature native woodland (WS2) on higher ground.

The pond was typically too shallow to support fish. Geographic isolation and a lack of connectivity from other fisheries habitats would further reduce the fisheries potential of the site. While it had high suitability for smooth newt and common frog none were observed.

No macro-invertebrate species of conservation value greater than 'least concern', according to national red lists, were recorded via sweep netting (**Appendix A**).

Given the absence of aquatic species or habitats of high conservation value, the aquatic ecological evaluation of site L21 was of **local importance (lower value)** (**Table 4.3**).



Plate 4.36 Representative image of site L21, September 2025

4.3 White-clawed crayfish survey

White-clawed crayfish was recorded from site G3on the Ardreagh River, where a single adult was captured via hand searching. No other live crayfish were recorded in the surveys undertaken at 29 no. other riverine or 4 no. lacustrine sites in September 2025.

Furthermore, inspection of otter spraints at 3 no. sites on the Black River, Breegagh River and Lisdowney Stream did not reveal the presence of crayfish remains.



Plate 4.37 White-clawed crayfish captured during sweep netting at site G3 on the Ardreagh River, September 2025

4.4 Biological water quality (macro-invertebrates)

The whirligig beetle *Gyrinus urinator* was recorded from site C6 on the Black River (**Appendix A**). This species is listed as 'Near threatened' on the Irish Red list (Foster et al., 2009).

No other rare or protected macro-invertebrate species (according to national red lists) were recorded in the biological water quality samples collected from the 19 no. other wetted riverine sites in September 2025 (**Figure 4.1**, **Appendix A**).

None of the survey sites achieved **Q4 (good status)** water quality (**Figure 4.1**). This was due to the absence of EPA group A species and or their presence at <5% of the total sample abundance (**Appendix A**).

All of the sites, with exception of site C5, achieved **Q3 (poor status)** biological water quality. This was given an absence of EPA group A (the cleanest water indicators), low numbers of EPA group B and a dominance of EPA group C (moderate water quality indicators). The group B species recorded included the mayflies *Alainites muticus* and *Paraleptophlebia cincta* and the stonefly *Leuctra fusca*. The dominant group C species included the mayfly *Baetis rhodani*, the caseless caddis species *Polycentropus kingi* and freshwater shrimp (*Gammarus duebenii*).

A single site, C5 on the Black River, achieved **Q3-4 (moderate status)** water quality (**Figure 4.1**). Despite the presence of the EPA group A mayfly *Ecdyonurus dispar*, this was only recorded in low numbers (<5% of total sample) and thus did not meet the qualifying criteria for good status as set out by Toner et al. (2005).

It should be noted that it was not possible to collected biological water quality samples for sites A2, A4, B2, B3, C1, C3 and sites G5-G9 due to the dry nature of the channels at the time of survey. The Q-ratings for sites A1, B1, B4, B3/G1, D1, G2 and G10 were tentative due to low summer flows and or a lack of suitable riffle areas for sampling (as per Toner et al., 2005).

4.5 Lacustrine macro-invertebrates

No protected macro-invertebrate species were recorded in the sweep samples taken from the four no. lake/wetland sites in September 2025 (**Appendix A**). All species recorded were of least concern when cross-referenced against national red lists, where lists exist for each species group.

The shallow peat lakes and wetlands supported a wide diversity of species, supporting mayflies such as *Cloeon dipterum* and *Caenis horaria*, two species that are widespread in silty lake margins. No dragonflies were recorded. However, the ubiquitous damselfly genus *Coenagrion* was present. The pigmy backswimmer (*Plea minutissima*) has a sparse distribution in Ireland but is known to be spreading northwards in recent decades (Anderson, 2010). A single specimen was recorded at lake survey site L20 (**Appendix A**). A second species of note was the dytiscid (diving) beetle, *Hyphydrus ovatus,* that was recorded a site L18. This beetle species has a sparse distribution in Ireland (NBDC data), despite being of least concern on the national red list for water beetles (Foster et al. 2009).

4.6 Otter signs

Whilst a full otter survey was beyond the scope of this survey, signs were recorded within a 150m radius of the survey sites in September 2025.

A total of 3 no. otter signs were recorded across 34 no. individual survey sites during the course of aquatic surveys undertaken in September 2025. All were recorded from riverine sites. Spraint sites (all regular) were recorded at sites on the Black River (C6), Breegagh River (D1) and the Lisdowney Stream (G10).

No breeding (holts) or resting (couch) areas were identified in the vicinity of the survey sites in September 2025 or during the previous 2023 surveys (Triturus, 2024).

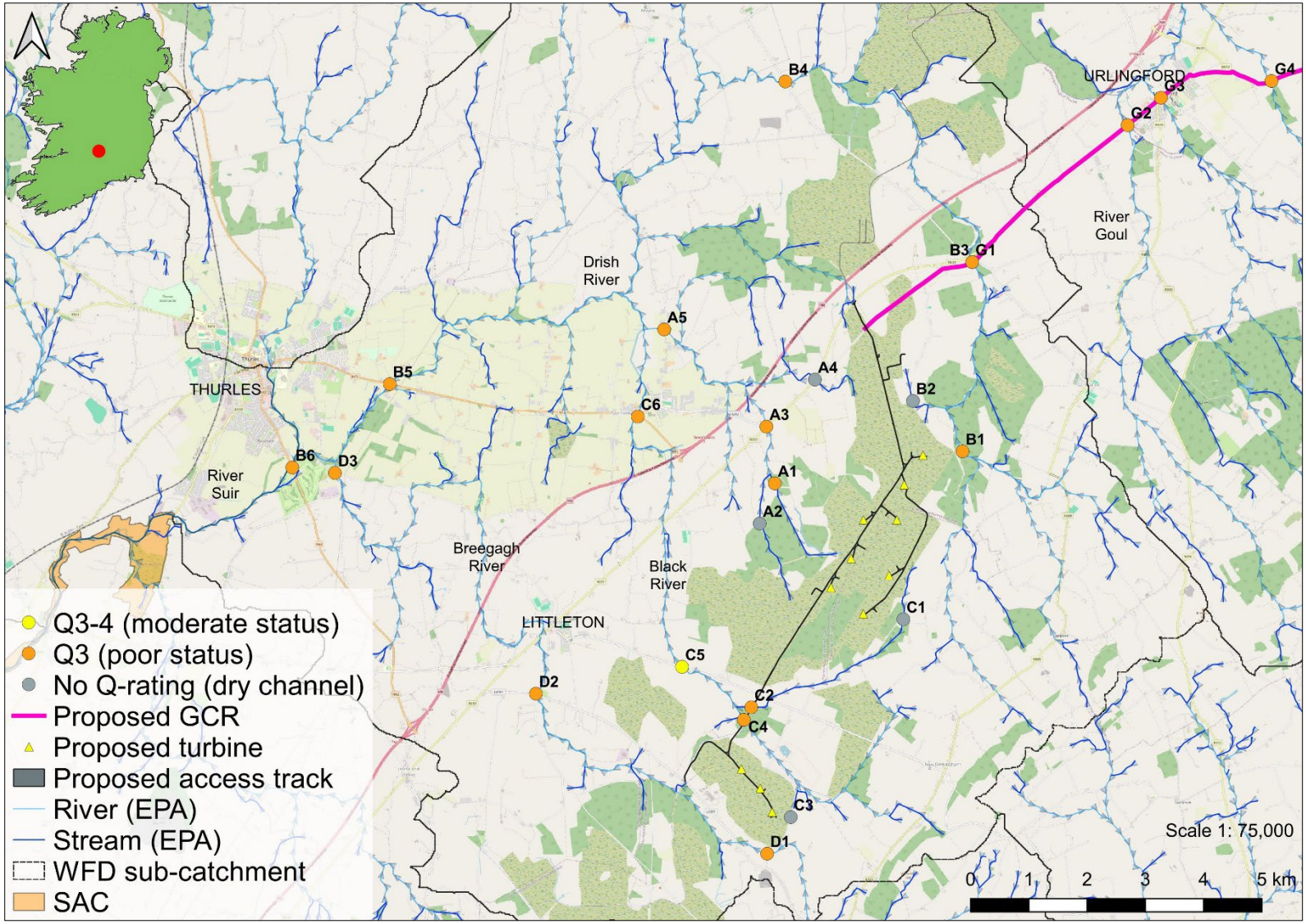


Figure 4.1 Overview of the biological water quality status in the vicinity of the proposed Littleton wind farm project, September 2025

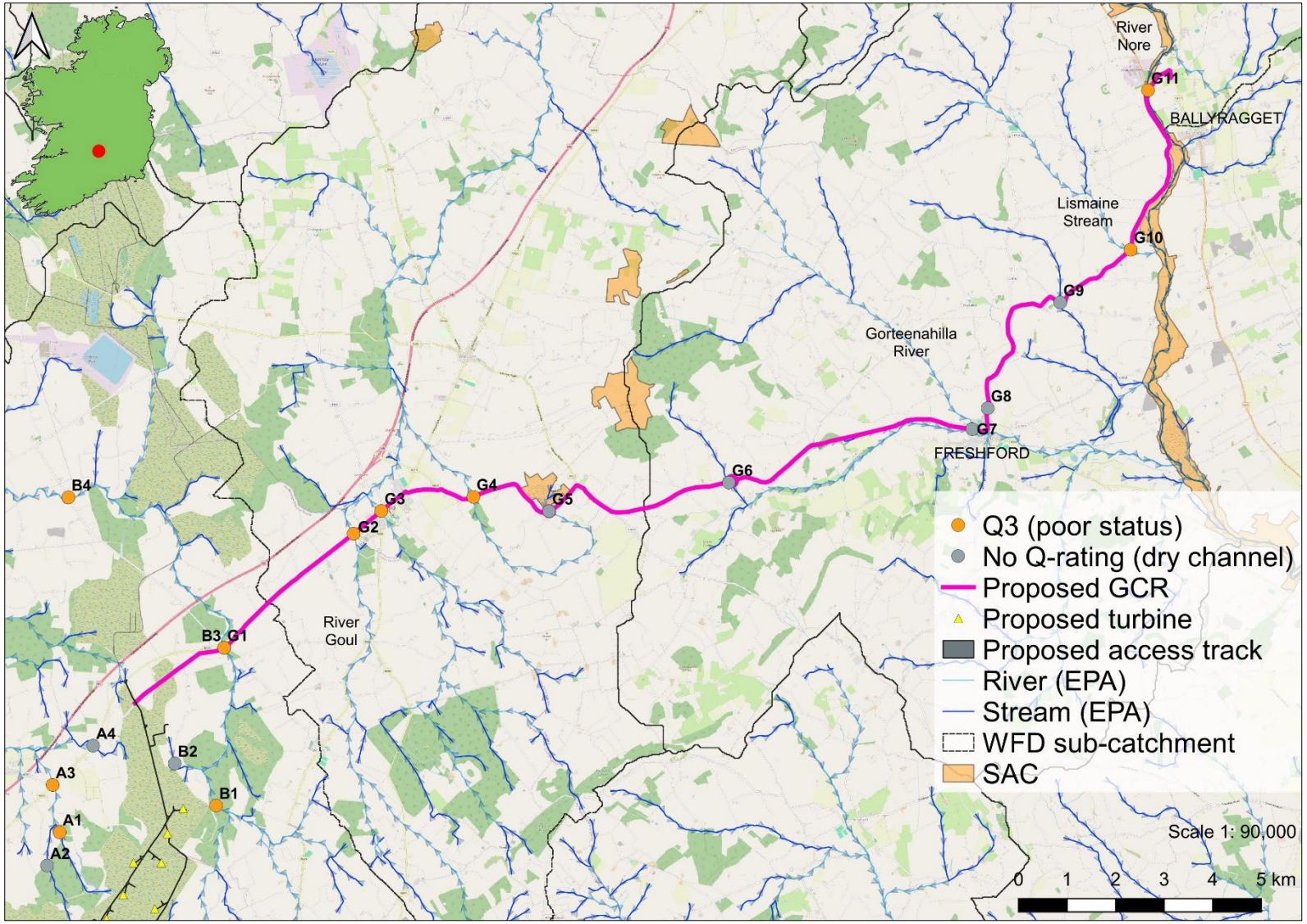


Figure 4.2 Overview of the biological water quality status in the vicinity of the proposed GCR crossings, September 2025

Table 4.1 Comparison of 2023 and 2025 biological water quality (Q-ratings) at sites in vicinity of Littleton wind farm

			September 2023		September 2025	
Site no.	Watercourse	EPA code	Q-rating	WFD status	Q-rating	WFD status
A1	Unnamed stream	n/a	**Q3***	Poor	**Q3***	Poor
A2	Clover River	16C04	**Q3***	Poor	n/a - dry channel	
A3	Clover River	16C04	**Q3**	Poor	**Q3**	Poor
A4	Unnamed stream	n/a	**Q2-3***	Poor	n/a - dry channel	
A5	Clover River	16C04	**Q3-4**	Mod.	**Q3**	Poor
B1	Drish River	16D02	**Q3***	Poor	**Q3***	Poor
B2	Unnamed stream	n/a	Not surveyed		n/a - dry channel	
B3/G1	Drish River	16D02	**Q2-3**	Poor	**Q3***	Poor
B4	Drish River	16D02	**Q2-3**	Poor	**Q3***	Poor
B5	Drish River	16D02	**Q4**	Good	**Q3**	Poor
B6	River Suir	16S02	Not surveyed		**Q3**	Poor
C1	Black River	16B01	n/a - dry channel		n/a - dry channel	
C2	Black River	16B01	**Q3**	Poor	**Q3**	Poor
C3	Unnamed stream	n/a	Not surveyed		n/a - dry channel	
C4	North Glengoole River	16N28	**Q3**	Poor	**Q3***	Poor
C5	Black River	16B01	**Q3**	Poor	**Q3-4**	Mod.
C6	Black River	16B01	**Q3**	Poor	**Q3**	Poor
D1	Breegagh River	16B03	**Q3-4**	Mod.	**Q3***	Poor
D2	Breegagh River	16B03	**Q3**	Poor	**Q3***	Poor
D3	Breegagh River	16B03	**Q3-4**	Mod.	**Q3**	Poor
G2	River Goul	15G02	Not surveyed		**Q3***	Poor
G3	Ardreagh River	15A03	Not surveyed		**Q3**	Poor
G4	Borrisbeg River	15B18	Not surveyed		**Q3**	Poor
G5	Borrisbeg River	15B18	Not surveyed		n/a – dry channel	
G6	Clomantagh Lower Stream	15C91	Not surveyed		n/a – dry channel	
G7	Gorteenahilla River	15G08	Not surveyed		n/a – dry channel	
G8	Unmapped stream	n/a	Not surveyed		n/a – dry channel	
G9	Lismaine Stream	15L16	**Q3**	Poor	n/a – dry channel	
G10	Lisdowney Stream	15L02	**Q4**	Good	**Q3***	Poor
G11	River Nore	15N01	Not surveyed		**Q3**	Poor

* tentative rating given poor flows and the absence of suitable riffle areas for sampling (as per Toner et al., 2005)

Table 4.2 Summary of aquatic species & habitats of higher conservation value recorded in the vicinity of the proposed Littleton wind farm, September 2025

Site		White-clawed crayfish	Otter signs[4]	Annex I aquatic habitats	Rare or protected macrophytes/ aquatic bryophytes	Rare or protected macro-invertebrates	Other species/habitats of high conservation value
Riverine sites							
A1	Unnamed stream	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
A2	Clover River	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
A3	Clover River	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
A4	Unnamed stream	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
A5	Clover River	None recorded	No signs	None recorded	None recorded	None recorded	**Atlantic salmon & *Lampetra* sp. recorded in 2023**
B1	Drish River	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
B2	Unnamed stream	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
B3/G1	Drish River	None recorded	No signs	**Hydrophilous tall herb (6430)**	None recorded	None recorded	**Atlantic salmon & European eel recorded in 2023**
B4	Drish River	None recorded	No signs	None recorded	None recorded	None recorded	***Lampetra* sp. recorded in 2023**
B5	Drish River	None recorded	No signs	None recorded	None recorded	None recorded	**Atlantic salmon, *Lampetra* sp. & European eel recorded in 2023**
B6	River Suir	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
C1	Black River	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
C2	Black River	None recorded	No signs	None recorded	None recorded	None recorded	**Atlantic salmon recorded in 2023**
C3	Unnamed stream	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
C4	North Glengoole River	None recorded	No signs	None recorded	None recorded	None recorded	None recorded

Site		White-clawed crayfish	Otter signs[4]	Annex I aquatic habitats	Rare or protected macrophytes/ aquatic bryophytes	Rare or protected macro-invertebrates	Other species/habitats of high conservation value
C5	Black River	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
C6	Black River	None recorded	**Regular spraint site**	None recorded	None recorded	***Gyrinus urinator* (Near threatened; Foster et al., 2009)**	**Atlantic salmon, *Lampetra* sp. & European eel recorded in 2023**
D1	Breegagh River	None recorded	**Regular spraint site**	None recorded	None recorded	None recorded	**Atlantic salmon recorded in 2023**
D2	Breegagh River	None recorded	No signs	None recorded	None recorded	None recorded	**Atlantic salmon & *Lampetra* sp. recorded in 2023**
D3	Breegagh River	None recorded	No signs	None recorded	None recorded	None recorded	**Atlantic salmon & European eel recorded in 2023**
G2	River Goul	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
G3	Ardreagh River	**Single crayfish captured**	No signs	None recorded	None recorded	None recorded	None recorded
G4	Borrisbeg River	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
G5	Borrisbeg River	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
G6	Clomantagh Lower Stream	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
G7	Gorteenahilla River	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
G8	Unmapped stream	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
G9	Lismaine Stream	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
G10	Lisdowney Stream	None recorded	**Regular spraint site**	None recorded	None recorded	None recorded	**Atlantic salmon & European eel recorded in 2023**
G11	River Nore	None recorded	No signs	None recorded	None recorded	None recorded	None recorded
Lacustrine sites							
L18	Lake/wetland	No signs	Not present	None recorded	None recorded	None recorded	None recorded
L19	Lake/wetland	No signs	Not present	None recorded	None recorded	None recorded	None recorded

Site		White-clawed crayfish	Otter signs[4]	Annex I aquatic habitats	Rare or protected macrophytes/ aquatic bryophytes	Rare or protected macro-invertebrates	Other species/habitats of high conservation value
L20	Lake/wetland	No signs	Not present	None recorded	None recorded	None recorded	None recorded
L21	Lake/wetland	No signs	Not present	None recorded	None recorded	None recorded	None recorded

Conservation value: White-clawed crayfish (*Austropotamobius pallipes*), Atlantic salmon (*Salmo salar*), brook lamprey (L*ampetra planeri*), river lamprey (*Lampetra fluviatilis*) and Eurasian otter (*Lutra lutra*) are listed under Annex II and Annex V of the Directive on the Conservation of Natural Habitats of Wild Fauna and Flora (92/43/EEC) ('EU Habitats Directive'). White-clawed crayfish and otter are also protected under the Irish Wildlife Acts 1976-2023. White-clawed crayfish (Füreder et al., 2010) are listed as 'Endangered' according to the IUCN Red List. European eel are 'critically endangered' according to most recent ICUN red list (Pike et al., 2020) and listed as 'critically engendered' in Ireland (King et al., 2011).

Table 4.3 Aquatic ecological evaluation summary of the Littleton wind farm survey sites according to NRA (2009) criteria

Site no.	Watercourse	EPA code	Evaluation of importance	Rationale summary
Riverine sites				
A1	Unnamed stream	n/a	**Local importance (higher value)**	Brown trout recorded in 2023; site utilised by otter
A2	Clover River	16C04	Local importance (lower value)	No aquatic species or habitats of high conservation value (dry, ephemeral channel)
A3	Clover River	16C04	**Local importance (higher value)**	Brown trout recorded in 2023; site utilised by otter
A4	Unnamed stream	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value (dry, ephemeral channel)
A5	Clover River	16C04	**Local importance (higher value)**	Atlantic salmon, brown trout & lamprey (*Lampetra* sp.) recorded 2023; site utilised by otter
B1	Drish River	16D02	Local importance (lower value)	No aquatic species or habitats of high conservation value
B2	Unnamed stream	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value (dry, ephemeral channel)
B3/G1	Drish River	16D02	**County importance**	Annex I hydrophilous tall herb (6430) habitat present
B4	Drish River	16D02	**Local importance (higher value)**	Brown trout & lamprey (*Lampetra* sp.) recorded in 2023
B5	Drish River	16D02	**Local importance (higher value)**	Atlantic salmon, brown trout, lamprey (*Lampetra* sp.) & Red-listed European eel recorded in 2023
B6	River Suir	16S02	**County importance**	Regionally important ecological corridor
C1	Black River	16B01	Local importance (lower value)	No aquatic species or habitats of high conservation value (dry, ephemeral channel)
C2	Black River	16B01	**Local importance (higher value)**	Atlantic salmon recorded in 2023
C3	Unnamed stream	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value (dry, ephemeral channel)
C4	North Glengoole River	16N28	**Local importance (higher value)**	Brown trout recorded in 2023
C5	Black River	16B01	**Local importance (higher value)**	Brown trout recorded in 2023

Site no.	Watercourse	EPA code	Evaluation of importance	Rationale summary
C6	Black River	16B01	**Local importance (higher value)**	Red-listed beetle *Gyrinus urinator* recorded (2025); Atlantic salmon, brown trout, European eel & lamprey (*Lampetra* sp.) recorded in 2023
D1	Breegagh River	16B03	**Local importance (higher value)**	Salmonids (including Atlantic salmon) recorded; site utilised by otter
D2	Breegagh River	16B03	**Local importance (higher value)**	Otter signs recorded (2025)
D3	Breegagh River	16B03	**Local importance (higher value)**	Atlantic salmon, European eel & otter signs recorded in 2023
G2	River Goul	15G02	Local importance (lower value)	No aquatic species or habitats of high conservation value
G3	Ardreagh River	15A01	**Local importance (higher value)**	White-clawed crayfish recorded (2025)
G4	Borrisbeg River	15B18	**Local importance (higher value)**	Suitable salmonid and lamprey habitat present
G5	Borrisbeg River	15B18	Local importance (lower value)	No aquatic species or habitats of high conservation value (dry, ephemeral channel)
G6	Clomantagh Lower Stream	15C91	Local importance (lower value)	Watercourse not present (possibly culverted underground)
G7	Gorteenahilla River	15G08	Local importance (lower value)	No aquatic species or habitats of high conservation value (dry, ephemeral channel)
G8	Unmapped stream	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value (dry, ephemeral channel)
G9	Lismaine Stream	15L16	Local importance (lower value)	No aquatic species or habitats of high conservation value (dry, ephemeral channel)
G10	Lisdowney Stream	15L02	**Local importance (higher value)**	Site utilised by otter (2025)
G11	River Nore	15N01	**International importance**	Site located in River Barrow and River Nore SAC (002162) and the River Nore SPA (004233)
Lacustrine sites				
L18	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L19	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value
L20	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value

Site no.	Watercourse	EPA code	Evaluation of importance	Rationale summary
L21	Lake/wetland	n/a	Local importance (lower value)	No aquatic species or habitats of high conservation value

Conservation value: White-clawed crayfish (*Austropotamobius pallipes*), Atlantic salmon (*Salmo salar*), brook lamprey (L*ampetra planeri*), river lamprey (*Lampetra fluviatilis*) and Eurasian otter (*Lutra lutra*) are listed under Annex II and Annex V of the Directive on the Conservation of Natural Habitats of Wild Fauna and Flora (92/43/EEC) ('EU Habitats Directive'). White-clawed crayfish and otter are also protected under the Irish Wildlife Acts 1976-2023. White-clawed crayfish (Füreder et al., 2010) are listed as 'Endangered' according to the IUCN Red List. European eel are 'critically endangered' according to most recent ICUN red list (Pike et al., 2020) and listed as 'critically engendered' in Ireland (King et al., 2011). With the exception of the Inland Fisheries Acts 1959 to 2017, brown trout and coarse fish species have no legal protection in Ireland.

5. Discussion

The riverine watercourses in the vicinity of the proposed Littleton wind farm, inclusive of those crossed by the proposed GCR, were typically lowland channels which had been extensively straightened and or deepened historically as part of drainage and land reclamation works, resulting in poor hydromorphology and reduced habitat heterogeneity. Whilst some good instream recovery had occurred locally (e.g. Drish River, Black River, Breegagh River, Lisdowney Stream), significant siltation and hydromorphological pressures were evident throughout much of the survey area. Furthermore, low summer flows, characteristic of this part of Ireland, also impacted the aquatic ecology during the 2025 surveys. A total of 10 no. sites, inclusive of five GCR watercourse crossings, were dry at the time of survey and did not support aquatic habitats.

Nevertheless, the majority of the riverine survey sites were evaluated as at least **local importance (higher value)** in terms of their aquatic ecology due to the presence of or suitability for high conservation value fish species, Annex II white-clawed crayfish, Annex II otter, the Red-listed beetle *Gyrinus urinator* or Annex I habitats (**Table 4.3**). Site G11 on the River Nore (proposed GCR crossing) was evaluated as **international importance** given its location with both the River Barrow and River Nore SAC (002162) and River Nore SPA (004233). Site B3/G1 on the Drish River (proposed GCR crossing) was evaluated as **county importance** given the presence of Annex I hydrophilous tall herb habitat. Site B6 on the River Suir was of **county importance** given the river's regional importance as an ecological corridor.

The 4 no. lakes and wetlands located near the turbine array originate from historical cutover bog activities and as such were shallow, peat stained, poorly vegetated and of lower productivity, providing relatively poor habitat for many higher conservation value species or habitats. Nevertheless these sites supported a range of macro-invertebrate species and were of high suitability for amphibians[1]. None of the lake/wetland sites corresponded to Annex I lake habitats (e.g. natural dystrophic lakes and ponds, 3160) and were of **local importance (lower value)**.

In support of previous surveys, no rare or protected macrophytes/aquatic bryophytes, otter breeding/resting areas or aquatic invasive species were recorded during the current survey. Biological water quality had broadly declined relative to the previous 2023 surveys, driven primarily through lower water volumes and reduced flows in the 2025 survey period.

5.1 Fisheries

Electro-fishing was beyond the scope of the current survey. However, a fisheries appraisal at all survey sites generally supported available data and previous findings. In 2023 a typical diversity of fish species for Irish midland rivers, namely Atlantic salmon, brown trout, lamprey (*Lampetra* sp.), European eel, stone loach, minnow, pike, perch and three-spined stickleback, were recorded via electro-fishing (Triturus, 2024). Whilst some good instream recovery had occurred locally (e.g. Drish River, Black River, Breegagh River, Lisdowney Stream), significant siltation and hydromorphological pressures

[1] Many sites had high suitability for amphibians although a dedicated survey for smooth newt and common frog was beyond the scope of this survey. An environmental DNA approach would help to clarify the status of amphibians at these sites

were evident throughout the survey area. Historical straightening and deepening of watercourses damages habitat and flow heterogeneity, removes instream structure and refugia, encourages sediment deposition and invariably results in an irreparable reduction in fisheries potential, particularly for salmonids (O'Briain et al., 2019; O'Grady et al., 2017; Blann et al., 2009; O'Grady, 2006) but also European eel and lamprey species.

Despite often considerable water quality and hydromorphological pressures, salmonid populations are widespread in the survey area, with Atlantic salmon known to occur on the Clover River, Drish River, Black River, Breegagh River, Ardreagh River, Gorteenahilla River and the Lisdowney Stream, as well as the River Nore and River Suir. In context of the survey area, lamprey (*Lampetra* sp.) are known from the Clover River, Drish River, Black River, Breegagh River, River Goul, River Suir and River Nore, although densities are typically low given sub-optimal spawning and nursery habitats, often a result of siltation and historical instream modifications. These characteristics were again observed in the current survey, including at proposed GCR crossings not surveyed previously (i.e. G2-G8 inclusive). Red-listed (King et al., 2011) and critically endangered (Pike et al., 2020) European eel are also known to occupy a restricted distribution in the survey area but are known from the majority of the survey watercourses (Triturus, 2024). Current and previous findings suggest this is due to a combination of sub-optimal habitat and widespread migration barriers in the survey catchments.

The 4 no. lakes and wetlands located adjacent to the proposed turbine array originate from historical cutover bog activities and as such are shallow, highly turbid (peat stained), poorly vegetated, isolated from other aquatic habitats and of lower productivity. None were considered of significant fisheries value (stickleback only).

5.2 White-clawed crayfish

Despite suitability at numerous sites, only a single live white-clawed crayfish was recorded during targeted surveys in September 2025, with an adult captured via hand searching on the Ardreagh River, a tributary of the River Goul, at site G3 (proposed GCR crossing) (**Plate 4.37**). Indeed, crayfish remains (but no live crayfish) were recorded in otter spraint at this same location in September 2023 (Triturus, 2024). White-clawed crayfish are also known from the Drish River, Clover River, Black River, River Goul and the River Nore (**Figure 3.1**) although crayfish plague (*Aphanomyces astaci*) has likely impacted crayfish populations throughout the Suir and Nore catchments.

The 4 no. survey lakes/wetlands were inherently unsuitable for white-clawed crayfish given their unsuitable peat geologies, water chemistry (humic/acidic) and physical habitat attributes (Demers et al., 2005; Lucey & McGarrigle, 1987).

5.3 Otter

Despite widespread suitability, only a low number of otter signs (3 no.) were recorded across 34 no. individual survey sites. All were recorded from riverine sites with the lakes/wetlands surveyed providing poor otter habitat, primarily due to insufficient prey resources. Spraint sites (all regular) were recorded at sites on the Black River (C6), Breegagh River (D1) and the Lisdowney Stream (G10). Otter signs were recorded at 6 no. sites during the previous 2023 survey (Triturus, 2024).

In keeping with previous observations, the paucity of signs in the wider survey area was considered to mainly reflect the influence of historical instream modifications (straightening, deepening) and low summer flows on the health and distribution of fish populations, the key prey resource of otter (Krawczyk et al., 2016; Ruiz-Olmo & Jiménez, 2009). Otters are food-limited and prey availability is a crucial factor in determining mortality, breeding success and the status of local populations (Sittenthaler et al., 2019; Ruiz-Olmo et al., 2002). Furthermore, otter sign marking is routinely associated with prominent features such as large instream boulders and tree root systems (Almeida et al., 2012). Historical drainage, such as that carried out historically in the vicinity of the proposed project, significantly reduces instream habitat heterogeneity (O'Grady, 2017) and the availability or marking features which therefore results in the deposition and detection of fewer otter signs such as spraints, irrespective of watercourse utilisation (e.g. for foraging).

No breeding (holts) or resting (couch) areas were identified in the vicinity of the survey sites in September 2025 or during the previous 2023 surveys (Triturus, 2024).

5.4 Macrophytes and Annex I habitats

In keeping with previous data, no rare or protected macrophytes or aquatic bryophytes were recorded at the riverine or lacustrine survey sites in September 2025.

Based on the presence of several indicator species (EC, 2013; Devaney, 2013), including *Lythrum salicaria, Epilobium hirsutum, Solanum dulcamara*, *Calystegia sepium, Myosotis scorpioides, Mentha aquatica* and *Galium palustre,* the heavily modified Drish River at site B3/G1 supported the Annex I habitat 'Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels (6430)'. This habitat often forms along unmanaged margins of lowland rivers (Devaney et al., 2013) and was recorded at the same location in 2023 (Triturus, 2024).

Although Annex I floating river vegetation (3260) was recorded at sites on the Black River (C6) and Breegagh River (D3) in 2023 (Triturus, 2024), the aquatic vegetation communities at these locations, though still supporting indicator species (EC, 2013), were not considered representative of the habitat in the current survey. This was mainly due to lower summer flows and water levels compared with 2023 which resulted in fragmentation and reduced coverage of the habitats.

5.5 Macro-invertebrates & biological water quality

Site C6 on the Black River was found to support the IUCN-threatened whirligig beetle *Gyrinus urinator*. This species is listed as IUCN near-threatened and has a limited distribution in Ireland, being largely restricted to lowland, base-rich rivers and streams (Foster et al., 2009).

With the exception of *Gyrinus urinator* (site C6), no other rare or protected macro-invertebrate species (according to national red lists) were recorded in the biological water quality samples taken from 20 no. wetted riverine sites or 4 no. sweep samples from lake sites in September 2025 (**Appendix A**). Whilst not protected, the nationally uncommon dytiscid beetle *Hyphydrus ovatus* and the pigmy backswimmer (*Plea minutissima*) were recorded at sites L18 and L20 respectively.

None of the riverine sites achieved greater than **Q3-4 (moderate status)** water quality in the current survey and thus all sites failed to meet the target good status (≥Q4) requirements of the European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2019 and the Water Framework Directive (2000/60/EC) (**Figure 4.1**). Two sites (B5 & G10) achieved Q4 status in 2023 but not in 2025, with a greater number of moderate status sites also in 2023 (**Table 4.1**). The reduction in water quality from the previous survey can be attributed to the low summer flows experienced during the September 2025 survey which evidently impacted macro-invertebrate populations and distribution. Site C5 on the Black River showed a slight improvement in water quality in September 2025, achieving **Q3–4 (moderate status)**, compared with **Q3 (poor status**) in 2023 (**Table 4.1**). Peat extraction (leading to siltation) and forestry are the significant threats to water quality in the survey area (EPA data). Furthermore, hydromorphological modifications also influenced biological water quality in September 2025.



Plate 5.1 Stock image of the IUCN near-threatened whirligig beetle *Gyrinus urinator*, recorded on the Black River at site C6 in September 2025

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7. Appendix A – Q-sample results (biological water quality) & lacustrine macroinvertebrates

Table 7.1 Macro-invertebrate Q-sampling results for riverine sites in the vicinity of Littleton wind farm, September 2025

Taxon	Family	Binomial name	A1	A3	A5	B1	B4	B5	B6	C2	C4	C5	C6	EPA Class
Ephemeroptera	Heptageniidae	*Ecdyonurus dispar*										2		**A**
Ephemeroptera	Baetidae	*Alainites muticus*	1		1			15		1		2		**B**
Ephemeroptera	Leptophlebiidae	*Paraleptophlebia cincta*					4							**B**
Odonata	Coenagrionidae	sp. indet.	1				1							**B**
Plecoptera	Leuctridae	*Leuctra fusca*			1			6	1	1			1	**B**
Trichoptera	Beraeidae	*Beraeodes minutus*									1			**B**
Trichoptera	Cased caddis pupa	sp. indet.		1									2	**B**
Trichoptera	Goeridae	*Silo pallipes*										2		**B**
Trichoptera	Hydroptilidae	*Hydroptila* sp.						1						**B**
Trichoptera	Leptoceridae	*Athripsodes aterrimus*							1					**B**
Trichoptera	Sericostomatidae	*Sericostoma personatum*		2	1	1		1		1				**B**
Trichoptera	Hydropsychidae	*Hydropsyche instabilis*		2	2			9	1	2		34		**C**
Trichoptera	Hydropsychidae	*Hydropsyche siltalai*						3						**C**
Trichoptera	Polycentropodidae	*Polycentropus kingi*	2		17		12	1	7				3	**C**
Trichoptera	Rhyacophilidae	*Rhyacophila dorsalis*						1				2		**C**
Ephemeroptera	Baetidae	*Baetis rhodani*			1			23		2		7		**C**
Ephemeroptera	Caenidae	*Caenis horaria*								1				**C**
Ephemeroptera	Caenidae	*Caenis luctuosa*				3			3					**C**
Ephemeroptera	Caenidae	sp. indet.						1						**C**
Ephemeroptera	Ephemerellidae	*Serratella ignita*							2			2		**C**
Coleoptera	Dytiscidae	Dytiscidae larva						2		2				**C**
Coleoptera	Dytiscidae	*Dytiscus semisulcatus*										1		**C**
Coleoptera	Dytiscidae	*Nebrioporus depressus*								4	2			**C**
Coleoptera	Elmidae	*Elmis aenea*		5	7	1	1	2	4			25	13	**C**
Coleoptera	Elmidae	*Limnius volckmari*			3			1		1		3		**C**

Taxon	Family	Binomial name	A1	A3	A5	B1	B4	B5	B6	C2	C4	C5	C6	EPA Class
Coleoptera	Gyrinidae	Gyrinidae larva					2							C
Coleoptera	Gyrinidae	*Gyrinus urinator* †											1	C
Coleoptera	Haliplidae	*Brychius elevatus*			1			3				1		C
Coleoptera	Hydrophilidae	*Laccobius minutus*							1					C
Gastropoda	Bithnyiidae	*Bithynia tentaculata*				2	39							C
Gastropoda	Lymnaeidae	*Lymnaea stagnalis*					2		1					C
Gastropoda	Planorbidae	*Bathyomphalus contortus*	1											C
Gastropoda	Planorbidae	*Gyraulus albus*							1					C
Gastropoda	Planorbidae	*Planorbis planorbis*		6		1	7		1					C
Arachnida	Hydrachnidiae	sp. indet.						3		1				C
Hemiptera	Gerridae	*Gerris* sp.		3			2			13	4	8		C
Hemiptera	Hydrometridae	*Hydrometra stagnorum*					1							C
Hirudinidae	Piscicolidae	Piscicola sp.										1	1	C
Crustacea	Gammaridae	*Gammarus duebeni*	10	45	8	5	11	47	19	27		65	8	C
Diptera	Chironomidae	Non-*Chironomus* spp.			1			1	10	4		1		C
Diptera	Culicidae	sp. indet.			1								1	C
Diptera	Pediciidae	*Dicranota* sp.		1								2	1	C
Diptera	Simuliidae	sp. indet.						1	1			9		C
Diptera	Tipuliidae	*Tipula* sp.							9					C
Gastropoda	Tateidae	*Potamopyrgus antipodarum*							4				2	C
Crustacea	Asellidae	*Asellus aquaticus*	3			2	29	3	4	1	3			D
Crustacea	Crangonyctidae	*Crangonyx* sp.						1	1					D
Gastropoda	Lymnaeidae	*Ampullacaena balthica*					2		8					D
Gastropoda	Physidae	*Physa fontinalis*				2	7	1	2					D
Hirudinidae	Glossiphoniidae	sp. indet.	1	1	2		1				2			D
Megaloptera	Sialidae	*Sialis lutaria*				2								D

Taxon	Family	Binomial name	A1	A3	A5	B1	B4	B5	B6	C2	C4	C5	C6	EPA Class
Mollusca	Sphaeriidae	sp. indet.					5	1					2	**D**
Diptera	Chironomidae	*Chironomus* spp.			14				9		4	2	1	**E**
Annelidae	Oligochaeta	sp. indet.						1				2		**n/a**
Abundance			**19**	**66**	**60**	**19**	**126**	**128**	**90**	**61**	**16**	**171**	**36**	
Q-rating			***Q3**	**Q3**	**Q3**	***Q3**	***Q3**	**Q3**	**Q3**	**Q3**	**Q3**	**Q3-4**	**Q3**	
WFD status			**Poor**	**Poor**	**Poor**	**Poor**	**Poor**	**Poor**	**Poor**	**Poor**	**Poor**	**Mod.**	**Poor**	

* tentative rating due to poor flows and or lack of suitable riffle areas for sampling (as per Toner et al., 2005)

† Listed as 'Near threatened' in Ireland (Foster et al., 2009)

Table 7.2 Macro-invertebrate Q-sampling results for riverine sites in the vicinity of Littleton wind farm, September 2025 (* tentative rating)

Taxon	Family	Binomial name	D1	D2	D3	B3/G1	G2	G3	G4	G10	G11	EPA Class
Ephemeroptera	Baetidae	*Alainites muticus*		1	2			3				**B**
Plecoptera	Leuctridae	*Leuctra fusca*	1		3						3	**B**
Trichoptera	Cased caddis pupa	sp. indet.		3								**B**
Trichoptera	Glossosomatidae	*Agapetus fuscipes*							10			**B**
Trichoptera	Glossosomatidae	sp. indet.		4	2						2	**B**
Trichoptera	Limnephilidae	*Drusus annulatus*								1		**B**
Trichoptera	Limnephilidae	*Potamophylax cingulatus*			5					7		**B**
Trichoptera	Odontoceridae	*Odontocerum albicorne*	1								7	**B**
Trichoptera	Sericostomatidae	*Sericostoma personatum*		1	1	1	2			8	2	**B**
Trichoptera	Hydropsychidae	*Hydropsyche instabilis*		18	6						2	**C**
Trichoptera	Polycentropodidae	*Plectrocnemia conspersa*	1									**C**
Trichoptera	Polycentropodidae	*Polycentropus kingi*	3		1			12				**C**
Trichoptera	Rhyacophilidae	*Rhyacophila dorsalis*			1							**C**
Ephemeroptera	Baetidae	*Baetis rhodani*	3		1			3	3		13	**C**
Ephemeroptera	Ephemerellidae	*Serratella ignita*			6			1			2	**C**
Coleoptera	Dytiscidae	Dytiscidae larva	1				2					**C**
Coleoptera	Dytiscidae	*Ilybius fuliginosus*					1					**C**
Coleoptera	Dytiscidae	*Nebrioporus depressus*		1						9		**C**
Coleoptera	Dytiscidae	*Oreodytes sanmarkii*		1								**C**
Coleoptera	Dytiscidae	*Oreodytes septentrionalis*		2								**C**
Coleoptera	Dytiscidae	*Stictotarsus duodecimpustulatus*					2			2		**C**
Coleoptera	Elmidae	*Elmis aenea*		18	1		2	6	26			**C**
Coleoptera	Elmidae	*Esolus parallelepipedus*					1					**C**
Coleoptera	Elmidae	*Limnius volckmari*		1				1				**C**
Coleoptera	Halipliidae	*Brychius elevatus*		3	4			3		1		**C**

Taxon	Family	Binomial name	D1	D2	D3	B3/G1	G2	G3	G4	G10	G11	EPA Class
Coleoptera	Halipliidae	*Haliplus ruficollis*					1					**C**
Coleoptera	Halipliidae	sp. indet.								1		**C**
Coleoptera	Hydraenidae	*Hydraena gracilis*							1			**C**
Coleoptera	Hydrophilidae	*Laccobius bipunctatus*					2					**C**
Gastropoda	Bithnyiidae	*Bithynia tentaculata*				28						**C**
Gastropoda	Planorbidae	*Bathyomphalus contortus*				7						**C**
Gastropoda	Planorbidae	*Planorbis planorbis*				3		2		1	2	**C**
Gastropoda	Valvatidae	*Valvata piscinalis*						7				**C**
Arachnida	Hydrachnidiae	sp. indet.		2	3							**C**
Hemiptera	Gerridae	*Gerris* sp.	14				2			2	4	**C**
Hemiptera	Veliidae	*Velia caprai*					3				1	**C**
Hirudinidae	Piscicolidae	*Piscicola* sp.			3			1				**C**
Diptera	Chironomidae	Non-*Chironomus* spp.	3	3	2			1	1	10		**C**
Diptera	Pediciidae	*Dicranota* sp.		2				3	14			**C**
Diptera	Ptychopteridae	sp. indet.							1			**C**
Diptera	Simuliidae	sp. indet.			1							**C**
Gastropoda	Tateidae	*Potamopyrgus antipodarum*	2	4							15	**C**
Crustacea	Gammaridae	*Gammarus duebeni*	27	109	32	15	4	42	27	1	10	**C**
Crustacea	Asellidae	*Asellus aquaticus*	1	19	8	26	2	1		31		**D**
Gastropoda	Lymnaeidae	*Ampullacaena balthica*		6			11			19	2	**D**
Gastropoda	Physidae	*Physa fontinalis*				8				10		**D**
Hirudinidae	Glossiphoniidae	sp. indet.				1	1			1	1	**D**
Diptera	Chironomidae	*Chironomus* spp.	9	5	2		3	2			1	**E**
Abundance			**66**	**203**	**84**	**89**	**39**	**88**	**83**	**104**	**67**	
Q-rating			***Q3**	***Q3**	**Q3**	***Q3**	***Q3**	**Q3**	**Q3**	***Q3**	**Q3**	
WFD status			**Poor**	**Poor**	**Poor**	**Poor**	**Poor**	**Poor**	**Poor**	**Poor**	**Poor**	

Table 7.3 Macro-invertebrate sweep sample results for lake/ wetland sites L8, L10, L12 & L14 in the vicinity of Littleton wind farm, September 2025

Taxon	Family	Binomial name	L8	L10	L14	L15
Ephemeroptera	Baetidae	*Cloeon simile*	2	9	11	
Ephemeroptera	Caenidae	*Caenis horaria*			7	
Trichoptera	Limnephilidae	*Limnephilus marmoratus*			3	
Trichoptera	Phryganeidae	*Agrypnia obsoleta*				1
Trichoptera	Polycentropodidae	*Plectrocnemia conspersa*	1			
Coleoptera	Dytiscidae	Dytiscidae larva	1			
Coleoptera	Dytiscidae	*Hyphydrus ovatus*	1		1	
Coleoptera	Dytiscidae	*Porhydrus lineatus*		1	3	
Coleoptera	Dytiscidae	*Stictonectes lepidus*			1	
Coleoptera	Gyrinidae	*Gyrinus marinus*	2			
Coleoptera	Haliplidae	*Haliplus ruficollis*	1			
Coleoptera	Haliplidae	*Haliplus* sp.			18	
Coleoptera	Hydrophilidae	*Laccobius bipunctatus*		1		
Coleoptera	Hydrophilidae	*Laccobius minutus*			1	
Coleoptera	Noteridae	*Noterus clavicornis*			1	
Gastropoda	Lymnaeidae	*Ampullacaena balthica*		7		2
Gastropoda	Physidae	*Physa fontinalis*			3	
Gastropoda	Planorbidae	*Gyraulus albus*				1
Gastropoda	Planorbidae	*Planorbis planorbis*		8	1	1
Gastropoda	Succineidae	sp. indet.		1	1	
Gastropoda	Tateidae	*Potamopyrgus antipodarum*			24	1
Hemiptera	Corixidae	*Callicorixa praeusta*				3
Hemiptera	Corixidae	*Corixa panzeri*	4	2		13
Hemiptera	Corixidae	Corixidae nymph				11
Hemiptera	Corixidae	*Hesperocorixa linnaei*	7	6		5

Taxon	Family	Binomial name	L8	L10	L14	L15
Hemiptera	Corixidae	*Hesperocorixa sahlbergi*		4		
Hemiptera	Corixidae	sp. indet.			3	
Hemiptera	Gerridae	*Gerris* sp.	1			
Hemiptera	Notonectidae	*Notonecta viridis*		2		1
Hemiptera	Pleidae	*Plea minutissima*			1	
Hirudinidae	Erpobdellidae	sp. indet.	2			
Hirudinidae	Glossiphoniidae	sp. indet.			1	
Mollusca	Sphaeriidae	sp. indet.				4
Odonata	Coenagrionidae	sp. indet.	18	16	7	
Crustacea	Asellidae	*Asellus aquaticus*	13	7	29	6
Crustacea	Gammaridae	*Gammarus duebeni*				2
Arachnida	Hydrachnidiae	sp. indet.	1			
Diptera	Chaoboridae	sp. indet.	8			
Diptera	Chironomidae	*Chironomus* spp.		1		
Diptera	Chironomidae	Non-*Chironomus* spp.	1			1
Diptera	Culicidae	sp. indet.		1		
Diptera	Limoniidae	sp. indet.			1	
Species richness (*n*)			**15**	**14**	**19**	**14**
Abundance			**63**	**66**	**117**	**52**



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FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

APPENDIX 7

Cutaway Bog Decommissioning and Rehabilitation Plan for Littleton Bog



Littleton Bog

Cutaway Bog Decommissioning and Rehabilitation Plan

2026

This document seeks to address the requirements of Condition 10.2 of IPC Licence Ref. P0499-01:

> "*The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of the cutaway boglands within the licensed area.*"

This licence condition requires BnM agree with the EPA the measures that will provide for rehabilitation, i.e., stabilisation of Littleton Bog upon cessation of peat production and compliments the licence requirement to decommission the site.

***Rehabilitation** generally comprises site stabilisation with natural colonisation with or without targeted management.*

Industrial peat production has now fully ceased at Littleton Bog. A rehabilitation programme was carried out at Littleton Bog in 2018-2021.

BnM have defined the key rehabilitation outcome at Littleton Bog as environmental stabilisation, re-wetting and setting the bog on a trajectory towards development of naturally functioning peatland and wetland habitats.

Any consideration of any other future after-uses for Littleton Bog will be conducted in adherence to the relevant planning guidelines and consultation with relevant authorities and will be considered within the framework of this rehabilitation plan.

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NON-TECHNICAL SUMMARY

- BnM (formerly known as Bord na Móna) is updating the rehabilitation plan prepared in 2018 for Littleton Bog, located in Co. Tipperary.
- BnM Industrial peat harvesting ceased at Littleton Bog in 2017.
- Littleton Bog was in industrial peat production since 1940s and formerly supplied peat to the Littleton Briquette Factory.
- In 2017, BnM announced the closure of the Littleton Briquette factory and the cessation of industrial peat production in a number of cutaway bogs within the Littleton Bog Group.
- A rehabilitation programme was carried out by BnM between 2018-2021 (Phase 1) with targeted drain-blocking through the site.
- Littleton Bog is now developing a mosaic of cutaway peatland habitats including Birch woodland and scrub, bog vegetation and wetlands.
- Littleton Bog has a partially pumped drainage regime. Pumps have been decommissioned.
- This rehabilitation plan has been prepared by BnM as part of obligations to carry out peatland rehabilitation via an IPC licence issued by the Environmental Protection Agency.
- The key objective of peatland rehabilitation is environmental stabilisation. This means developing habitats and vegetation back onto the bare peat (putting a “skin” back onto the peat), and minimising effects to downstream waterbodies.
- In general, soggy ground conditions are preferred. This means the remaining peat is wet and that plants that prefer wetter conditions, like Bog Cotton will thrive.
- Rehab measures included drain-blocking and other measures to raise water levels to the surface of the bog, thus encouraging the development of naturally functioning cutaway peatland habitats.
- These rehabilitation measures were planned by a team consisting of expert ecologists and engineers. It is a guiding principle of BnM rehabilitation planning that no actions or activities will be undertaken that would negatively impact on adjacent land. No boundary drains will be blocked. Water will still leave the bog via the existing outlets.
- Peatland rehabilitation of this bog will bring a range of benefits to the local community via improvements to the local landscape and is also important for supporting national policies and strategies in relation to reduction of carbon emissions from these peatlands, supporting biodiversity and improvements to water quality.
- Rehabilitation at Littleton Bog will result in improved water quality, climate benefits with the reduction of carbon emissions and enhanced biodiversity when the residual peat is re-wetted.
- Many BnM bogs cannot be restored back to raised bog, as the majority of peat has been removed and the environmental conditions have been modified. However other natural habitats will develop, like poor fen and regenerating wet deep peat vegetation communities (on deeper peat); and wetlands with Reedbeds and Birch woodland on shallower peat. In time a naturalised peatland can be developed.
- It will take some time for vegetation and habitats to fully develop at Littleton Bog, and a peatland ecosystem to be restored. However, it is expected that any bare peat will be developing pioneer habitats after 5-10 years.
- The development of a range of habitats at Littleton Bog will support biodiversity including plants, insects, birds and mammals. This includes some species that are rare and protected in the wider landscape.
- This peatland rehabilitation plan does not consider future after-use or development. BnM continually reviews its land-bank to consider future commercial or industrial developments. Any other proposed

development will be planned in adherence to relevant planning guidelines and will consider the rehabilitation and the condition of the bog.

1. INTRODUCTION

BnM (formerly known as Bord na Móna) operates under IPC Licence issued and administered by the EPA to extract peat within the Littleton Bog Group (Ref. P0499-01) (see Appendix I for details of the bog areas within this Group). As part of Condition 10.2 of this licence, a rehabilitation plan must be prepared for permanent rehabilitation of the boglands within the licensed area. Littleton Bog is located in Co. Tipperary.

This document seeks to address the requirements of Condition 10.2 of IPC Licence Ref. P0499-01:

> "*The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of the cutaway boglands within the licensed area.*"

It also seeks to outline measures to optimise climate action and other ecosystem services benefits, mainly through hydrological management.

This plan is a specific rehabilitation plan for the bog and outlines:

- Description of site management and status.
- Main issues and approaches to rehabilitation.
- Consultation to date with interested parties.
- Interaction with other policy and legislative frameworks (Appendix V).
- The planned rehabilitation goals and outcomes.
- The scope of the rehabilitation plan.
- Criteria which define the successful rehabilitation and key targets to validate rehabilitation.
- Proposed rehabilitation actions.
- Proposed timeframe to implement these measures.
- Budget and Costings.
- Associated aftercare, maintenance, and monitoring.

Note: This plan should be read in conjunction with the accompanying Map book.

Littleton Bog is part of the Littleton Bog Group and supplied the Littleton Brickette Factory. BnM made the decision to close this brickette factory in 2017 and to rehabilitate the Littleton Bog group. Littleton Bog was rehabilitated by BnM during 2018-2021.

This updated rehabilitation plan supersedes the previous rehabilitation plan prepared and submitted to the EPA in 2018.

1.1 Constraints and Limitations

This document covers the area of **Littleton Bog** shown in drawing number *BNM-ECO-26-11B-01: Site Location Map*.

There are areas of active turf cutting (turbary) on the margins of the bog which have been mapped as a constraint. The parts of Littleton Bog (within the areas owned by BnM) that are currently used by domestic turf cutters to harvest peat are ecologically and hydrologically linked to the area owned by BnM. BnM are aware of such issues which may constrain the proposed rehabilitation actions, and this rehabilitation plan considered potential impacts of turf cutting on the delivery of the stated objectives.

Part of Littleton Bog was developed as Conifer forestry by Coillte. This is mapped as a constraint.

Rehabilitation in other areas of the bog may also be constrained due to other property issues or archaeological features. There is known archaeology close to Littleton Bog. There are some areas of agricultural grassland along the margins of Littleton Bog. These areas will not be subject to rehabilitation and have been identified as constrained land.

2. METHODOLOGY

This rehabilitation plan was developed with a combination of desktop and field surveys, consultations with internal and external stakeholders. The development of this rehabilitation plan considered recently published guidance issued by the EPA, '*Guidance on the Process of Preparing and Implementing a Bog Rehabilitation Plan' (EPA, 2020)*.

The ecological information and site information collected during the BnM ecological baseline survey, additional confirmatory site visits (covering the period 2011 to 2025 inclusive) and monitoring and desktop analysis forms the basis for the development of the rehabilitation plan for the bog, along with:

- Experience of 40 years of research on the after-use development and rehabilitation of the Bord na Móna cutaway bogs (Clarke, 2010; Bord na Móna, 2016)
- Significant international engagement during this period with other counties in relation to best practice regarding peatland rehabilitation and after-use through the International Peat Society and the Society for Ecological Restoration (Joosten & Clarke, 2002; Clarke & Rieley, 2010; Gann *et al*., 2019),
- Consultation and engagement with internal and external stakeholders,
- GIS Mapping,
- BnM drainage surveys,
- Bog topography and LIDAR data,
- Previous research studies on site,
- Hydrological modelling.

2.1 Desk Study

The desk study involved collecting all relevant environmental and ecological data for the study area. The development of the rehabilitation plan also takes account of research, experience and engagement with other peatland restoration and rehabilitation projects and peatland research including Irish, UK, European and International best practice guidance (full citations are in the References Section):

- Anderson *et al*. (2017). An overview of the progress and challenges of peatland restoration in Western Europe.
- Barry, T.A. *et al*. (1973). A survey of cutover peats and underlying mineral soils. Soil Survey Bulletin No. 30. Dublin, Bord na Móna and An Foras Taluntais.
- Bonn *et al*. (2017). Peatland restoration and ecosystem services- science, policy and practice.
- Carroll *et al*. (2009). *Sphagnum* in the Peak District. Current Status and Potential for Restoration. Moors for the Future Report No 16.
- Clark & Rieley (2010). Strategy for responsible peatland management.
- Eades *et al*. (2003). The Wetland Restoration Manual.
- Farrell & Doyle (2003). Rehabilitation of Industrial Cutaway Atlantic Blanket Bog, NW Mayo, Ireland.
- Gann *et al*. (2019). International Principles and Standards for the practice of Ecological Restoration.
- Hinde *et al*. (2010). *Sphagnum* re-introduction project: A report on research into the re-introduction of *Sphagnum* mosses to degraded moorland. Moors for the Future Research Report 18.
- Joosten & Clarke (2002). Wise Use of mires and peatlands – Background and Principles including a framework for Decision-making.

- Lindsay (2010). Peatbogs and Carbon: a Critical Synthesis to Inform Policy Development in Oceanic Peat Bog Conservation and Restoration in the Context of Climate Change.
- Mackin *et al*. (2017). Best practice in raised bog restoration in Ireland. Irish Wildlife Manuals, No. 99. National Parks and Wildlife Service,
- McBride *et al*. (2011). The Fen Management Handbook (2011), Scottish Natural Heritage.
- McDonagh (1996). Drain blocking by machines on Raised Bogs. Unpublished report for National Parks and Wildlife Service.
- NPWS (2017a). National Raised Bog Special Areas of Conservation management plan. Department of Arts, Heritage and the Gaeltacht.
- Pschenyckyj et al., (2021). Optimising Water Quality Returns from Peatland Management while Delivering Co-Benefits for Climate and Biodiversity. An Fóram Uisce.
- Quinty & Rochefort (2003). Peatland Restoration Guide, second edition. Canadian *Sphagnum* Peat Moss Association and New Brunswick Department of Natural Resources and Energy.
- Regan*, et. al.* (2020). Ecohydrology, Greenhouse Gas Dynamics and Restoration Guidelines for Degraded Raised Bogs. EPA Research Report. Prepared for the Environmental Protection Agency by Trinity College Dublin.
- Renou-Wilson *et al*. (2011). BOGLAND - Sustainable Management of Peatlands in Ireland. STRIVE Report No 75 prepared for the Environmental Protection Agency.
- Schouten (2002). Conservation and Restoration of Raised Bogs: Geological, Hydrological and Ecological Studies. Dúchas - The Heritage Service of the Department of the Environment and Local Government, Ireland.
- Thom (2019). Conserving Bogs – Management Handbook.
- Wheeler & Shaw (1995). Restoration of Damaged Peatlands – with Particular Reference to Lowland Raised Bogs Affected by Peat Extraction.
- Wittram *et al*. (2015). A Practitioners Guide to Sphagnum Reintroduction. Moors for the Future Partnership.

Additional on-line resources were also incorporated into the desk study, including:

- Littleton Integrated Pollution Control Licence
- Littleton Annual Environmental Reports
- Review of the National Biodiversity Data Centre (NBDC) webmapper
- Inland Fisheries Ireland (IFI) Reports
- Environmental Protection Agency database (www.epa.ie)
- EPA Guidance on Requests for Alterations to a Licensed Industrial or Waste Activity
- Birdwatch Ireland online data (including I-WeBS and CBS datasets; www.birdwatchireland.ie)
- Geological Survey of Ireland - National Draft Bedrock Aquifer map
- Geological Survey of Ireland - Groundwater Database (www.gsi.ie)
- Historic Environment Viewer at https://webgis.archaeology.ie/historicenvironment/
- National Parks & Wildlife Services Public Map Viewer (www.npws.ie)
- Water Framework Directive catchments.ie/maps/ Map Viewer (www.catchments.ie)
- OPW Indicative Flood Maps (www.floodmaps.ie)
- CFRAM Preliminary Flood Risk Assessment (PFRA) maps (www.cfram.ie)
- River Basin Management Plan for Ireland 2022-2027

- BnM Annual Report 2025
- Spatial data in respect of Article 17 reporting, available online at https://www.npws.ie/maps-and-data/habitat-and-species-data/article-17

2.2 Consultation

A number of stakeholders have been identified during the course of BnM's rehabilitation and Biodiversity Action Plan activities and are contacted during the rehabilitation planning process for their views. See Section 4.

2.3 Field Surveys

BnM carried out a baseline ecological survey of all of its properties in 2009-2012 and developed habitat maps. As part of this exercise, Littleton Bog was surveyed in 2012, with additional surveys in 2013 and 2016. Habitat maps were updated in 2018. Habitat maps have been updated, where required. This rehabilitation plan is informed by the original baseline survey as well as subsequent confirmatory site walk-over surveys and visits, and updates to baseline data.

Habitat mapping followed best practice guidance from Smith *et al.* (2011). Map outputs including all habitat maps and target notes were produced using GIS software application packages (ArcGIS). General marginal habitats and other habitats that had not been modified significantly by industrial peat extraction were classified using Fossitt *et al*. (2000). Plant nomenclature for vascular plants follows Stace (2019), while moss and liverwort nomenclature follow identification keys published by the British Bryological Society (2010).

The original ecological survey report for Littleton Bog is contained in Appendix II.

3. SITE DESCRIPTION

Littleton Bog is located in Co. Tipperary, 3 km east of Littleton Village. The total combined area of the rehabilitation footprint of the bog is 995 ha. It is part of the Littleton Bog group with Longford Pass Bog to the north and Ballybeg bog to the south. A former BnM industrial railway passes through the site. Littleton bog is situated in a lowland landscape and is mostly surrounded by farmland and Coillte forestry. It is a relatively long (extending for 7 km along the railway) and narrow bog. It is bordered to the north by a minor road (that separates Littleton from the adjacent Longford Pass BnM property).

Industrial peat extraction started in the 1940s and finally ceased in 2017 with the announcement of the closure of the Littleton Brickette Factory.

Rehabilitation took place at Littleton Bog between 2018-2021. Targeted measures were applied to areas that had already vegetated or had maturing habitats and were stabilised. Some outfalls were blocked or adjusted with hydrological management. More intensive rehabilitation was carried out across the bare peat areas. Field drains were regularly blocked.

The central part of the bog has been developing as cutaway for some time. The underlying glacial topography is quite influential. There are many localised wetlands where there are basins with open water and wet peatland vegetation, and some of these are divided by mounds or ridges where there is drier habitat development with Birch scrub, Heather and some pioneer grassland communities. Pine is colonising the north-east section from an adjacent conifer plantation. This area has also been further sub-divided by a series of deep trench drains and associated high fields. These divide the bog into regularly grouped series of fields. The high fields act as berms to maintain small wetland areas.

Littleton Bog has a partially pumped drainage system with pumps located in three locations along the spine of the bog. The central pump ceased pumping in 2018. Pumping ceased in the northern section of the site in 2022. Some additional drainage was carried out in 2022 to alleviate flooding that was occurring in this area and that was impacting on adjacent land and the rail underpass at the N9 motorway. Pumps at Littleton Bog are now permanently depowered and scheduled for removal, although some pumping may be required in the future for maintenance.

These are several old former sod peat production areas that have naturally re-colonised over a long period (50-60 years). Re-vegetation tends to be dominated by Heather-dominated and Bog Cotton-dominated vegetation, in mosaic with scattered Birch scrub and small amounts of Purple Moor-grass dominated vegetation. There are also other elements of raised bog vegetation present, due to the presence of more acidic deeper peat, although *Sphagnum* re-generation in the drier areas is poor. Some of the wetter areas have excellent *Sphagnum* re-generation and can be classed as embryonic peat-forming *Sphagnum* communities. Overall re-vegetation has been excellent with only the travel paths still having significant bare peat. Several sod peat bays have been cut to a much lower level than the surrounding bog and have now developed as wet peatlands. These wetlands attract significant amount of wildfowl.

See Drawing number *BNM-ECO-26-11B-01: Site Location Map*, included in the accompanying Mapbook[1] , which illustrates the location of Littleton Bog in context to the surrounding area.

[1] Cutaway Bog Decommissioning and Rehabilitation Plan – Littleton Bog Map Book

3.1 Status and Situation

3.1.1 Site history

Large-scale industrial peat production began at Littleton Bog in the 1940's when sod turf was produced for fuel, by manual labour. Sod peat production was mechanised during the 1950's. Milled peat production began in the 1970's and milled peat was supplied to the Briquette factory at Lanespark, which was constructed in 1981. Some of the sod peat production areas in the bog were converted to milled peat production. Littleton Bog formerly supplied peat to the Littleton briquette factory.

Some conifer plantation was developed at the southern end of the bog in the 1980's by Coillte. The main central part of the bog came out of production prior to 2000 and has been developing as cutaway since then. Much of the peat was cut out of this section and the underlying glacial subsoil was exposed in places, and some wetlands had developed by this stage. A small part of the site was used for industrial peat extraction between 2010-2018.

In 2017, BnM announced the closure of the Littleton Briquette factory and the cessation of industrial peat production in the majority of cutaway bogs within the Littleton Bog Group including Littleton Bog.

Rehabilitation commenced at Littleton Bog in 2018, with a program of targeted drain blocking and other measures.

3.1.2 Current land-use

Industrial peat extraction by BnM ceased in 2017. There is some active private sod-peat cutting around the margins of the site.

A small area (10 ha) at the northern end of Littleton Bog has recently been planted with Eucalyptus as a commercial biomass trial (2018).

Coillte have developed a relatively large area of conifer forestry on the site (85 ha leased from BnM).

Littleton Bog has a particularly pumped drainage regime. Two pumps are still present on site and remain non-functional. The former BnM industrial railway is still present on site. This former railway is expected to be decommissioned shortly.

BnM and Tipperary County Council carried out a feasibility study of the potential for amenity development across the Littleton Bog Group called Littleton Labyrinth. The first phase of this amenity has been completed, and a greenway has been constructed at Killeen Bog to Loch Doire Bhile. A further extension (Phase 2) is proposed at Ballybeg and Derryvilla Bog. There is potential for future extensions to this greenway network through Littleton Bog.

Tipperary County Council has currently included the area of Littleton Bog within the Mid-Tipperary Decarbonising Zone in the Tipperary Climate Action Plan.

3.1.3. Socio-Economic conditions

BnM has historically been a vital employer for the rural communities in the Irish Midlands. BnM compiled a report on the role of peat extraction in the midlands historically in which they report that in 1986, by the end of BnM's Third Development Programme, a total of twenty-three work locations had been established around the country. The company had an average employment of approximately 4,688 in the mid 1980's, with a peak employment of 6,100 during the production season, which placed it among the country's largest commercial employers. The

importance of such levels of employment were largely due to its regional concentration in the Midlands and the lack of alternative employment opportunities in these areas at the time.

According to the Energy Crop Socio-Economic Study undertaken by Fitzpatrick Associates in 2011, there were an estimated 1,443 jobs supported by the peat-to-power industry in Ireland at the time, some 81% of which were located in the catchment areas of the three peat-fired generating stations (Lough Ree, West Offaly, and Edenderry Power Stations). These constituted jobs in the plants and in peat extraction, jobs indirectly supported in upstream supply industries and jobs induced through the trickle-down effects of the wages and salaries of those supported directly or indirectly. These job numbers have now declined with the cessation of peat extraction.

In respect of Littleton Bog, jobs included in the above study would have included those to facilitate extraction of peat at this bog and associated processing and transfer to Littleton Briquette Factory.

As the primary employer in many Midland counties, BnM played a central role in building communities through several initiatives, including development and construction of local housing complexes, education bursaries, support of local sporting clubs, the provision of community gain funds, charity programmes and the provision and building of amenity areas.

Employment numbers have now declined significantly following the cessation of peat extraction at this bog.

3.2 Geology and Peat Depths

3.2.1 Sub-soil geology

The underlying geology[2] at Littleton Bog is limestone-based and comprises three different bedrock units; Ballysteen Formation (Dark muddy limestone and shale), Waulsortian Limestones (Massive unbedded lime-mudstone) and a small area of Lisduff Oolite (Oolitic limestone).

Quaternary subsoil mapping maps most of the Littleton area as cut peat, underlain by till derived from limestones and some small pockets of gravels derived from limestones.

3.2.2 *Peat type and depths*

Much of the peat exposed in the cutaway is fen peat. The conifer plantation was planted on a range of *Phragmites* peat and Sphagnum peat. The northern area (formerly managed for industrial peat production) is somewhat younger and exposed comprising light brown peat. The old sod peat areas along the western side have much deeper remnant acidic peat.

There is limited peat depth information for Littleton Bog. Parts of the site have been mapped across the bog using GPR and are provided in figure *BNM-ECO-26-11B-04: Peat depths*. The majority of the site has very shallow peat remaining (0-1m), with several areas where subsoil is exposed. Thicker deposits remain in the lobe of intact raised bog around the margins and in a pocket of cutover bog at the north-east end of the site (> 2 m).

[2] https://www.gsi.ie/en-ie/data-and-maps/Pages/Bedrock.aspx

3.3 Key Biodiversity Features of Interest

3.3.1 Current habitats

The most common vegetation communities/habitats[3] present in the former production areas at Littleton Bog include:

- Bare peat (BP),
- Birch/Willow scrub (eBir/oBir/cBir),
- Pine-dominated scrub (ePine/oPine),
- Pioneer Soft Rush-dominated or Bog Cotton-dominated poor fen (pJeff/pEang),
- Open water (wetlands also contain emergent pioneer poor fen – pEang/pJeff/pRos),
- Pioneer Heather in mosaic frequently with pEang,
- Embryonic raised bog community (Bog Cotton-dominated vegetation with Sphagnum (EM –pEangS),
- Embryonic raised bog community (Sphagnum-rich vegetation with PB1 species),
- Pioneer Purple Moorgrass-dominated vegetation (gMol) (frequently in mosaic with dHeath and oBir along high fields and other areas),
- Bulrush-dominated Reedbeds (pTyph) (small infilled wetlands),
- Common Reed-dominated Reedbeds (pPhrag),
- Pioneer poor fen with Marsh Arrowgrass (pTrig),
- Pioneer acidic grassland (gAn-H-Eq) (in mosaic with scrub, gMol and pJeff on some of the drier mounds where gravel was exposed),
- Pioneer potential rich fen (pRos/pVir with some Black Bog-rush),
- Railway (Acc) (with some exposed gravel - ED2/ED3/DisTuss).

The most common habitats[4] found around the margins include:

- Conifer plantation (WD4) (Codes refer to Heritage Council habitat classification, Fossitt 2000),
- Cutover Bog (PB4)
- Secondary cutover bog – now mosaic of Heather, poor fen and scrub (PB/PF2/WS1)
- Scrub (WS1),
- Raised bog (PB1) (minor remnants) with poor fen flushes (PF2),
- Birch woodland (WN7),
- Dense Bracken (HH3),
- Acid grassland (GS3),

[3] Codes refer BnM classification of pioneer habitats of production bog

[4] Codes refer to Heritage Council habitat classification, Fossitt 2000

- Improved grassland (GA1) (privately-managed land along margins).

See Drawing number *BNM-ECO-26-11B-17: Habitat Map (2018)*, included in the accompanying Mapbook.

- Littleton contains a significant amount of wetland and open water scattered across the site. Some of this wet peatland provides breeding habitat for wetland birds (Copland, 2011)) as well as refuge for wintering wildfowl. Some duck (Mallard and Teal) were noted on one of the larger wetlands close to the margin of the site. The extent of wet peatland habitat is likely to increase in the future when the bog comes out of production. These wetland areas are likely to continue to mature and become more structurally diverse in the future. Shoveler Duck, a scarce breeder in Ireland, was confirmed breeding on the site in 2018 (Birdwatch Ireland Tipp).
- Littleton also contains a significant area of bog remnant that was formerly partially used for sod peat cutting. Much of these bog remnants and former sod peat areas have completely re-vegetated and have been zoned for biodiversity by BnM. The relatively deep remnant peat is indicative that there is a large mainly Heather-dominated area on the site. *Sphagnum*-rich vegetation is also present, indicating some regeneration. As much of the bog has developed secondary peatland habitats, it forms a relatively large refuge for wildlife.

Photos of Habitats at Littleton Bog (2024)	
	**Littleton Bog SW** Derryhogan Bog 2021 New wetlands evident across the landscape.
	**Littleton South 2021** Conifer plantation evident to the left of the picture. Extensive Birch woodland and mosaic of wetlands developing. Bare peat strip is a travel path along the railway. .
	**Littleton South 2022** Looking south towards the conifer plantation Mosaic of wetland (open water, poor fen, wet scrub and woodland) and drier woodland and open habitats developing across this area.

	**Littleton North 2021** Old wetland along the western margin (looking south). Adjacent area has been out of peat extraction since 1980s and has re-vegetated.
	**Littleton North 2021** New wetland creation and development of cutaway habitats in central section (looking south
	Embryonic *Sphagnum* rich vegetation developing in the former trenches at Derryhogan Bog. This cutaway vegetation has been developing for > 40 years and is one of the best examples of typical future habitat on re-wetted acidic deep peat bog. The *Sphagnum* moss forms an extensive mat in places. No re-wetting was carried out in these trenches as it was deemed in good condition and providing significant habitat for wintering and breeding birds.

	Re-wetted area in Derryhogan 2025. This area has radically transformed compared to pre-rehab.

3.3.2 Species of conservation interest

A number of species of conservation interest utilize the habitats available at Littleton Bog. The following is a summary of the records of these species available within both BnM and NBDC records.

- Multiple mammal species have been recorded as part of BnM surveys on or in close proximity to the bog including Otter (*Lutra lutra*), Hare (*Lepus timidus spp. hibernicus*), Eurasian Red Squirrel (Sciurus vulgaris), Badger (*Meles meles*) and the bat species Leislers Bat (*Nyctalus leisleri*) and Soprano Pipistrelle (*Pipistrellus pygmaeus*).
- There are records of Marsh Fritillary (*Euphydryas aurinia*) along the margins of Littleton Bog, including larval webs and butterflies in flight. Marsh Fritillary is a species of significant conservation interest (Annex II species – EU Habitats Directive).
- Littleton contains a significant amount of wetland and open water scattered across the site. Some of this wet peatland provides breeding habitat for wetland birds (Copland, 2011)) as well as refuge for wintering wildfowl. Some duck (Mallard and Teal) were noted on one of the larger wetlands close to the margin of the site. These wetland areas are likely to continue to mature and become more structurally diverse in the future. Shoveler Duck, a scarce breeder in Ireland, was confirmed breeding on the site in 2018 (Birdwatch Ireland Tipp).
- Littleton is used by wintering Hen Harrier, Merlin and by small flocks of Whooper Swans (Biosphere Environmental Services 2014). The small wetlands are regularly used by wintering wildfowl. Breeding Curlew has also been recorded on the site at Derryhogan in the south-west part of the site. This is a particularly rare Red-listed bird species. The wetlands also support a colony of Black-headed Gull, another Red-listed breeding species. Curlew are still confirmed breeding on the site (2025).
- Bird species of conservation interest recorded from the bog include the BOCCI[5] red listed species Snipe (*Gallinago gallinago*), Kestrel (*Falco tinnunculus*), Lapwing (*Vanellus vanellus*), Meadow Pipit (*Anthus pratensis*) and small flocks of Golden Plover (*Pluvialis apricaria*). The BOCCI amber listed species Willow

[5] https://birdwatchireland.ie/app/uploads/2021/04/BOCCI4-leaflet-2-1.pdf

Warbler (*Phylloscopus trochilus*), Mallard (*Anas platyrhynchos*), Swallow (*Hirundo rustica*), Northern Wheatear (*Oenanthe Oenanthe*), Lesser Black-backed Gull (*Larus fuscus*), Linnet (*Linaria cannabina*) and House Martin (*Delichon urbicum*) have also been recorded at Littleton Bog.

- Plant species of particular conservation value that were recorded on the site include Blue Fleabane and Marsh Hellebore. Blue Fleabane is a Red Data Book species.

3.3.3 Invasive species

There are BnM records for the high impact invasive species Japanese Knotweed (*Fallopia japonica*) recorded from the northern gate at Littleton Bog. Some herbicide control has been carried out over the past few years.

3.4 Statutory Nature Conservation Designations

There are no European Designated Sites in close proximity (i.e. within a 5km radius at minimum) to Littleton Bog.

The nearest European Designate Sites to Littleton Bog are as follows:

- The Loughans SAC (000407)- located approximately 8km northeast,
- Lower Suir SAC (site code: 002137) - located approximately 9.5km west (at the closest point,)
- River Barrow and River Nore SAC (002162) (002162)-10km east (at the closest point),
- Spahill and Clomantagh Hill SAC (000849)- located approximately 10.3km northeast,
- Galmoy Fen SAC (001858) - located approximately 13.7km northeast,
- Cullahill Mountain SAC (000831)- located approximately 14.8km northeast,

There are also no NHA's (Natural Heritage Areas) within a 5km radius of this site. There is only one proposed NHA (Proposed Natural Heritage Area) within a 5km radius of this site, i.e. Kilcooly Abbey Lake pNHA (site code: 000958) which is located approximately 5km east of Littleton Bog. A number of non-statutory designated sites which overlap with European designated sites occur in the wider area. There are also a number of pNHA's that occur within 10km of Littleton Bog including:

- Kilcooly Abbey Lake pNHA (site code: 000958), located approximately 5km east.
- Laffansbridge pNHA (000965) - located approximately 6.3km south,
- The Loughans pNHA (000407)- located approximately 8km northeast,
- Killough Hill pNHA (000959) - located approximately 9.2km to the southwest,
- Cabragh Wetlands pNHA (001934) – located approximately 9.5km to the west,
- Spahill and Clomantagh Hill pNHA (000849) - 10.3km northeast.

See drawing *BNM-ECO-26-11B-23: Proximity to Designated Sites* in the accompanying map book.

3.4.1 Other Nature Conservation Designations

The Ramsar Convention entered into force in Ireland on 15th March 1985. Ireland currently has 45 sites/wetlands designated as Wetlands of International Importance (Ramsar Sites). These cover a surface area of 66,994ha.

There are no Ramsar sites in close proximity to Littleton Bog.

3.5 Hydrology and Hydrogeology

Littleton Bog forms part of the Suir Catchment (Catchment ID: 16) as defined by the EPA under the Water Framework Directive (WFD). The bog lies within several sub-catchments including Black (Twomileborris_SC_10) Clover_010 and Drish_010. Littleton Bog had a partially based pumped drainage system. The bog contains several drainage pathways and discharge locations, with most of the bog discharging to streams (via silt ponds), which eventually flow into the River Suir.

The northern part of the site is considered a locally important aquifer (LI) as the bedrock is moderately productive only in specific zones. The southern part of the site is classified as a regionally important (Rk) as it is subject to karstificaiton.

An aquifer is an underground body of water-bearing rock or unconsolidated materials (gravel or sand) from which groundwater can be extracted in useful amounts. GSIs Aquifer classes are divided into three main groups based on their resource potential, and further subdivided based on the type of openings through which groundwater flows. There are nine aquifer categories in total. Locally important aquifers are capable of supplying locally important abstractions (e.g. smaller public water supplies, group schemes), or good yields (100-400 m3/d). This data gives an indication of sub-surface deposits (bedrock and unconsolidated materials) in terms of their groundwater resource potential and dominant groundwater flow type.

Regionally important aquifers are those in which the network of fractures, fissures and joints, through which groundwater flows, is well connected and widely dispersed, resulting in a relatively even distribution of highly permeable zones. There is good aquifer storage and groundwater flow paths can be up to several kilometres in length. There is likely to be substantial groundwater discharge to surface waters (‘baseflow’) and large (>2,000 m3/d), dependable springs may be associated with these aquifers.

The majority of the cutover bog is located in an area mapped by GSI as of moderate groundwater vulnerability with some peripheral sections having low groundwater vulnerability (GSI Mapviewer). Groundwater vulnerability for the area surrounding Littleton Bog ranges from moderate to low vulnerability. Groundwater Vulnerability is a term used to represent the intrinsic geological and hydrogeological characteristics that determine the ease with which groundwater may be contaminated by human activities. Groundwater vulnerability maps are based on the type and thicknesses of subsoils (sands, gravels, glacial tills (or boulder clays), peat, lake and alluvial silts and clays), and the presence of karst features. Groundwater is most at risk where the subsoils are absent or thin and, in areas of karstic limestone, where surface streams sink underground at swallow holes. These data indicate there is generally low risk of any groundwater contamination occurring at this site. Groundwater Vulnerability is typically used to indicate the susceptibility to groundwater pollution.

3.6 Emissions to surface-water and watercourses

Littleton Bog has 2 treated surface water outlets (SW34 and SW35) from previously active peat extraction catchment. SW34 and SW35 discharge to unnamed streams eventually meeting the Clover River (IE_SE_16C040300). The Clover River is classed as Good water quality status (Ecological Status or Potential SW 2019-2024 – Water Framework Directive) but the unnamed streams leading to the Clover River are classed as having poor/moderate water quality.

The locations of silt ponds, associated surface water emission points and those being monitored and sampled as part of the IPC licence are detailed on the BNM-ECO-26-11B-02 Littleton Bog: Structures and Sampling, along with the water quality map (BNM-ECO-26-11-WQ01 Littleton Bog: Water Quality Map) in the associated map book.

Peat extraction continues to be identified as a pressure in the third cycle of the River Basin Management Plan (Water Action Plan for Ireland). The main emission limit value (ELV) associated with these bogs is 35mg/l suspended solids, with trigger levels for ammonia of 3.6 mg/l and COD 100mg/l.

An analysis of the results over a number of years of the IPC licence environmental monitoring of some of the discharges from this bog indicates that results were well under the Emission Limit Value for Suspended Solids for the last 30 months of monitoring up to December 2025, with a similar level of compliance for COD at 95% and 100% under the trigger level for Ammonia.

Ammonia averaged 0.301mg/l and ranged from 0.028 to 1.78 mg/l with Suspended Solids ranging from 2 to 7 mg/l and averaging 3.54 mg/l.

The Annual Monitoring Return (AMR) for the period up to December 2025 is due to be submitted to the EPA in May 2026.

Rehabilitation of cutaway peatland is closely linked with control of emissions. One of the criteria for successful rehabilitation is stabilisation through re-vegetation, which will stabilise all substrates and in turn remove the need for further silt control measures. This site is already vegetated in some areas. Re-wetted peat also aids the primary objective of stabilizing peat, as when peat is re-wetted it is not vulnerable to wind erosion. Re-wetted peat and the development of wet peatland habitats can also act as sinks for silt and mobile peat, and increases additional retention time for solids, and the peatland vegetation can quickly stabilise this material within blocked drains on site (by acting like constructed wetlands).

Water quality of water discharges from restored peatlands normally improves as a result of bog restoration measures and the restoration of natural peatland processes (Bonn *et al*., 2017). Bog restoration is also expected to improve water attenuation of the site as the drains are blocked, slowing water movement and water release from the site. Restored peatlands help slow the release of water and aid the natural regulation of floods downstream (Minayeva *et al*., 2017). The draft National River Basin Management Plan (NRBMP) 2022-2027 (DHPCLG, 2022) is the key national plan for Ireland to achieve the objectives of the Water Framework Directive (WFD). The NRBMP outlines how key actions such as the BnM peatland rehabilitation is expected to have a positive impact on water quality and help the NRBMP deliver its objectives in relation to the WFD.

Water will still discharge from designated emission points when rehabilitation at Littleton Bog has been completed. This discharge will have improving water quality and there will be increased wetland attenuation, meaning slower release of water. This is expected to have a positive impact on status of downstream water bodies. While water quality improvements assist in meeting water frameworks directive ambitions and targets, they can also improve drinking water sources in applicable catchments with drained peatlands and the potential for associated reduction in treatment requirements at drinking water treatment facilities.

Decommissioning and Rehabilitation Programme Water Quality Monitoring.

Results for the quarterly monitoring programme for the last 3 yrs are included in Appendix XI, for Littleton.

BnM have been providing the Local Authority Water Programme (LAWPRO) with details of the surface water emissions points associated with this bog.

This is necessary to ensure that there is alignment with the WFD monitoring programme and that where possible, the monitoring programme will enable any improvements in water quality or establishing trends to be quantified against any available WFD monitoring data. It will also enable the periodic sharing of data which will inform the monitoring reports, success criteria and enable LAWPRO under the Water Framework Directive to track any changes in pressures and be aware of changes in water chemistry.

Monitoring results will be maintained, trended every six months and reported on each year and as required, as part of the requirement to report on Condition 10.1 of the IPC Licence on Bog Rehabilitation in the Annual Environmental Report, and will be provided to LAWPRO and the EPA as required to inform progress and national monitoring requirements under the WFD.

These results will also be available in May each year as a requirement of the Annual Environmental Report at www.epa.ie.

The parameters to include as per condition 6.2 of the IPC Licence include monthly monitoring for pH, Flow, Suspended Solids, Total Solids, Total Phosphorus, Total Ammonia, Colour & COD.

3.7 Fugitive Emissions to air

None.

The bog is no longer in industrial peat production. Rehabilitation of the cutaway peatland will seek to re-wet the dry peat where possible and re-vegetate all areas (whether wet or dry). Collectively, ceasing industrial peat production, re-wetting and re-vegetating will minimise any risk of emission to air from dust.

3.8 Carbon emissions

Irish peatlands are a huge carbon store, containing more than 75% of the national soil organic carbon (Renou-Wilson *et al.* 2012). Peatland drainage and extraction transforms a natural peatland which acts as a modest carbon sink (taking in 0.1 to 1.1 t of carbon as CO_2-C /ha/yr) into a cutaway ecosystem which is a large source of carbon dioxide (releasing 1.3 to 2.2 t of carbon as CO_2-C /ha/yr) based on Tier 1 Emission factors (Evans *et al*. 2017). Renou-Wilson *et al.* (2018) reported losses of between 0.81 – 1.51 CO_2-C /ha/yr from drained peatlands located in Ireland.

Re-wetting of dry peatlands will increase methane emissions (Gunther *et al*. 2020) as a consequence of the anoxic conditions within the peat body that provide a suitable environment for the microbial breakdown of plant litter and root exudates. Tanneberger *et al.* (2021) describes how peatland management has to choose between CO_2 emissions from drained peatlands or increased methane (CH_4) emissions from rewetted industrial peatlands. However, when radiative effects and atmospheric lifetimes of both GHG gases are considered and modelled, postponing rewetting increases the long-term warming effect of continued CO_2 emissions (Gunther *et al*. 2020). This means the increase in methane due to rewetting of dry peatlands is still negated by the CO_2 emissions reductions. Further, Wilson *et al.* (2022) confirmed the benefit of rapid rewetting to achieve strong carbon reductions and potentially altering the warming dynamics from warming to cooling depending upon the climate scenario.

It is expected that Littleton Bog will become a reduced carbon source following rehabilitation. The potential of any cutaway site to develop as a carbon sink in the longer-term depends on the success of the rehabilitation measures, the extent of development of *Sphagnum*-rich or other peat-forming habitats, the balance of carbon

fluxes from different cutaway habitats and future climatic conditions. Much of this bog is expected to develop wetland habitats on shallow peat with open water, reed swamp and fen habitats with alkaline emission factors and a smaller proportion will develop as regenerating wet deep peat vegetation on deep peat areas. Birch woodland is expected to develop on the drier mounds and along peripheral headlands.

3.9 Current ecological rating

(Following NRA (2009) Evaluation Criteria)

Parts of this site are deemed to be of **County-National Importance**. The site supports breeding Curlew, a species whose breeding population has experienced drastic declines on a national level, presence of wintering Hen Harrier; and the establishment of *Sphagnum*-rich poor fen habitat deemed to be of County Importance.

Other sections of the site support semi-natural habitats such as Birch woodland, pioneer cutaway habitats and smaller sections of high bog deemed to be of **local importance; higher value**.

4. CONSULTATION

4.1 Consultation to date

Consultation with interested parties.

There has been ongoing consultation about rehabilitation, biodiversity and other general issues over the years about Littleton bog group, including Littleton Bog, with various stakeholders in relation to:

- General consultation with range of stakeholders at annual Bord na Móna Biodiversity Action Plan review days 2010-2018.
- Open consultation with range of stakeholders at annual BAP review days 2010-2018.
- Consultation with the North Tipperary Heritage Forum during the period 2010-2015.
- General consultation at a local community event in Littleton in Dec 2016.
- General consultation with Tipperary County Council and other stakeholders in relation to the Littleton Labyrinth Project Feasibility Study.
- Ongoing engagement with Lisheen Mine.
- Archaeological Liaison Committee (National Museum of Ireland & Dept of Culture Heritage and the Gaeltacht).
- Midlands & East Regional WFD Operational Committee (River Basin Management Plans).
- Ongoing consultation with Coillte – proposed Coillte/BnM Midlands Native Woodland Project.
- Ongoing consultation with Slieve Ardagh Rural Development Group.
- General consultation with Tipperary County Council and other stakeholders in relation to the Midlands Network Trail.
- Specific Consultation with Tipperary Climate Action Officer and Biodiversity Officer relating to the Tipperary Climate Action Plan and the Mid-Tipperary Decarbonising Zone.

There was specific consultation and engagement about rehabilitation of the Littleton Bog group, including Littleton Bog, with various stakeholders during the period 2018-2021:

- Lisheen Mine.
- Irish Peatland Conservation Council.
- NPWS (site visits).
- Tipperary County Council (2018).
- Tipperary Heritage Forum.
- Kilkenny County Council.
- Consultation with members of the local community.
- Consultation with local community groups.
- Slieve Ardagh Rural Development.
- National University of Galway.
- Limerick Institute of Technology.
- Irish Wildlife Trust.
- Environmental Protection Agency.
- Birdwatch Ireland.
- Birdwatch Ireland Tipperary Branch.
- Forest Service.

- Coillte.

To inform the original Plan (Phase 1 Rehabilitation), both national and local stakeholders, local representatives of national bodies (such as Regional National Parks and Wildlife Service staff) and relevant offices in County Councils (such as the Heritage or Environmental Offices) were contacted. Any identified local interest groups were informed of the opportunity to engage with this rehabilitation plan and were invited to submit their comments or observations in relation to the proposed rehabilitation (Phase 1) at Littleton Bog or the programme in general.

4.2 Issues raised by Consultees

Some issues were raised by consultees during the consultation process for the rehabilitation plan for Ballybeg/Lanespark/Derryvella Bog and for response to consultation for rehabilitation across the Littleton Bog Group between 2018-2025, and these are summarised below.

NPWS welcomed the restoration and rehabilitation measures proposed for the Littleton Bog Group in 2018, particularly where it could result in the development of Annex I active raised bog or would significantly aid Ireland in meeting its commitments under the EU Habitats Directive.

NPWS (2018) suggested that BnM consider more fully the potential for forward-planning during production phases of its operation so that the topography of the commercial fields could be engineered so as to best facilitate rewetting of the sites. Consideration should be given to reprofiling works within the Littleton Bog Group.

NPWS (2018) highlighted the potential for more intensive rehabilitation during initial consultation and the potential for larger project opportunities focusing on GHG emission reduction creation of peat-forming habitats, biodiversity enhancement, other ecosystem services enhancement/restoration. The use of bunding at several sites was discussed.

Birdwatch Ireland (2018) welcomed the proposed restoration/rehabilitation of the Littleton Bog Group and highlighted need to take consideration of bird nesting season when carrying out works, particularly for Lapwing and Curlew.

IPCC (2018) requested clarity around the scope of sites included in the Littleton Rehabilitation Programme and recommended that priority be given to raised bog restoration, where possible. IPCC were concerned about the fact that milled peat extraction was projected to continue at Killeen Bog (in 2018, subsequently ceased in 2021). The IPCC were also unclear about the aims and objectives for sites with biodiversity interest. The IPCC recommended the use of contouring as a methodology to improve re-wetting outcomes.

The IPCC (2018) highlighted that monitoring of changes to water-levels as a result of rehabilitation could be improved using piezometers and queried the frequency of ecotope mapping. NPWS (2018) recommended that ongoing research into the interaction between rehabilitation measures and carbon emissions is prioritized so as to better inform future rehabilitation plans.

The Irish Farmers Association (IFA), The Department of Agriculture Food and the Marine, individual local residents and ICMSA queried likely impacts relating to the finalisation of several bog rehabilitation plans in 2021 and 2022. They raised concerns based on the proposed re-wetting in relation to flooding on adjoining lands and, specifically, with regards to the maintenance of drains. In previous submissions, the IFA also raised the issue of Health and Safety in relation to raising water levels as well as possible impacts on land and property prices.

Several individuals who owed adjacent land to bogs within the Littleton Bog Group expressed concerns about the potential impacts of re-wetting to their land (2018).

Several individuals and organisations expressed interest in the development of amenity and greenways through the Littleton Bog Group (2018). IPCC highlighted a bog area at the north of Littleton Bog that had been used for educational purposes in the past.

Tipperary County Council (2018) highlighted the need to avoid any unnecessary deterioration in the quality and quantity of ground and surface waters. Tipperary County Council (2018) also suggested that peatland water levels and flow regimes should be restored to as close to the natural reference conditions as possible.

Queries about future nature conservation designations were also submitted by IPCC, discussed with IWT and with Birdwatch Ireland Tipperary Branch. Birdwatch Ireland, Tipperary Branch (2018) suggested further management of sites for to improve habitat for breeding wetland birds.

The Irish Farmers Association (IFA) (2021-2022) expressed concerns regarding the future ownership of the BnM bogs subject to rehabilitation, in submissions made on earlier rehabilitation plans. They expressed a desire for contingency planning for potential future ownership of designated bogs so as to ensure no negative impacts arise on adjacent properties from any new ownership. A local landowner (2017) with a holding adjacent to a Littleton Bog made some enquires about the return of land originally CPOed by BnM.

University of Galway (2017) were interested in developing an INTEREG Project on peatland sites and were discussing the inclusion of several BnM sites in this proposed project. (This subsequently became the CarePeat INTEREG Project and Cavemount Bog Co. Offaly was included in the project, which is now completed).

Limerick Institute of Technology (LIT) were interested in developing a project on peatlands and paludiculture and were discussing the potential availability of land within the Littleton Bog Group. This proposal ultimately did not develop into a project on BnM lands.

An individual highlighted the presence of several rare Bee Orchid varieties along the BnM railway at Longford Pass.

Tipperary County Council developed a Climate Action Plan in 2024 and have developed an area called the Mid Tipperary Decarbonizing Zone. This Decarbonising Zone within the local authority area is to act as a test bed for a range of climate mitigation, adaptation and biodiversity measures in a specifically defined area through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective (Tipperary County Council 2024).

4.3 BnM response to issues raised during consultation and rehabilitation 2018-2021

BnM carried out extensive consultation and engagement with all interested parties during 2018-2021.

Consultees during the Phase 1 rehabilitation (2018-2021), including NPWS and the IPCC, suggested the use of more intensive rehabilitation measures such as contouring and bunding. These ultimately were beyond the scope of the rehabilitation budget allocated to these sites by BnM at the time (2018-2021). PCAS is now an opportunity to carry out some of these suggested measures (e.g. bunding, recontouring) through the Littleton Bog Group as part of Phase 2 rehabilitation and various additional phase 2 rehab has been proposed for Templetouhy,

Carrickhill, Derryville, Baunmore, Inch, Ballybeg, Derryvilla and Killeen. This additional Phase 2 rehab is dealt with by the 2025 update to the Ballybeg-Lanespark-Derryvilla Rehabilitation Plan 2025.

Sphagnum inoculation is one measure that was initially suggested by IPCC (in 2018) for use at Ballysorrell to support raised bog restoration. This measure was ruled out initially by BnM in 2018 due to its relatively high cost, lack of resources and other logistical issues such as lack of suitable local *Sphagnum* donor sites. Since then, BnM has developed the Peatlands and People LIFE Project (Home | Ireland's Climate Action Catalyst | Peatlands & People) and one of the main objectives of this project on BnM land is to inoculate approx. 800 ha of suitable residual deep peat with *Sphagnum* plugs to speed up the trajectory of development of *Sphagnum*-rich embryonic bog vegetation. So far, 350 ha has been inoculated across midlands bogs. The future selection of sites within the Littleton Bog Group for *Sphagnum* inoculation will be dependent on availability of resources for planting. Site visits to Lanespark and Littleton (2025) has also shown that *Sphagnum* is present on site and is recolonising and spreading in certain areas quickly in response to the re-wetting in 2018-2021.

Rehabilitation measures should positively impact the water quality in receiving water bodies through enhancing the water attenuation across rehabilitated sites. The robust water monitoring programme implemented will be used to assess water quality leaving rehabilitated sites at designated points. BnM also advised that decommissioning of silt ponds will only be carried out when the EPA are satisfied that adequate stabilisation of the bog has been achieved and silt ponds are no longer required. This decommissioning will be determined by water quality results and EPA approval.

During Phase 1 of the rehabilitation across Littleton Bogs, individual landowners who expressed concerns were met on site. No boundary drains were blocked and, in several instances, (Ballybeg) some internal drainage was modified to allow water draining from external lands to flow through these sites unhindered. It is the intention of BnM that the re-wetting of the bogs will be carried out in such a manner that does not impact on third party lands. Where it is deemed that blocking of a shared drain would cause any adjoining lands to be adversely affected, this will be avoided, and alterations made to the rehabilitation plan. In general, drains around the margins of the bog will not be blocked. It is intended that rehabilitation measures will not significantly alter the existing topographical catchments and that the spine of the drainage networks, those which the upstream catchments drain through, will be retained by BnM. If issues arise with boundary drainage in the future, then these will be dealt with by BnM.

BnM and Tipperary County Council carried out a feasibility study of the potential for amenity development across the Littleton Bog Group called Littleton Labyrinth in 2018-2020. The first phase of this amenity has been completed and a greenway has been constructed at Killeen Bog to Loch Doire Bhile. A further extension (Phase 2) is proposed at Ballybeg and Derryvella Bog. There is potential for future extensions to this greenway network in the future. These greenways can be integrated into the rehabilitated landscape with no significant impact to the previous re-wetting.

Rehabilitation plans are not intended to plan out future management of these sites. Known or planned after-use (way-leave, Littleton Labyrinth greenway feasibility) has been incorporated, where possible, in the rehabilitation plan. Peatland rehabilitation is not intended to constrain future land-uses, where they are compatible with this environment.

Ballybeg Bog is proposed to be included in the Coillte/BnM Midlands Native Woodland Project (Midlands Native Woodland - Coillte). The main objective of this proposed project is to develop and enhance native woodland in areas of cutaway that would remain naturally dry, developing woodland habitat that would naturally complement wetland and peatland habitats already developing across these sites. An area of 11.2 ha is proposed for planting

at this Bog. This proposed project is currently being considered for consent by the Forest Service. Areas proposed to be included in Native Woodland Project have also been mapped as constrained land in the rehabilitation plan.

BnM will continue to manage their land bank into the future. As industrial peat production has now ceased on BnM lands and rehabilitation measures carried out, a regular drainage maintenance programme will not be required or carried out as would have been the case in the past. However, if issues arise with the BnM internal drainage system that affects upstream or downstream landowners, then these issues will be addressed by BnM.

BnM considers issues regarding estate security, fire risk, invasive species and water pollution of utmost importance. BnM intends to maintain security and manage fire risk over the entirety of the estate. In this regard, rehabilitation should have no detrimental impact on these issues. Regarding water pollution, BnM is regulated by the EPA and as such adheres to the strict water pollution measures laid out by the same. BnM will consider future opportunities for biodiversity enhancement, subject to availability of resources and funding, where possible. BnM intends to maintain a “No Shooting” policy on Littleton Bog.

It is the intention of BnM to keep secure the estate and ensure that any anti-social behaviour that occurs within the estate is reported and dealt with by the appropriate authorities.

5. REHABILITATION GOALS AND OUTCOMES

The rehabilitation goals and outcomes outline what BnM want to achieve by implementing the rehabilitation. These include:

- Meeting conditions of IPC Licence.
- Stabilisation or reduction in water quality parameters of water discharging from the site (e.g. suspended solids).
- Reducing pressure on receiving waterbodies that have been classified as *At Risk* from peatlands and from peat extraction, via stabilization or improving water-quality from this bog, and therefore, reducing pressures.
- Optimising hydrological conditions for **climate action benefits**.
- Optimising hydrological conditions for the protection of exposed archaeological structures, their retention in situ and preservation into the future.
- Integrating rehabilitation measures with existing land-use (e.g. conifer forestry). Supporting other potential future land-uses. Integrating rehabilitation measures with future potential land-uses on site. It is not proposed to carry out any rehabilitation actions to change or negatively affect any infrastructure.
- The main goal and outcome of this plan is the successful rehabilitation (environmental stabilisation) of peatlands used for industrial peat production at the bog in a manner that is acceptable to both external stakeholders and to BnM and which optimise climate action and other ecosystem service benefits.

The rehabilitation goals and outcomes take account of the following issues.

- BnM have carried out rehabilitation at Littleton Bog in 2018-2021. Significant drain-blocking and re-wetting was carried out during this phase.
- It will take some time for stable naturally functioning habitats to fully develop at Littleton Bog. This will happen over a longer timeframe than the implementation of this rehabilitation plan.
- Re-wetting residual peat will initially maintain and enhance the carbon storage capacity of the bog. There is scientific consensus that restoration of hydrology in damaged bog can improve carbon storage, water storage and attenuation and help support biodiversity both on the site and in the catchment (See Section 3.8). This will reduce carbon emissions from the site from a larger carbon source to a smaller carbon source. In time, the site has the capacity to develop in part as a carbon sink.
- It is not expected that the cutover bog in the former production area has the potential to develop active raised bog (ARB) analogous to the priority EU Habitats Directive Annex I habitat within the foreseeable future (c.50 years). Littleton Bog has relatively some sections with relatively deep residual peat across the site, with sections of the bog containing shallow residual peat and proportions of the bog cutaway with exposed gravel ridges. Therefore, there are areas that have potential to develop *Sphagnum*-rich habitats in this timeframe. Nevertheless, re-wetting across the entire bog, as part of the Scheme, will improve habitat conditions of the whole bog. Other peatland habitats such as wetland or scrub/woodland will develop in a wider mosaic that reflects underlying conditions.
- Rehabilitating former industrial peat production bog will also in the longer-term support other ecosystem services such as such the development of new habitat to support biodiversity and local attenuation of water flows from the bog.
- WFD status in receiving water bodies can be affected by peatlands and peat extraction but is also affected by other sources such as agriculture. In addition, receiving water bodies that are assessed as At Risk from

peatlands and from peat extraction are likely to have several contributary sources of impacts (private peat extraction and BnM). Reducing pressures due to former peat extraction activities at Littleton Bog will contribute to stabilising or improving water quality status of receiving water bodies in general. Ultimately, improving the WFD status of the receiving water body will depend on reducing pressure from a range of different sources, including peatlands in general (private and BnM).

- Re-wetting in general will benefit the future preservation of most known and unknown archaeological features.

6. SCOPE OF REHABILITATION

The principal scope of this enhanced rehabilitation plan is to rehabilitate the bog. This is defined by:

- The area of Littleton Bog within the rehabilitation footprint.
- EPA IPC Licence - Ref. P0499-01. As part of Condition 10.2 of this licence, a rehabilitation plan must be prepared for permanent rehabilitation of the boglands within the licensed area.
- Much of the site already has establishing pioneer cutaway habitats with some areas having well-developed habitats. Targeted drain-blocking, wetland outfall management and deep peat measures are the most suitable rehabilitation approach for the site.
- BnM have defined the key goal and outcome of rehabilitation at Littleton Bog as **environmental stabilisation** and **optimising residual peat re-wetting,** to enhance the development of compatible habitats.
- Rehabilitation of Littleton Bog will support multiple national strategies of climate action, biodiversity action and other key environmental strategies such was the Water Framework Directive.
- Rehabilitation of Littleton Bog also supports and aligns with the goals and objectives of the Tipperary Decarbonizing Zone.

6.1 Key constraints

- **Bog conditions.** Rehabilitation outcomes are constrained by the environmental characteristics of the particular bog. For example, there is potential for raised bog restoration at some sites where there has not been significant industrial peat extraction, and the peat body is largely intact (deep peat sites that are drained). At other sites, most of the peat mass has been removed, the environmental characteristics of these areas have therefore changed radically (peat depths, hydrology, water chemistry, substrate type, nutrient status, etc.) and there will therefore be different habitat outcomes (wetlands, fen, heathland, grassland and Birch woodland).
- The majority of Littleton Bog has shallow residual peat with some deeper peats. The bog has a partially pumped drainage regime. Two pumps are still present on site but remain non-functional. Wetland habitats (fen, wetland, reedswamp) and dry cutaway habitats (Birch woodland, scrub and grassland) are the most likely habitats to develop in areas with shallower peat. Areas of residual deeper peat are likely to develop *Sphagnum* rich bog vegetation in time. These habitats are already developing in places on older cutaway.
- **Surrounding landscape and neighbours.** Another key constraint is the interaction between the BnM bogs and the surrounding landscape. Care has to be taken that no active rehabilitation management is carried out that could negatively and knowingly impact on surrounding land. This includes any hydrological management on neighbouring farmland. It is anticipated that the work carried out at Littleton (blocking drains and re-wetting cutaway peatlands) will not have any flooding impacts on adjacent land.
- **Archaeology**. The discovery of monuments or archaeological objects during peatland rehabilitation may potentially constrain the rehabilitation measures proposed for a particular area. The rehabilitation will optimise hydrological conditions for the protection of exposed archaeological structures, their retention in situ and preservation into the future. Any newly discovered archaeology may require rehabilitation measures to be reviewed and adapted. Should any previously unknown archaeological material be uncovered during the rehabilitation works, it will be avoided and reported to the BnM Archaeological Liaison Officer and the National Museum of Ireland.

- **Turf-cutting.** There are areas of active turf cutting (turbary) on the margins of the bog. No rehabilitation measures will be carried out that affect turbary rights.
- **Coillte Conifer Plantation.** No measures will take place that will affect Coillte conifer forestry.
- **Biomass**. A small area (10 ha) used as a pilot Eucalyptus biomass project was constrained.
- **Conifer plantation/agricultural grassland**. Conifer plantation forestry and parcels of agricultural grassland border the bog. These areas have been identified as constrained land where they overlap the rehabilitation footprint.
- **Potential Future Amenity development.** BnM and Tipperary County Council carried out a feasibility study of the potential for amenity development across the Littleton Bog Group called Littleton Labyrinth. There is potential for future extensions to this greenway network through Littleton Bog. The proposed rehabilitation measures will not impact on the delivery of any future amenity as a route is still available across the bog, and there is no constraint to rehabilitation.

6.2 Key Assumptions

- It is assumed that BnM will have all resources required to deliver this project.
- It is expected that weather conditions will be within normal limits over the rehabilitation plan timeframe. Long periods of wet weather have the capacity to significantly affect ground conditions and constrain drain blocking and other ground activities.

6.3 Key Exclusions

The scope of this rehabilitation plan does not cover:

- Areas subject to turf cutting are excluded.
- Coillte conifer plantation.
- The longer-term development of stable naturally functioning habitats at Littleton Bog. The plan covers the short-term rehabilitation **actions** and **an additional monitoring and after-care programme** to monitor the rehabilitation and to respond to any needs.
- This plan is not intended to be an after-use or future land-use plan for Littleton Bog.
- The longer-term management of this site, potentially as a nature conservation site, or for amenity, or for other uses in the future.

7. CRITERIA FOR SUCCESSFUL REHABILITATION

This section outlines what criteria will be used to indicate successful rehabilitation and what critical success factors are needed to achieve successful rehabilitation. All criteria used will be measured to validate the achievement of the rehabilitation goals and outcomes and validate the completion of the rehabilitation.

The key objective of this enhanced rehabilitation plan is **environmental stabilisation** and the stabilisation of any emissions from the site that related to the former industrial peat extraction activities.

Rehabilitation is generally defined by BnM as:

- stabilisation of bare peat areas via targeted active management (e.g. drain-blocking/re-wetting) slowing movement of water across the site and encouraging natural colonisation; and
- mitigation of key emissions (e.g. potential run-off of suspended solids).

In addition, BnM wish to optimise climate action and other ecosystem service benefits.

7.1 Criteria for successful rehabilitation to meet EPA IPC licence conditions:

- Rewetting of residual peat in the former area of industrial peat production to offset potential silt run off and to encourage and accelerate development of vegetation cover via natural colonisation and reducing the area of bare exposed peat. See Table 7.1 for a summary of the criteria for successful rehabilitation and associated monitoring. The target will be the delivery of measures and this will be measured by an aerial survey after rehabilitation is completed.
- That there is a stabilizing/improving concentration of suspended solids and ammonia in discharges from BnM sites, associated with the measures undertaken to stabilize the peat surface by the blocking of the internal drainage system and the maximized rewetting of the peat surface. This will be demonstrated by developing a stable or downward trajectory of water quality indicators (suspended solids and ammonia) towards what would be typical of a re-wetted cutaway bog. This will be measured via water quality monitoring (suspended solids and ammonia) for at least 2 years after the rehabilitation has been completed.
- Receiving water bodies have been classified under the River Basin Management Plan and this classification includes waters that are *At Risk* from peatlands and peat extraction. The success criteria will be that the *At Risk* classification will see improvements in the associated pressures from this peatland or if remaining *At Risk*, that there is an improving trajectory in the pressure from this peatland.

Table 7-1 Summary of Success criteria, targets, how various success criteria will be measured and expected timeframes.

Criteria type	Criteria	Target	Measured by	Expected Timeframe
IPC validation	Rewetting in the former area of industrial peat production	Delivery of rehabilitation measures Reduction in bare peat.	Aerial photography after rehabilitation has been completed – to demonstrate measures (drain-blocking)	2025-2027

Criteria type	Criteria	Target	Measured by	Expected Timeframe
			Establishment of a baseline for future monitoring of bare peat, vegetation establishment and habitat condition.	
IPC validation	Key water quality parameters Ammonia, Phosphorous, Suspended solids, pH and conductivity	Reduction or stabilisation of key water quality parameters associated with this bog	Water quality monitoring for a period after rehabilitation has been completed	2025-2027
IPC validation	Reducing pressure from peat production on the local water body catchment (WFD)	Where this section of the water body, that this bog drains to, has not been identified as under pressure from peat extraction, that the intervening EPA monitoring programme associated with its Programme of Measures for this water body, confirms that its classification remains at not being at risk from peat extraction associated with activities at this bog.	EPA WFD monitoring programme	WFD schedule

Meeting climate action verification criteria and monitoring of these criteria after the scheme has been completed is dependent on support from the Climate Action Fund or other sources of funding. Note that monitoring and verification of the overall scheme will be stratified – not all these criteria will be measured at each individual site. Baseline monitoring to be carried out during the scheme when rehabilitation is complete. Sites can be re-monitored in the future and compared against this baseline.

7.2. Critical success factors needed to achieve successful rehabilitation as outlined in the plan

The achievement of successful rehabilitation as outlined in the plan requires:

- **Funding to pay for resources required to deliver the planned rehabilitation (BnM and external).** BnM maintains a provision on its balance sheet to pay for these future costs. BnM is fully committed to meeting its obligations relating to rehabilitation and decommissioning under the Integrated Pollution Control

Licence. It is expected that additional costs of enhanced rehabilitation will be supported by Government through the Climate Action Fund and Ireland's National Recovery and Resilience Plan.

- **BnM to have sufficient resources (staff and training) to deliver the planned rehabilitation with required associated skills and competencies.**
- **BnM to have sufficient resources (suitable machinery) and staff to maintain this machinery.**
- **Weather conditions to be within normal limits over the rehabilitation plan timeframe.** Long periods of wet weather have the capacity to significantly affect ground conditions and constrain the delivery of rehabilitation. The potential impact of wet weather on ground conditions can be reduced by appropriate planning and management. BnM have significant experience of managing these issues through 70 years of working in these peatland environments.
- **Rehabilitation measures to be effective.** The rehabilitation measures proposed in this plan are based on 40 years of BnM experience of peatland management and best practice applied internationally in peatland management. Measures proposed in this plan have already been shown to be affective at other sites. BnM will apply a flexible and adaptable approach to the more innovative rehabilitation measures proposed in this plan**.** If measures are not initially effective, BnM will review any requirement for additional practical rehabilitation.
- **Natural colonisation of vegetation to develop semi-natural habitats at a rate within the normal limits.** The development of naturally functioning semi-natural habitats on degraded bog takes time. It may take 30-50 years for active raised bog vegetation to re-develop on suitable cutaway that was previously bare peat. However, BnM experience has demonstrated the effectiveness of these type of measures for re-wetting bog and creating carbon sinks (Renou-Wilson *et al*. 2018).
- Rehabilitation measures have been designed to accelerate and work with natural colonisation and other natural processes. BnM experience of rehabilitation has shown that re-wetting improves conditions for natural colonisation and that natural colonisation is accelerated where the environmental conditions are most suitable. Rehabilitation measures have been designed to modify the conditions of areas within sites where conditions are less suitable for natural colonisation (modifying hydrology, topography, nutrient status or availability of potential seed sources).
- **Monitoring to be robust and effective.** Rehabilitation Monitoring will be established to validate the success of rehabilitation as required by Condition 10 of the IPC Licence and to verify the benefits of the proposed enhanced measures to optimise climate action. This will focus on a collecting a range of scientific data that can then quickly be adapted and into metrics that can be used to measure changes in various ecosystem services.

8. REHABILITATION ACTIONS AND TIME FRAME

Peatland rehabilitation requires detailed planning and the use of data from desktop surveys and field surveys. This data in association with topographical and hydrological modelling will be important in planning the future peatland landscapes and planning the use of the most appropriate rehabilitation methodologies to maximise climate action benefits. Hydrological modelling indicates those areas that are likely to re-wet when drains are blocked, based on the current topography, and areas where water levels may have to be modified, where needed. Enhanced rehabilitation measures will look to optimise hydrological conditions for re-wetting peat in other areas. This planning is also essential for matching the most sustainable rehabilitation methodology to the most suitable cutaway environment to maximise the benefits of the resource outlay (maximising cost/benefit).

A number of illustrative figures have been produced to inform Rehab Planning and Design, including Aerial Photography, Peat Depths, LiDAR Surface Maps, and Depression Analysis modelling; these are included in the accompanying Mapbook as the drawings referenced below:

BNM-ECO-26-11B-21 Littleton Bog: Aerial Imagery 2000

BNM-ECO-26-11B-22 Littleton Bog: Aerial Imagery 2020

BNM-ECO-26-11B-04 Littleton Bog: Peat Depths

BNM-ECO-26-11B-03 Littleton Bog: LiDAR Map

BNM-ECO-26-11B-09 Littleton Bog: Depression Analysis

The rehabilitation actions themselves will be a combination of measures to re-wet peat and encourage natural colonisation. The distribution of these measures is provisionally outlined in drawing titled *BNM-ECO-26-11B-20 Littleton Bog: Standard Rehab Measures* in the accompanying Mapbook**.**

Extensive drain-blocking was already carried out as part of the rehabilitation programme between 2018-2022.

Rehabilitation measures for Littleton included (see Table 8.1):

- Re-assessment of the pumping regime and removing pumps if this was desired and had no significant external impact or impacts on proposed future land-uses. Initial hydrological modelling indicated that a part of the site would develop a mosaic of wetland habitats with some permanent deeper water if pumps were decommissioned. Hydrological management looked to optimise summer water levels to maximise the development of wetland vegetation (by looking to set water depths at < 0.5 m, where possible. It is inevitable that some sections will naturally have deeper water due to the topography at this site). Water-levels were adjusted at outfalls and by adjusting piped drainage, where possible. More sustainable permanent gravity drainage solutions were examined. It is expected that a natural seasonal regime of water fluctuation will develop, with water-levels fluctuating in association with levels of surrounding rivers.
- A targeted drain-blocking programme was implemented across the cutaway, where possible. In general, field drains were blocked where possible to re-wet cutaway and re-wet to the optimum water-level. More intensive measures were targeted towards the bare peat.
- Less intensive measures (targeted drain-blocking) were used in areas where habitats have already established.
- Hydrological measures included modifying outfalls and managing water levels with overflow pipes.

The existing silt pond was retained and maintained during the rehabilitation phase. During the monitoring and verification phase the silt pond wase continually inspected and maintained, where appropriate. When it is deemed that the silt pond is not required, as the bog has been successfully stabilised and there is no silt run-off, the condition of the silt pond will be reviewed. The silt pond will either be de-watered (water levels lowered to a level where the silt pond will naturally develop as a small wetland feature), left in situ, or infilled (where discharges do not require silt control).

8.1 Completed

- A rehabilitation programme was carried out in Littleton between 2018-2021. This comprised of a range of measures outlined in *BNM-ECO-26-11B-20 Littleton Bog: Standard Rehab Measures*. These measures varied in intensity, were targeted in places and reflected the existing environmental conditions.
- Some areas of bare peat had regular drain-blocking (Drain-blocking).
- Southwest portion of Littleton Bog (Derryhogan Bog subsite) had a combination of regular drain blocking, trench drain blocking and outfall management to encourage re-wetting and bog restoration (Deep peat re-wetting).
- Some areas were subject to reducing or ceasing pumping (Hydrological management).
- Some areas had minimal intervention as there were already re-vegetated and developing a mosaic of wetland, woodland and peatland habitats (Minimal intervention).
- Some areas were allowed to continue to develop as wetland due to the natural breakdown of drainage and ceasing drain maintenance (Wetland).
- Southwest portion of Littleton Bog (Derryhogan Bog subsite) was also subject to some tree clearance (removal of feral conifers) to encourage breeding Curlew on site (Tree clearance).
- Pumping ceased in the northern section of the site in 2022. Some additional drainage was carried out in 2022 to alleviate flooding that was occurring in this area and that was impacting on adjacent land and the rail underpass at the N9 motorway. Pumps at Littleton Bog are now permanently depowered and scheduled for removal.
- The majority of Littleton Bog is now vegetated or re-vegetating. Some sections have been developing as secondary habitats for a significant period of time (40 years). Birch woodland and scrub has significantly expanded across the site on some of the drier ground. The central part of the site is developed a mosaic of wetland and woodland habitats, on mostly shallow residual peat. The wetland habitats include some Reedbeds and wet scrub where the water is deeper, and some poor fen vegetation with Bog Cotton and Bottle Sedge dominating where there are water levels closer to the peat surface.
- The western margins have several lobes where there is deeper residual peat and more typical bog vegetation is developing. The wetter areas and the flooded trenches have developed mats of *Sphagnum* moss. The drier areas have developed a drier Heather-dominated bog vegetation type, particularly where there are relatively steep slopes. Drain-blocking in these areas with residual deep peat is encouraging the development of bog vegetation and *Sphagnum*-rich embryonic bog vegetation.
- In general, cutaway habitats are developing according to the underlying environmental conditions and reflect the varying topography, hydrology and peat depths. Drain-blocking and other rehabilitation measures have had a significant positive impact across the site in re-wetting residual peat and enhancing the development of wetter peatland and wetland habitats. Ceasing pumping has also had a significant impact and has led to the development or a large wetland in the north-western corner of the site.

8.2 Short-term planning actions (0-1 years)

- Seek formal approval of this plan.
- Ensure all activities comply with the environmental protection requirements of the IPC Licence.

8.3 Short-term practical actions (0-2 years)

- Silt ponds will be monitored during this period and there will be continued maintenance and cleaning to prevent potential run-off of suspended solids from the site during the rehabilitation phase.

8.4 Long-term (>5 years)

- Evaluate success of short-term rehabilitation measures outlined above and remediate where necessary.
- Delivery of a monitoring, aftercare and maintenance programme (See section 9 below).
- Decommissioning of silt-ponds will be assessed and carried out, where required.
- Reporting to the EPA will continue until the IPC Licence is surrendered.

8.5 Timeframe

- **2026**: Short-term planning actions.
- **2025-2026**: Short-term delivery actions.
- **2026**: Long term delivery actions. Evaluate success of short-term rehabilitation measures outlined above and remediate where necessary.
- **2028**: Decommission silt-ponds, if necessary.

8.6 Budget and costing

BnM maintains a provision on its balance sheet to pay for the future costs of standard rehabilitation and decommissioning. This is updated every year - for more information see the BnM Annual Report (BnM, 2025). BnM is fully committed to meeting its obligations relating to rehabilitation and decommissioning under the Integrated Pollution Control Licence.

At this time, a ‘standard’ rehabilitation provision (sufficient to discharge the requirement of Condition 10 in the licence) has been allocated to the site based on the area of different cutaway types across the site.

9. AFTERCARE AND MAINTENANCE

9.1 Programme for monitoring, aftercare and maintenance

This programme for monitoring, aftercare and maintenance has been designed to meet the Conditions of the IPC Licence. This is defined as:

- There will be **initial monitoring assessments** of the site to determine the general status of the site, the condition of the silt ponds, assess the condition of the rehabilitation work, monitoring of any potential impacts on neighbouring land, general land security, boundary management, dumping and littering.
- These monitoring visits will also consider any requirements for further practical rehabilitation measures.
- **Water quality monitoring** at the bog will be maintained. The main objective of this water quality monitoring will be to establish a baseline and then monitor the impact of peatland rehabilitation on water quality from the bog.
- Monitoring results will be maintained, trended and reported on each year as part of the requirement to report on Condition 10.1 of the IPC Licence on Bog Rehabilitation in the Annual Environmental Report, which will be available in April each year at www.epa.ie.
- The parameters to be included (as per condition 6.2 of the IPC Licence) include monthly monitoring for pH, Suspended Solids, Total Solids, Total Phosphorus, Total Ammonia, Colour, and COD and DOC.
- If, after two years, key criteria for successful rehabilitation are being achieved and key targets are being met, then the water quality monitoring will be reviewed, with consideration of potential ongoing research on site. The water quality data, the aerial surveys and the habitat mapping will be collated and will be submitted to the EPA as part of the final validation report.
- If, after two years, key criteria for successful rehabilitation have **not** been achieved and key targets have **not** been met, then the rehabilitation measures and status of the site will be evaluated and enhanced, where required. This evaluation may indicate no requirement for additional enhancement of rehabilitation measures but may demonstrate that more time is required before key criteria for rehabilitation has been achieved. Monitoring of water quality will then also continue for another period to be defined.
- Where other uses are proposed for the site that are compatible the provision of biodiversity and ecosystem services, these will be assessed by BnM in consultation with interested parties. Other after-uses can be proposed for licensed areas and must go through the required assessment process and planning procedures.

9.2 Rehabilitation plan validation and licence surrender – report as required under condition 10.4

IPC Licence Condition 10.4. *A final validation report to include a certificate of completion for the Rehabilitation Plan, for all or part of the site as necessary, shall be submitted to the Agency within six months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.*

Reporting to the EPA will continue until the IPC Licence is surrendered. The bog will be included in the full licence surrender process as per the Guidance to Licensees on Surrender, Cessation and Closure of Licensed Sites EPA, 2012, when:

- The planned rehabilitation has been completed.

- The key criteria for successful rehabilitation have been achieved and key targets have been met;
- Water quality monitoring demonstrates that water quality of discharge is stabilising or improving; and
- The site has been environmentally stabilised.

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APPENDIX I: BOG GROUP CONTEXT

The Littleton Bog Group IPC Licenced area was in industrial peat production for several decades until 2017. There are 11 defined bog units covering a total area of 4,421 ha. Each bog area further comprises a range of habitats from bare milled peat former production areas to re-colonising cutaway to workshops areas and transport infrastructure. Industrial peat extraction from these sites mainly supplied briquettes (Littleton Brickette Factory), horticulture and commercial turf for domestic use.

Industrial peat extraction across the majority of the Littleton Bog Group ceased in 2017. (Killeen extended to 2021). Littleton Brickette Factory finally ceased production in 2021. All licences for sod turf production also ceased during this period.

The Littleton Rehabilitation Programme started in 2018. Rehabilitation was planned and implemented across all of the Littleton Bogs. A range of different strategies was implemented across different sites, which reflect variable underlying environmental conditions and land-uses and potential future land-uses at the time.

Drain-blocking was carried out at Ballysorrell Bog and Knockahaw Bogs with the objective of raised bog restoration. These bogs had not had significant peat extraction and retained raised bog restoration potential. Rehabilitation measures at Templetouhy took account of the Bruckana Windfarm, which was is operational since 2015. Bawnmore, Littleton, and Derryville were developing cutaway habitats already as scrub and wetland, and targeted measures were carried out through these sites to enhance these developing habitats. More intensive drain-blocking was carried out across Carrickhill, Inch, Ballybeg, Derryvilla, Longford Pass and Killeen Bogs, particularly where there was recent industrial peat extraction and there were functional drains and bare peat dominated. Pumping ceased at Carrickhill, Inch and Baunmore. Some pumping continued for various periods at Derryville, Longford Pass and Littleton, due to operational issues. Some fertiliser treatments were carried out at Carrickhill and Derryvilla in 2020 as a pilot rehabilitation project.

Rehabilitation measures so far has been very effective. The majority of the targeted areas have been re-wetted. Ballysorrell and Knockahaw Bogs are responding quite quickly to the new conditions with the development of Sphagnum and improvement in bog conditions. Areas at Templetuohy, Bawnmore, Littleton and Derryvilla are changing quickly with the development of existing habitats and new pioneer vegetation where there was bare peat. Habitats at Killeen and Lanespark are developing and integrating with the new greenway amenity. Areas in Carrickhill, Inch and Killens that where large areas of bare peat in 2018 have been slower to recolonise due to underlying environmental factors (deeper residual peat).

A project called the BnM/Coillte Midlands Native Woodland Project was developed over the same period (Midlands Native Woodland - Coillte). It was proposed to be funded and administered by the Forest Service. The main objective of this proposed project is to develop and enhance native woodland in areas of cutaway that would remain naturally dry, developing woodland habitat that would naturally complement wetland and peatland habitats already developing across these sites. An initial feasibility study was carried out in 2018 and a project was developed across the Littleton bogs, which finally identified 120 ha of cutaway to be developed as woodland. This project has piloted alternative methods to establish native woodland, including seeding, and these trials were carried out at Bawnmore. This proposed project has not been approved by the Forest Service yet. Areas of cutaway at Carrickhill, Bawnmore, Inch, Ballybeg and Killeen have been proposed as part of this project.

The Littleton Labyrinth is a proposed amenity project that was also developed during this period, in partnership with Tipperary County Council. Initially a feasibility study was carried out that looked at developing greenway

amenity, and associated facilities across the Littleton Bogs, and potential links to existing infrastructure and local villages/towns. The first phase of this project was developed by Tipperary County Council in 2023/24, and a greenway was constructed on former BnM industrial railway though Killeen and Lanespark Bog to link with Loch Doire Bhile amenity, north of Lanespark. There are proposals to develop a Phase 2 shortly, with additional links being planned in Ballybeg and Derryvilla Bogs. This project is in pre-planning and is funded via Failte Ireland.

BnM rehabilitated several bogs in the Littleton Bog Group via Peatland Climate Action Scheme in 2025. The main objective of this proposed Phase 2 rehabilitation is to look at enhancing re-wetting and development of pioneer vegetation to support climate action, where possible. Measures are likely to include targeted drain-blocking, use of fertiliser to encourage pioneer vegetation growth, water-level management (adjustment of outfalls and use of over-flows). Bogs included Templetouhy, Derryville, Carrickhill, Baunmore, Inch, Ballybeg, Inch and Killeens.

A breakdown of the component bog areas for the Littleton Bog Group IPC Licence Ref. P0499-01 is outlined in Table Ap-2. Industrial peat production history varies across the Littleton bog group, so there is a wide range of peat depths at present.

Table Ap-2: Littleton Bog Group names, area and indicative status

Bog Name	Area (ha)	Stage of development	Land-Use and History	Peat Production Cessation	Rehab Plan Status
Carrickhill	170 ha	Cutover Bog Industrial peat production started in the 1970's and ceased in 2017. There is residual deep peat across much of this site. Carrickhill had a partially pumped drainage system.	Carrickhill Bog formerly supplied peat to the Littleton briquette factory. Some areas of shallow peat cutaway on site are developing pioneer cutaway vegetation communities. The pump was decommissioned in 2018. Drain blocking was carried out in 2018. A fertiliser treatment on part of the headland was carried out in 2021. The majority of the site is still mostly bare peat. Carrickhill is proposed for the Coillte/BnM Midlands Native Woodland Project. 28 ha is proposed for planting at this site. This proposed project is currently being considered for consent by the Forest Service.	2017	Draft 2018 Phase 1 Rehab measures implemented 2018-2021. Updated 2025. Phase 2 PCAS measures ongoing 2026
Templetuohy	737 ha	Cutover Bog Industrial peat production commenced at Templetuohy Bog in 1940's. Areas began to develop as cutaway during the 1980s as peat extraction ceased on a phased basis. Industrial peat extraction finally ceased in 2017. This bog has a partially pumped drainage system. Part of the site has developed pioneer cutaway habitats. Areas re-developed for peat extraction in 2015-17 are now revegetating quickly. Areas that were used for peat extraction upto 2017 are a	Templetuohy Bog formerly was developed to supply fuel sod peat and also supplied peat to the Littleton briquette factory. BnM have constructed a 40MW Wind Farm with 14 turbines and road network on cutaway at Templetuohy bog called Bruckana Wind Farm. This windfarm is operational. Pumping is still operational across this site to support the windfarm infrastructure.	2017	Draft 2018 Phase 1 Rehab measures implemented 2018-2021 Updated 2025. Phase 2 PCAS measures ongoing 2026

Bog Name	Area (ha)	Stage of development	Land-Use and History	Peat Production Cessation	Rehab Plan Status
		mosaic of re-wetted bare peat and pioneer communities.			
Derryville	250 ha	Cutover Bog Industrial peat production commenced at Derryville Bog in 1970's. Areas began to develop as cutaway during the 2000s as peat extraction ceased on a phased basis. Peat extraction finally ceased in 2017. This bog has a partially pumped drainage system.	Derryville Bog formerly supplied peat to the Littleton briquette factory. Part of the site has been developed for conifer forestry and is leased to Coillte. Part of the site was sold to Lisheen Mine and removed from the IPC Licence in the 2000s. Much of the former production area on site is developing pioneer cutaway vegetation communities, the remainder of the site is bare peat and developing wetland. Pumping continued at Derryville until 2022. Pumping has now ceased, and measures have been implemented in 2024 to manage water levels across the site and to decommission the pump.	2017	Finalised 2018 Phase 1 Rehab measures implemented 2018-2021 Updated 2025 Phase 2 PCAS measures ongoing 2026
Bawnmore	531 ha	Revegetating cutover bog. Industrial peat production commenced at Baunmore Bog in 1970's. Areas began to develop as cutaway during the 2000s as peat extraction ceased on a phased basis. Peat extraction finally ceased in 2017. Much of the site is now developing a mosaic of woodland, peatland and wetland habitats. Baunmore had a partially pumped drainage regime.	Bawnmore Bog formerly supplied peat to the Littleton briquette factory. Much of the site is developing pioneer cutaway habitats and the site has significant biodiversity value. Pumping ceased in 2018. Part of the access is used for log biomass storage (for Edenderry Power). Bawnmore is proposed for the Coillte/BnM Midlands Native Woodland Project. 39 ha is proposed for planting at this site. This proposed project is currently being considered for consent by the Forest Service.	2017	Finalised 2018 Phase 1 Rehab measures implemented 2018-2021 Updated 2025 Phase 2 PCAS measures ongoing 2026
Ballysorrel	196 ha	Drained raised bog – This site was initially drained for peat extraction. It was developed for peat production in the 1970s, but milled peat harvesting only occurred over a short 2 year timeframe. The site was then left as a peat reserve to be re-developed in the future. Restoration/drain blocking carried out in in 2018.	Much of the site was bare peat in the early 2000s. The site has since re-vegetated naturally (in a drier situation) since then and is now responding quickly to the recent re-wetting. Much of the high bog has re-colonised with Heather-dominated vegetation. Small hummocks of *Sphagnum* capillifolium and S. subnitens are present. *Sphagnum* spp. are also present in some low-lying areas that are permanently waterlogged and are spreading.	2017	Finalised 2018 Phase 1 Rehab measures implemented 2018-2021 Updated 2025 Phase 2 PCAS measures ongoing 2026
Inch	120 ha	Cutover Bog Industrial peat production since 1970s. Finally ceased in 2017. Inch had a partially pumped drainage regime.	Inch Bog formerly supplied peat to the Littleton briquette factory. Some areas of shallow peat cutaway on site are developing pioneer cutaway vegetation communities with deep peat areas slow to colonise and remaining mostly bare peat.	2017	Finalised 2018 Phase 1 Rehab measures implemented 2018-2021

Bog Name	Area (ha)	Stage of development	Land-Use and History	Peat Production Cessation	Rehab Plan Status
			Pumping ceased in 2018. Inch is proposed for the Coillte/BnM Midlands Native Woodland Project. 19 ha is proposed for planting at this site. This proposed project is currently being considered for consent by the Forest Service.		Updated 2025 Phase 2 PCAS measures ongoing 2026
Longford Pass (Popes Bog)	214 ha	Cutaway Bog Peat production at Longford Pass bog commenced in the 1940's and finally ceased in 2017. Peat extraction ceased and cutaway habitats began to develop on a phased basis. Longford Pass has a partially pumped drainage system.	Longford Pass Bog initially was developed as a sod turf production site. It then formerly supplied peat to the Littleton briquette factory. The site was bisected by the construction of the N8 Motorway in 2000s. A small area between the new motorway and R639 (old main road) was leased and developed for farmland in 2018. Longford Pass is part of the proposed Littleton Windfarm Project. This project is currently in pre-planning. Some areas of shallow peat cutaway on site are developing pioneer cutaway vegetation communities with deep peat areas slower to colonise. Pumping continued at the site until 2022, when the pumping failed. Since then, measures have been carried out to manage water-levels.	2017	Finalised 2018 Rehab measures implemented 2018-2021 Updated 2026
Ballybeg, Lanespark and Derryvilla	474 ha	Cutaway Bog Industrial peat production since 1970s and finally ceased in 2017. Peat extraction ceased and cutaway habitats developed on a phased basis during this period. .	Ballybeg, Lanespark and Derryvilla initially were developed for sod turf production, and then formerly supplied peat to the Littleton briquette factory. Part of the site has been developed for conifer forestry and is leased to Coillte. Part of Lanespark/Derryvilla (Loch Doire Bhile) was developed as fishing lake and an amenity site in 1999-2002. This site is leased to Slieve Ardagh Rural Development. A greenway was constructed across the site as part of the Littleton Labyrinth Project in 2024, connecting the historical site of Derrynaflan to Loch Doire Bhile amenity, via Lanespark. Additional greenway is proposed to extend amenity through Derryvilla and Ballybeg as part of Failte Ireland. Midlands Trail project. This is currently in pre-planning. Ballybeg and Lanespark are proposed for the Coillte/BnM Midlands Native Woodland Project. 21 ha is proposed for planting at this site. This proposed project is currently being considered for consent by the Forest Service .	2017	Finalised 2018 Phase 1 Rehab measures implemented 2018-2021 Updated 2025 Phase 2 PCAS measures ongoing 2026
Killeen	632 ha	Industrial peat production commenced at Killeen Bog in 1980s. Industrial peat extraction finally ceased in 2021.	Killeen bog formerly supplied peat to the Littleton briquette factory and the horticultural market. Re-wetting was carried out across the site in 2021.	2017	Finalised 2018 Phase 1 Rehab measures

Bog Name	Area (ha)	Stage of development	Land-Use and History	Peat Production Cessation	Rehab Plan Status
			Some areas of shallow peat cutaway on site are developing pioneer cutaway vegetation communities with deep peat areas slower to colonise since the site was re-wetted. A greenway was constructed across the site as part of the Littleton Labyrinth Project in 2024, connecting the historical site of Derrynaflan to Loch Doire Bhile amenity, via Lanespark. Killeen is proposed for the Coillte/BnM Midlands Native Woodland Project. 31 ha is proposed for planting at this site. This proposed project is currently being considered for consent by the Forest Service .		implemented 2018-2021 Updated 2025 Phase 2 PCAS measures ongoing 2026
Littleton	1,020 ha	Cutaway Bog Littleton is a relatively old industrial peat production bog. Large-scale industrial peat production began in the 1940's where sod peat was produced for fuel. Sod peat production was mechanised during the 1950's. Milled peat production began in the 1970's and milled peat was supplied to the Briquette factory (constructed in 1981) at Lanespark. Peat extraction ceased and cutaway habitats developed on a phased basis since the 1890s and some well-established cutaway habitats have developed. Industrial peat extraction finally ceased in 2018. Littleton has a partially pumped drainage system.	Littleton Bog formerly supplied sod peat before supplying peat to the Littleton briquette factory. Older cutaway has already extensively colonised with pioneer cutaway, wetland and scrub habitats. Part of the site has been developed for conifer forestry and is leased to Coillte. A small area (10 ha) was used as a pilot biomass project and Eucalyptus was planted in 2018. Some pumps in Littleton Bog have been decommissioned and some have been retained but are non-functional.	2017	Finalised 2018 Rehab measures implemented 2018-2021 Updated 2026

See Drawing number *BNM-ECO-26-11B-24: Littleton Bog Group*, included in the accompanying Mapbook which illustrates the location of Killeen Bog and the Littleton Bog Group in context to the surrounding area.

APPENDIX II: ECOLOGICAL SURVEY REPORT

Ecological Survey Report

Note: This report outlines an ecological survey of the bog. This report should not be taken as a management plan for the site as other land-uses may still be considered. Information within this report may inform the development of other land-uses and identify areas with particular biodiversity value. The report outlines potential options for biodiversity management after industrial peat production has ceased, (if this is the proposed main land-use for the site).

Bog Name:	**Littleton**	**Area (ha):**	995 ha
Works Name:	Littleton	**County:**	Tipperary
Recorder(s):	MMC	**Survey Date(s):**	23-24/08/2012

Habitats present (in order of dominance)

The most common pioneer habitats present in the former production areas include:

- Bare peat (BP) (Codes refer BnM classification of pioneer habitats of production bog.
- Birch/Willow scrub (eBir/oBir/cBir)
- Pine-dominated scrub (ePine/oPine)
- Pioneer Soft Rush-dominated or Bog Cotton-dominated poor fen (pJeff/pEang)
- Open water (wetlands also contain emergent pioneer poor fen – pEang/pJeff/pRos)
- Pioneer dry heath (dHeath) (in mosaic frequently with pEang)
- Embryonic raised bog community (Bog Cotton-dominated vegetation with *Sphagnum* (EM –pEangS)
- Embryonic raised bog community (*Sphagnum*-rich vegetation with PB1 species)
- Pioneer Purple Moorgrass-dominated vegetation (gMol) (frequently in mosaic with dHeath and oBir along high fields and other areas),
- Bulrush-dominated Reedbeds (pTyph) (small infilled wetlands)
- Common Reed-dominated Reedbeds (pPhrag)
- Pioneer poor fen with Marsh Arrowgrass (pTrig)
- Pioneer acidic grassland (gAn-H-Eq) (in mosaic with scrub, gMol and pJeff on some of the drier mounds where gravel was exposed)
- Pioneer potential rich fen (pRos/pVir with some Black Bog-rush)
- Railway (Acc) (with some exposed gravel - ED2/ED3/DisTuss)

The most common habitats found around the margins of the former production bog and other sections include:

- Conifer plantation (WD4) (Codes refer to Heritage Council habitat classification, Fossitt 2000),
- Cutover Bog (PB4)
- Secondary cutover bog – now mosaic of dry heath, poor fen and scrub (HH1/HH3/PF2/WS1)
- Scrub (WS1)
- Raised bog (PB1) (minor remnants) with poor fen flushes (PF3)
- Birch woodland (WN7)
- Dense Bracken (HH3)
- Acid grassland (GS3)
- Improved grassland (GA1) (privately-managed land along margins)

Description of site

Littleton is located in north Co. Tipperary, 3km from Littleton village. It is part of the Littleton Bog group with Longford Pass Bog to the north and Ballybeg bog to the south. A BnM railway passes through the site and connects the northern BnM sites to the wider Littleton network. Littleton bog is found in a lowland landscape and is mostly surrounded by farmland and Coillte forestry. The bog has developed in a basin in the landscape and one noticeable feature of the site is that parts of the western margin are at a much higher level (10 m) compared to the central section along the railway and in the former milled peat production areas. The site comprises a relatively long and narrow bog (extending for 7 km along the railway). It is bordered to the north by a minor road (that separates Littleton from the adjacent Longford Pass BnM property). One feature of Littleton Bog is that much of it is relatively remote and inaccessible and the main access points are at the northern and southern ends where there are railway crossings. There is also a travel path along the railway, but this is over peat in places and in poor condition. This inaccessibility probably means that there is less unauthorised access to this bog compared to other BnM bogs in the Littleton group. As of 2017/2018, industrial peat production has ceased on all parts of the bog with onset closure of Littleton Briquette factory.

Some of the marginal remnant high bog at the southern end is being privately cut for sod peat. There is also some sod peat production along the eastern boundary. Some of this turbary overlaps with the BnM property line. There are several large private sod peat production areas adjacent to the bog. One of these areas at the south-west corner of the bog is expanding quite rapidly and beginning to use some of the remnant high bog within the BnM property line that was previously designated as a peat reserve prior to the cessation of industrial peat production at Littleton Bog.

Littleton is a relatively old industrial peat production bog. Large-scale industrial peat production began in the 1940's where sod peat was produced for fuel. Sod peat production was mechanised during the 1950's. Milled peat production began in the 1970's and milled peat was supplied to the Briquette factory (constructed in 1981) at Lanespark up until 2017/2018. Some of the former sod peat production areas in the bog were converted to milled peat production in the past. However, some of the former sod peat production areas along the western side were abandoned and have naturally re-colonised and since this time. The main central part of the bog was out of production prior to 2000. Much of the peat was cut out of this section and the underlying glacial subsoil was exposed in places and some wetlands had developed by this stage.

Northern area (former milled-peat production bog)

This sub-section is divided into two main parts by the BnM railway and central travel path. It extends to the west where it borders an area formerly classed as a peat reserve area with a deep trench drain marking the boundary. The majority of this northern sub-section was managed for milled peat production prior to the cessation of industrial peat production in 2017/2018. The north-east section has the deepest remnant peat and some of the peat is still relatively light and brown in colour. Several fields within this area were developing dry bog vegetation (Ling Heather) where there has not been any activity for several years. There is some recent drainage development with a new pipe being constructed at the northern end of the site to drain a localised basin towards a new pump at the outfall.

There is some recent wetland development in localised basins in small sections in the southern end. The south-west part of this sub-section has also come out of industrial peat production recently (prior to 2017/2018). Fields on both sides of the railway have also been out of production for some time. Those nearest to the railway and travel path tend to have somewhat deeper peat and the vegetation is dominated by dry heath with Heather and Birch scrub, with small amounts of Purple Moor-grass. Some of this has developed into closed Birch scrub and woodland. Other fields further out from the railway (and lower down) have been out of production for a shorter period and are also on thinner fen peat. The vegetation tends to be dominated by Soft Rush-dominated poor fen with patches of emerging or open Birch scrub. There are also some intermediate vegetation communities with mixed Heather and Purple Moor-grass as well as Soft Rush. The youngest fields out of production tend to have scattered patches of pioneer poor fen vegetation with Marsh Arrow-grass, Bog Cotton and/or Soft Rush dominating. Bog Cotton tends to dominate in the wetter sections, while Soft Rush tends to dominate where it is drier and where the peat is thinner and some sub-soil may be exposed.

The central railway has been constructed on the underlying glacial sub-soil. Marsh Hellebore was noted at several locations along the travel path adjacent to the railway. There has been some excavation along the railway towards the southern end associated with the re-alignment of the track. This produced a large spoil heap of sub-soil adjacent to the travel path. This spoil heap is now vegetating with several species of conservation interest including Blue Fleabane and Marsh Helleborine.

Central area (former production-related cutaway)

The majority of this sub-section has been out of industrial peat production for some time (prior to 2017/2018). It is bordered to the south by the BnM/Coillte conifer plantation and to the west by the railway. Much of the cutaway area is almost completely vegetated, apart from high fields and travel paths. Some of the younger cutaway areas to the east are still vegetating, as is the central mound around the old tea centre. Comparison of 2000 aerial photos to more recent aerial photo series shows that there have been significant changes in this sub-section in the past 12 years as there seemed to be much more bare peat visible in 2000. Only a small portion of the cutaway seemed to be vegetated at this stage.

The landscape of this sub-section is more typical of midlands cutaway and not like adjacent bogs such as Bawnmore. Much of the peat seems to have been cutaway so the remaining peat is fen peat and much of the habitat development is dominated by pioneer poor fen communities. There is less influence from acidic peat and less dry heath/Purple Moor-grass dominated communities. As peat has been cutaway, the underlying topography is also quite influential. There are many localised wetlands were there are basins and some of these are divided by mounds or ridges where there is drier habitat development with Birch scrub and some pioneer grassland communities. This area has also been further sub-divided by a series of deep trench drains and associated high fields. These divide the bog into regularly grouped series of fields. The high fields act as berms to enhance wetland development and hold water within these areas. The high fields tend to be vegetated with dry heath, Purple Moor-grass-dominated vegetation and scrub.

The wetland development is likely to have been enhanced by the pumped drainage in this area and the fact that some of the pumps have been turned off in the past. There are significant wetlands scattered across this area. The largest and deepest wetlands have open water and are fringed by Bog Cotton-dominated poor fen. Some smaller wetlands have infilled with poor fen vegetation usually dominated by Bog Cotton, but also containing Soft Rush. There are also several small wetlands that have infilled with Reedmace. There is some development of Bottle-Sedge-dominated vegetation associated with the wetlands towards the northern end, perhaps indicating some shell-marl influence (although no shell marl was noted on the site). The lower lying drier land is usually vegetated with Birch scrub and with Soft Rush-dominated pioneer poor fen. Gravel mounds also tend to have well-developed Birch scrub development, and this is associated with somewhat more grassy vegetation with Sweet Vernal-grass (gAn-HO-Eq) and Purple Moor-grass (gMol). Some of the younger cutaway towards the east and the south also has Marsh Arrow-grass present.

Comparison of aerial photo series (2000 and 2009) seems to indicate that there has been significant re-vegetation and development of scrub and wetlands within this period. This comparison also indicates that there has also been new wetland development (possibly attributed to pumps being turned off). There also seems to have been some new re-wetting and wetland development between 2009-2012 in the south-east section.

The central area (where railway branches) around the old tea centre is located on a low mound. This area is still re-vegetating and there is a significant amount of bare peat. The re-vegetation along the railway tracks tends to be dominated by Purple Moor-grass with some open Birch and dry heath mosaic where there has been no disturbance for a longer period of time.

There is a small area of cutaway located south-east of the conifer plantation. This area seems to have been developed for milled peat production but had much less production compared to the other central cutaway. However, there is much more dry heath development in this section, perhaps indicating that there is deeper remnant peat.

Dry Heath was developing in association with open Birch scrub and with Bog Cotton-dominated poor fen. There were also patches of purple Moor-grass vegetation. *Sphagnum* was also noted in this area, although not in any great quantity and the drains tends to have a poor fen influence, rather than a more acidic influence.

The north-east section is located adjacent to conifer plantation. This is having a significant impact on the re-vegetation of the cutaway, with much of the drier sections being colonised by Pine-dominated scrub. There is a similar topography/landscape and Pine-dominated areas and high fields are interspersed with wetlands. Some of the wetlands contain significant Reedbed development. The proportion of Pine decreased further away from the plantation, but was significant over a relatively large area. Some of the Pine scrub was burnt in the recent past but is regenerating (ca. 2006). A small part of the cutaway was developing potential rich fen vegetation where there was some wetland development close to the margin that was dominated by Yellow Sedge and Bottle Sedge. Black Bog-rush was also present. Other species present included Star Sedge and Flea Sedge and Large-leaved Sundew. However, there was no indication of any brown moss development. This area is located adjacent to a natural poor fen area, some of which is found in the marginal remnant bog. This section was dominated by Purple Moor-grass dominated vegetation and also contains patches of Bog Myrtle, as well as scattered Birch scrub. It has also been burnt in the recent past.

South-western area (former peat reserve area)

This sub-section includes all of the bog between the railway/conifer plantation and the south-west margin. A portion of this area along the railway was developed for milled peat production in the past. The majority of this area was re-vegetating with pioneer habitats and there seemed to be no production in this area in recent times. The habitat development is similar to the central cutaway area in that pioneer poor fen communities dominate. It also has a similar topography with dry mounds and wet basins appearing. A pump is located midway along this section. These communities are much younger in terms of development, and the majority of this area was in full production in 2004 (apart from mounds). The wet basins are vegetating with a range of poor fen communities including Bog Cotton, Marsh Arrowgrass and Soft Rush, depending on water depth. There is also some permanent open water and a significant proportion of bare peat with scattered pioneer vegetation. As of 2017/2018, industrial peat production has ceased on all parts of the bog with onset closure of Littleton Briquette factory.

The adjacent old sod peat sections are somewhat different in character. These are divided into long wide bays and are also drained by deep trench drains. There are also some high travel fields separating the bays. The bays to the east have been cut to some extent and are lower than bog to the west. Re-vegetation tends to be dominated by dry heath and Bog Cotton-dominated vegetation, in mosaic with scattered Birch scrub and small amounts of Purple Moorgrass-dominated vegetation. This section was abandoned in ca. 1970's and has been subject to approximately 40 years of regeneration. Overall, re-vegetation has been performing well with only the travel paths still having significant bare peat.

Bog Cotton-dominated vegetation dominates in the wetter areas while Heather dominates in drier sections. Some the drier Heather-dominated sections still have a proportion of bare peat between the Heather stands and the moss layer is poorly developed, being dominated by *Campylopus introflexus* and *Hypnum jutlandicum*. The peat is generally quite firm. The wettest vegetation also contains elements of high bog not usually found on typical cutaway such as Hare's-tail Bog Cotton, White-beak Sedge, Carnation Sedge, Bog Asphodel and Deer-grass. There is also some extensive *Sphagnum* development. This includes a mat of dense *S. cuspidatum* associated with the Bog Cotton where there is surface water and extensive hummocks of *S. subnitens*, *S. palustre*, S. *papillosum* and *S. capillifolium* where it is just water-logged . The areas of standing water with the *Sphagnum* mat and Bog Cotton had generally developed over firm peat (not quaking bog). Some of the *S. subnitens* hummocks are up to 40 cm high. Some of the wetter sections are dominated by White-beak Sedge, creating a pool/hollow type raised bog community. *Sphagnum* cover reaches 100% in small patches. Birch, Pine and Willow saplings and young trees are also present. Much of this vegetation has been classified as an embryonic raised bog vegetation type rather than pioneer poor fen. Other sections of similar vegetation have less scattered *Sphagnum* cover. There has been some recent drainage work (in past few years) to let off water from some of these areas. It is likely that the *Sphagnum* regeneration was greater in the past prior to this recent drainage work.

Further west, there is a wide sod peat bay that was cut to a much greater extent and is therefore much lower, and sandwiched between two higher bays. This section has re-wetted to create a large wetland. There is a significant area of open water along with emergent wetland vegetation. This wetland vegetation is dominated by Bog Cotton with a small amount of Bottle Sedge. There are also extensive patches of *S. cuspidatum* mat associated with the emergent Bog Cotton, and this vegetation has been classified as an embryonic bog vegetation community (similar to those found in Mayo). This mat of *Sphagnum*-dominated vegetation is similar to transnational mire communities found at some other intact peatland sites. Patches that are intermediate in elevation have greater Heather cover as well as scrub with Pine and Birch. This wetland had attracted a large flock of Mallard as well as some Teal.

The northern margin around this section is planted with conifer forestry. Pine and some Spruce are spreading from this plantation and into the scrub areas with Birch. These trees are growing in association with Heather-dominated vegetation.

There is a small high bog remnant (PB1) at the north-east corner of this section. This area of bog is in relatively good condition. It was wet in places with a high *Sphagnum* cover. Other sections were firm and dried out. Ecotope quality varies between sub-central and sub-marginal. Bog Rosemary and Cranberry were both present.

Mid-western area (former peat reserve area)

This sub-section is found about midway along the western margin of the bog. It includes the lobe of the bog found west of the railway and the central production related cutaway area. Two series of fields adjacent to the railway were converted to milled peat production but have since been abandoned. These fields were in industrial peat production in 2000. In the intervening period, peat production stopped and these fields have generally re-vegetated with Soft Rush-dominated poor fen and emergent Birch scrub. There is also some Bog Cotton-dominated poor fen.

Further west, there is a large old sod peat area that was abandoned and has now regenerated. The main feature is a wide bay where sod peat was cut with bagger machines that was largely cutaway and has re-wetted, sandwiched between two higher bays where there was less production. A large wetland has been created with a significant area of open water and emergent vegetation. There is also some development of embryonic raised bog vegetation with the development of *Sphagnum* mats associated with the Bog Cotton. There is some development of scrub and Birch woodland at both ends of this bay with occasional Spruce and Pine. The intermediate zones tend to have good *Sphagnum* hummock development with *S. palustre* and *S. subnitens*.

The high bog areas on the edge of the wetland area contain deep peat. Some of this high bog had been developed for milled peat production with field drains in the past but production had never started. The vegetation is dominated by Heather in the dry sections and is typical of pioneer dry heath communities on cutaway. However, there are wetter areas where water accumulates midway along the bay and these sections have more Hare's-tail Bog Cotton, as well as some *Sphagnum* cover. The *Sphagnum* development is less impressive compared to the south-west sod peat area. Some wet areas are also dominated by White-beak sedge. Overall, vegetation cover is about 90%, with a small amount of bare peat cover still present. There is not likely to have been significant peat production over these high bog areas however these areas have been disturbed or had vegetation cleared in the past. There are no indications of original *Sphagnum* hummocks present or old features such as pools.

Further west, there is some old remnant high bog that has been drained with field drains but has not been significantly disturbed with industrial peat production in the past.

A mineral ridge divides this mid-west sod peat production area (and peat reserve) from the north-west sod peat production area. This ridge extends to the edge of the bog and there is a small section within the BnM property on this high bog where acidic grassland (GS3) has developed. This grassland has developed on a thin layer of peat that is relatively dry. It contains Sweet Vernal-grass, Red Clover, Creeping Bent, Heath Bedstraw Bramble, Purple Moorgrass, Heather, Silverweed, Hawthorn, Yorkshire Fog, Tormentil, Heath Sorrel, Soft Rush, Devil's Bit and Wild Rose. This is an area of high ground with significant slopes and a fall towards the adjacent cutaway areas.

North-western area (former peat reserve area)

This sub-section includes the old sod peat production area along the north-west margin of the site. There are significant slopes and falls from high ground towards the western margin towards the lower cutaway close to the railway. The eastern margin is marked by a deep trench drain that separates this section from the adjacent former area previously managed for milled peat production (ceased 2017/2018).

There is another wetland found on the higher slopes along the western margin. Again, this was created by old sod peat production with baggers. The wetland is similar in nature to the previous two sod peat wetlands and contains a large open water area with emergent vegetation. One feature of note is that the water level within the wetland is at a significant elevation above the adjacent cutaway areas. The surrounding high bog is dominated by dry heath and Bog Cotton-dominated vegetation. There seems to have been some milled peat bog development on the lower slopes of this section, with fields and bare peat present in the aerial photos in 2000. However, this area is now re-vegetating with pioneer dry heath and Bog Cotton (poor fen). *Sphagnum* is much rarer in this section compared to the other old sod peat production areas. There is some Birch scrub, but this is relatively light and there is a wide expanse of Heather-dominated vegetation.

Pine and Birch have colonised the bog towards the northern end of this section. These trees are found in association with Heather-dominated dry heath. Some wetter communities have developed down the slope and adjacent to the deep trench drain. Bog Cotton-dominated vegetation has developed in one section and further north there is some Reed Bed development.

Designated areas on site (cSAC, NHA, pNHA, SPA other)

None in the immediate vicinity of Littleton bog.

Adjacent habitats and land-use

Adjacent habitats include conifer plantation (WD4), wet grassland (GS4), improved agricultural grassland (GA1), scrub (WS1), Birch woodland (WD7) and cutover bog (PB4).

Watercourses (major water features on/off site)

- Littleton is located within the Suir catchment.
- There are several main sub-catchments within the bog. These drain off the bog at various locations, with the majority of the bog draining to the west. There are several channelized streams/drains that drain the bog towards the Clover River, which drains towards the Dinish River. Some of the southern section drains south towards the Black River, which also drains towards the Dinsh River.
- The majority of the northern area (formerly managed for industrial peat production) is the only section where the catchment runoff is treated by silt-ponds. Part of this production area is not treated at all. Silt-ponds are required in some other sections of the bog. Much of the catchment runoff from the cutaway areas is treated by outfalls.

Peat type and sub-soils

Much of the peat exposed in the cutaway is fen peat. The conifer plantation was planted on a range of *Phragmites* peat and *Sphagnum* peat. The northern area (formerly managed for industrial peat production) is somewhat younger and exposed comprising light brown peat. The old sod peat areas along the western side have much deeper remnant acidic peat.

The bog is generally underlain by a mixed glacial till. This is exposed around the site at various locations. There are no indications of any significant shell-marl deposits exposed around the site.

Fauna biodiversity

Birds

Several bird species were noted on the site during the survey.

- Hen Harrier. This bird was noted roosting in the centre of the site.
- Kestrel. Kestrel was noted hunting over the site several times during both days of the survey.
- The large wetlands associated with the old sod peat cutting areas attracted some wildfowl. A small flock of Teal (6) were noted roosting on the south-west wetland in the old sod peat cutting areas. A larger flock of Mallard (60) were also noted at this location. The northern wetland also had Teal (9) and Mallard (1).
- The smaller wetlands towards the centre of the site had relatively few wildfowl, apart from 1 pair of Mallard.
- Other species noted on the site included Snipe, Heron, Magpie, Pheasant, Rook (2) Raven, Swallow (30) northern section), Grey Crow, Wren, Blackbird, Blue Tit, Goldcrest, Wood Pigeon, Meadow Pipit and Reed Bunting.
- This site was also surveyed by Copland (2011). Breeding Lapwing and Common Sandpiper were noted using the more exposed sections of cutaway to the east of the site. Curlew was recorded on the bog to the west and was suspected of breeding.

Mammals

Signs of several mammal species were noted on the site during the survey.

- Rabbit – at several places along the central line
- Signs of Fox were noted around the site.
- Signs of Badger were noted around the site.
- Several Hares were noted on the site.

Other species

- Butterfly species noted on the site included Meadow Brown, Ringlet and Small Tortoise-shell

References

Cross, J.R. 2006. The Potential Natural Vegetation of Ireland. Biology and Environment: Proceeding of the Royal Irish Academy, Vol. 106B, No. 2, 65-116 (2006).

European Commission (2013). Interpretation manual of European Union Habitats. European Commission DG Environment Nature ENV B.3.

Fossitt, J. (2000). A guide to habitats in Ireland. Kilkenny. The Heritage Council.

NRA (2009). Guidelines for Assessment of Ecological Impacts of National Road Schemes (Revision 2). National Roads Authority.

APPENDIX III: ENVIRONMENTAL CONTROL MEASURES TO BE APPLIED TO BOG REHABILITATION

- Bog restoration/rehabilitation measures will be restricted to within the footprint of the proposed rehabilitation area.
- The proposed rehabilitation will have due regard to noise limits and hours of operation (i.e. dusk and dawn) to minimise any potential disturbance on resident and local fauna that utilise the site and immediate environs.
- All plant and equipment for use will comply with the Construction Plant and Equipment Permissible Noise Levels Regulations (SI 359/1996).
- The proposed activities will be restricted to daylight hours and there will be no requirement for artificial lighting.
- Silt ponds will be inspected and maintained as per the IPC Licence.
- During periods of heavy precipitation and run-off, activities will be halted.
- Measures will be carried out using a suitably sized machine and in all circumstances, excavation depths and volumes will be minimised where possible.
- All machines will be regularly checked and maintained prior to arrival at the site to prevent hydrocarbon leakage.
- Hoses and valves will be checked regularly for signs of wear and will be closed and securely locked when not in use.
- Fuelling and lubrication of equipment shall only be carried out in designated areas away from surface water drainage features and ecologically sensitive areas.
- Waste oils and hydraulic fluids will be collected in leak-proof containers and removed from the site for disposal or re-cycling.
- Vehicles will never be left unattended during refuelling.
- No direct discharges to waters will be made. No washings from vehicles, plant or equipment will be carried out on site.
- All plant refuelling will take place using mobile fuel bowsers. Only dedicated trained and competent personnel will carry out refuelling operations.
- Mobile storage such as fuel bowsers will be bunded to 110% capacity to prevent spills. Tanks for bowsers and generators shall be double skinned. When not in use, all valves and fuel trigger guns from fuel storage containers will be locked. All pumps using fuel or containing oil will be locally and securely bunded where there is the possibility of discharge to waters.
- Potential impacts caused by spillages etc. during rehabilitation will be reduced by keeping spill kits and other appropriate equipment on-site.
- Site activities will be carried out in accordance with 'best practice'. In order to ensure compliance and implementation of 'best practice', these measures will be communicated to relevant BnM staff and updated as required.

APPENDIX IV: BIOSECURITY

The potential for importation or introduction of non-native plant species (such as Japanese Knotweed, Himalayan Balsam, etc.) during future rehabilitation management, such as drain-blocking using excavators, has the potential to result in the establishment of invasive species within the site. Section 49 of the European Communities (Birds and Natural Habitats) Regulations 2011 prohibits the introduction and dispersal of invasive alien species (particularly plant species) listed on Part 1 (third column) of the 'Third Schedule'.

This section aims to reduce the risk from, and impacts of, invasive species and protecting biodiversity on lands under BnM ownership. Rehabilitation and decommissioning in the bog will have due regard to the relevant biosecurity measures outlined below:

- Records of problematic invasive species within the various bog units will be marked out with signs to highlight areas of infestation to personnel.
- All plant machinery will be restricted from disturbing known colonies of invasive species.
- All plant machinery will avoid unnecessary crossings to adjoining lands.
- Good site hygiene will be employed to prevent the introduction and spread of problematic invasive alien plant species (i.e. Japanese Knotweed (*Fallopia japonica*), Himalayan Balsam (*Impatiens glandulifera*), Himalayan Knotweed (*Persicaria wallichii*), etc.) by thoroughly washing vehicles prior to entering the area.

The biosecurity measures outlined above are in line with best practice guidelines issued by the National Roads Authority (NRA, 2010) – The Management of Noxious Weeds and Non-native Invasive Plant Species on National Roads and broadly based on the Environment Agency's (2013) – The Knotweed Code of Practice: Managing Japanese Knotweed on Development Sites (Version 3, amended in 2013).

In addition to the above, Best Practice measures around the prevention and spread of Crayfish plague[6] will be adhered with throughout all rehabilitation measures and activities.

[6] https://www.biodiversityireland.ie/projects/invasive-species/crayfish-plague/

APPENDIX V: POLICY AND REGULATORY FRAMEWORK

BnM Plc is a publicly owned company, originally established in 1934 to develop some of Ireland's extensive peat resources for the purposes of economic development and to support energy security. In the decades since its establishment the company has employed tens of thousands of people in its fuel, energy, and horticultural growing media businesses. For much of its history the company's support of important national policy aims has been enabled and encouraged in a variety of ways by Government.

Today, BnM is undertaking a number of highly significant actions in support of climate policy. These actions involve a radical transformation and decarbonisation of nearly the entire BnM business. This transformation will be driven by unlocking the full potential of our land and creating significant value for Ireland and the Midlands in particular.

BnM is an integral part of the economic, social, and environmental fabric of Ireland and Irish life. As a key employer in the Midlands, the company is conscious that its obligations go beyond purely commercial and environmental – there is also a social responsibility to employees and the communities served by BnM. It is the company's role and absolute priority to ensure that its long-term strategy delivers on all of these important areas in a robust and balanced way.

There are a wide range of policies, plans, legislation and land designations that inform the development of this BnM peatland rehabilitation plan. BnM have also developed and operate various policies and strategies that also inform the development of this rehabilitation plan.

1 EPA IPC Licence

BnM operates under IPC Licence issued and administered by the EPA to extract peat within the Littleton Bog group (Ref. P0-499-01). As part of Condition 10.2 of this licence, a rehabilitation plan must be prepared for permanent rehabilitation of the boglands within the licensed area. The bog is part of the Littleton Bog group. This regulatory requirement is the main driver of the development of this rehabilitation plan.

2 The Peatlands Climate Action Scheme (PCAS)

BnM (BnM) understand that it is the Minister's (DECC) intention to impose an obligation on BnM to develop a programme of measures, 'the Scheme', for the enhanced decommissioning, rehabilitation and restoration of boglands previously used to supply peat for electricity generation within the State. The enhanced decommissioning, rehabilitation and restoration of the peatlands funded by the Scheme (PCAS) will deliver benefits across climate action (GHG mitigation through reduced carbon emissions and acceleration towards carbon sequestration), enrich the State's natural capital, increase eco-system services, strengthen biodiversity, improve water quality and storage attenuation as well as developing the amenity potential of the peatlands.

BnM is carrying out an enhanced decommissioning, rehabilitation and restoration, under the Scheme (PCAS), and supported by the Climate Action Fund and Ireland's National Recovery and Resilience Plan across a footprint of 24,500 ha between 2021-2026. This scheme will significantly go beyond what is required to meet rehabilitation and decommissioning obligations under existing EPA IPC licence conditions. Interventions and measures supported by the Scheme will ensure that environmental stabilisation is achieved (meaning IPC obligations are met), and importantly, significant additional benefits, particularly relating to climate action and other ecosystem services, will also be delivered. However, only the additional costs associated with the additional and enhanced

rehabilitation, i.e., those activities which go beyond the existing decommissioning and rehabilitation requirements arising from Condition 10 will be eligible for support under the Scheme.

3 National Climate Policy

The National Policy Position establishes the fundamental national objective of achieving a transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. It sets out:

- the context for the objective;
- clarifies the level of GHG mitigation ambition envisaged; and
- establishes the process to pursue and achieve the overall objective.

The evolution of climate policy in Ireland will be an iterative process based on the adoption by government of a series of national plans over the period to 2050. GHG mitigation and adaptation to the impacts of climate change are to be addressed in parallel national plans – respectively through the National Climate Action Plan. The plans will be continually updated, as well as being reviewed on a structured basis at appropriate intervals and, at a minimum, every five years. This will include early identification and ongoing updating of possible transition pathways to 2050 to inform sectoral strategic choices.

BnM is following a decarbonisation programme aimed at reducing the carbon emissions from its activities. Industrial peat production has now ceased, and several other decarbonisation measures are being implemented. The company aims to further develop renewable energy and resource recovery markets with a key objective of reducing the carbon intensity of all products. In addition, the carbon emission mitigation benefits associated with the post-peat extraction rehabilitated peatland following re-wetting, revegetation and colonisation of significant areas with native woodland will make a significant contribution to achieving the State's carbon emission reduction targets.

4 National Peatlands Strategy

The National Peatlands Strategy (2015) contains a comprehensive list of actions, necessary to ensure that Ireland's peatlands are preserved, nurtured and become living assets within the communities that live beside them. It sets out a cross-governmental approach to managing issues that relate to peatlands, including compliance with EU environmental law, climate change, forestry, flood control, energy, nature conservation, planning, and agriculture. The Strategy has been developed in partnership between relevant Government Departments/State bodies and key stakeholders through the Peatlands Council.

The strategy recognises that Ireland's peatlands will continue to contribute to a wide variety of human needs and to be put to many uses. It aims to ensure that Ireland's peatlands are sustainably managed so that their benefits can be enjoyed responsibly. It aims to inform appropriate regulatory systems to facilitate good decision making in support of responsible use. It also aims to inform the provision of appropriate incentives, financial supports and disincentives where required. The strategy attempts to strike an appropriate balance between different needs, including local stakeholders like turf-cutters and semi-state bodies such as BnM.

In line with a National Peatlands Strategy recommendation, a Peatlands Strategy Implementation Group (PSIG), was established, assisted in the finalisation of the Strategy, is overseeing subsequent implementation and will report to Government on an annual basis on the implementation of the actions and principles contained within the Strategy.

BnM is a key stakeholder in the National Peatlands Strategy and the Peatlands Strategy Implementation Group. The strategy recognises the potential for some BnM sites to be restored and to contribute to the national SAC and NHA network of protected raised bog sites. The strategy (agreed in 2015) also recognises the various different values of cutaway bog and developed six key principles (with BnM) for the after-use of cutaway bog.

- BnM will continue to assess and evaluate the potential of the company's land bank, using a land use review system. The assessment will help prepare a set of evidence-based management plans for the various areas of peatland. These plans will also inform its cutaway bog rehabilitation.
- The policy of BnM is not to open up any undrained new bogs for peat production.
- Lands identified by BnM as having high biodiversity value and/or priority habitats will be reserved for these purposes as the principal future land use.
- Generally, BnM cutaway bogs that flood naturally will be permitted to flood unless there is a clear environmental and/or economic case to maintain pumped drainage.
- In deciding on the most appropriate afteruse of cutaway peatlands, consideration shall be given to encouraging, where possible, the return to a natural functioning peatland ecosystem.
- This will require re-wetting of the cutaway peatlands which may lead in time to the restoration of the peatland ecosystem.
- Environmentally, socially and economically viable options should be analysed to plan the future use of industrial cutaway peatlands, in conjunction with limiting factors as outlined in BnM's Strategic Framework for the Future Use of Peatlands.

The National Peatlands Strategy highlights the importance and value of developing peatland rehabilitation plans for BnM cutaway sites and implementing this peatland rehabilitation. Some of these principles have now been superseded by the company's decision to cease industrial peat extraction. The National Peatlands Strategy is currently being reviewed by Government.

5 National River Basin Management Plan 2022-2027 (Water Framework Directive)

The River Basin Management Plan for Ireland 2022-2027 (Department of Housing, Local Government and Heritage, 2022) is the key national plan for Ireland to achieve the objectives of the Water Framework Directive (WFD). In broad terms, the objectives of the WFD are (1) to prevent the deterioration of water bodies and to protect, enhance and restore them with the aim of achieving at least good status and (2) to achieve compliance with the requirements for designated protected areas.

The NRBMP 2022-2027 outlined how peat extraction can be a potentially significant pressure on various water quality parameters. Peatland rehabilitation of BnM cutaway (in addition to other measures) was part of the WFD (2022-2027) programme of measures. The NRBMP 2022-2027 takes account of the fact that BnM was in the process of phasing out the extraction of peat for energy production, that it set a target to rehabilitate 9,000 ha of cutaway bogs (covering 25 peatlands) by 2021 (in 2018) and will look to implement best-available mitigation measures to further reduce water quality impacts caused by peat extraction while the phasing-out process is taking place. This NRBMP 2022-2027 rehabilitation target was superseded by the acceleration of the BnM de-carbonisation programme and the Scheme (PCAS).

The development of site rehabilitation plans and the delivery of peatland rehabilitation by BnM was expected to have a positive impact on water quality and will help the NRBMP 2022-2027 deliver its objectives in relation to the Water Framework Directive and is one of the five key principal actions.

The NRBMP 2022-2027 describes how the number of waterbodies impacted by peat, industry and forestry have decreased by 10, 10 and 5 waterbodies, respectively since the second cycle. Impacts on water quality and river habitat arising from peat and peat extraction and associated drainage include the release of ammonium and fine-grained suspended sediments, and physical alteration of aquatic habitats. Drainage of peatlands also results in changes to the hydromorphological condition of rivers.

The NRBMP 2022-2027 outlines how maintaining and restoring Irish bogs will lead to a decrease in waterborne carbon leaching to levels comparable with intact bogs as well as reducing losses of peat silt and ammonia. Vegetation on the surface of the peat can also slow the flow of water over the land surface. Based on the EPA's most recent reports, peat extraction and drainage is impacting on 106 water bodies across the country, with peat the single pressure on 28 of these water bodies. However, compared to the data in the second-cycle plan, the number of water bodies impacted by peat has decreased.

The cessation of industrial peat extraction by BnM in 2021 was expected to have a significant positive impact on water quality of receiving water courses by reducing the impact of peat extraction as a key pressure on particular water courses. This is now being supported by the results and conclusions of the draft NRBMP 2022-2027.

6 4th National Biodiversity Action Plan 2023-2030

Ireland's 4th National Biodiversity Action Plan (NBAP) sets the national biodiversity agenda for the period 2023-2030 and aims to deliver the transformative changes required to the ways in which we value and protect nature. The 4th NBAP has been developed with the support, advice and input of the interdepartmental Biodiversity Working Group and the independent Biodiversity Forum. Ireland's 2nd National Biodiversity Conference was held to gather insights and recommendations for the development of the NBAP and a public consultation process was held to provide further opportunities to engage with the Plan.

The 4th NBAP strives for a "whole of government, whole of society" approach to the governance and conservation of biodiversity. The aim is to ensure that every citizen, community, business, local authority, semi-state and state agency has an awareness of biodiversity and its importance, and of the implications of its loss, while also understanding how they can act to address the biodiversity emergency as part of a renewed national effort to "act for nature".

The delivery of rehabilitation via PCAS is expected to significantly contribute in the future to actions and targets of the 4th National Biodiversity Action Plan 2023-2030, particularly in relation to peatland restoration, nature restoration and creation of new habitats such as wetlands and woodlands.

7 EU Nature Restoration Law

The EU Nature Restoration Law is a key element of the EU Biodiversity Strategy, which sets binding targets to restore degraded ecosystems, in particular those with the most potential to capture and store carbon and to prevent and reduce the impact of natural disasters. The regulation combines an overarching restoration objective for the long-term recovery of nature in the EU's land and sea areas with binding restoration targets for specific habitats and species. These measures should cover at least 20% of the EU's land and sea areas by 2030, and ultimately all ecosystems in need of restoration by 2050.

This regulation has now been adapted and it is expected that all Member States will be required to produce a National Restoration Plan within two years of adoption. This will be led by the National Parks and Wildlife Service

and will comprise a broad and deep public participation process, informed by robust ecological and socio-economic impact assessments. BnM are working with NPWS and DAFM to identify bog restoration and other re-wetted cutaway sites that can contribute towards Irelands targets for the Nature Restoration Law.

8 National conservation designations

BnM operates in a wider landscape that also includes a network of European and National nature conservation sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs), National Heritage Areas (NHAs, pNHAs) and National Nature Reserves). BnM will take account of this network of conservation objectives and their conservation objectives when developing these rehabilitation plans. It is expected that peatland rehabilitation will, in general, benefit the conservation objectives of this network of nature conservation sites.

9 National Raised Bog Special Area of Conservation Management Plan 2017-2022.

The National Raised Bog Special Area of Conservation Management Plan 2017-2022 sets out a roadmap for the long-term management, restoration and conservation of protected raised bogs in Ireland. The Plan strikes an appropriate balance between the need to conserve and restore Ireland's raised bog network as part of Ireland's commitments towards the EU Habitats Directive, and the needs of stakeholders and gives recognition to the important role that communities have to play in the conservation and restoration of raised bogs. The National Raised Bog Special Areas of Conservation (SACs) Management Plan 2017-2022 is part of the measures being implemented in response to the on-going infringement action against Ireland in relation to the implementation of the EU Habitats Directive, with regard to the regulation of turf cutting on the Special Areas of Conservation (SACs). The then Minister for Arts, Heritage and the Gaeltacht, also published a **Review of Raised Bog Natural Heritage Area Network** in 2014.

BnM has also responded to the needs of the National Raised Bog Special Area of Conservation Management Plan (NRBMP) and provided several sites to the government for the relocation of turf-cutters from SACs. This is part of a suite of ongoing bog conservation measures in the NRBMP to manage turf-cutting in protected sites. BnM and the National Parks and Wildlife Service continues to engage regarding the ongoing relocation of turf-cutters from protected raised bog sites.

10 All-Ireland Pollinator Plan 2021-2025

The All-Ireland Pollinator Plan 2026-2031 outlines key objectives and actions to protect and support pollinating insects and the habitats they rely on. A BnM specific action in this plan includes the adoption of pollinator-friendly management within the BnM network of sites. One action to help achieve this objective is habitat rehabilitation and restoration, where possible, of pollinator-friendly habitats, including peatland habitats.

11 Land-use planning policies

As BnM operates in many counties across Ireland, it is important to note the respective development plans in these counties. Many of the existing development plans recognise the potential that exists in the after-use of cutover/cutaway peatlands. BnM seeks to work with all of the relevant local authorities to ensure that the most appropriate after-uses are reflected in local planning policy. The following areas of consistent importance are of

both direct and indirect relevance to BnM: heritage, tourism, biodiversity/conservation, landscape, renewable energy, and economy/enterprise.

12 National Archaeology Code of Practice

BnM operated under an agreed Code of Practice (COP) regarding archaeology with the Department of Arts, Heritage and the Gaeltacht and the National Museum of Ireland which provided a framework to enable the Company to progress peat extraction whilst carrying out archaeological mitigation. (https://www.archaeology.ie/sites/default/files/media/publications/cop-bord-na-mona-en.pdf)

Under the Code, BnM, the Minister and Director worked together to ensure that appropriate archaeological survey and mitigation was carried out in advance of peat extraction.

As peat extraction ceased in 2018, the remaining elements of the COP that are still applicable include:

- BnM must ensure that any newly discovered monuments on BnM lands are reported in a timely manner to the National Monuments Service of the Department of Arts, Heritage and the Gaeltacht.
- BnM must ensure that any archaeological objects discovered on BnM lands are reported immediately to the Duty Officer of the National Museum of Ireland.
- BnM will adhere to the Archaeology Code of Practice relating to management of any archaeological finds that may arise during cutaway peatland rehabilitation and decommissioning.

13 Bord na Móna Biodiversity Action Plan 2016-2021

Rehabilitation of industrial peatlands is a key objective of the Bord na Móna Biodiversity Action Plan 2016-2021. This action plan outlines the main objectives and actions around biodiversity on BnM lands. The Bord na Móna Biodiversity Action Plan also outlines key International and European policy in relation to biodiversity. This includes the **United Nations Convention on Biodiversity 2011-2020 (CBD)** and **European Biodiversity Strategy to 2020**. Further details of these policies and BnM s responses can be found in the Bord na Móna Biodiversity Action Plan (Bord na Móna , 2016). Both policy documents highlight targets such as reducing pressure on biodiversity, promoting sustainability, habitat restoration and benefits of ecosystem services.

One example of a key CBD target is:

- *“Restore at least 15% of degraded areas through conservation and restoration activities.”*

The EUs headline target for progress by 2020 is to:

- *“halt the loss of biodiversity and the degradation of ecosystems in the EU by 2020, restore them as far as feasible, while stepping up the EU contribution to averting global biodiversity loss.”*

This rehabilitation plan is aligned to the CBD target and the EU Biodiversity Strategy target and will help Ireland meet its commitment to these international Biodiversity polices.

14 BnM commitments

BnM made the commitment in 2009 not to develop any new peatland sites for industrial peat production. The company has continued to work with different stakeholders.

In line with BnM's accelerated decarbonisation programme, the company made a further commitment to a significantly larger rehabilitation target. This was reflected in our plans to rehabilitate a further 20,000 hectares of cutaway and cutover bog to wetland and woodland mosaics by 2025. In addition, we planned to restore a further 1,000 hectares of raised bog habitat by 2025. These initial targets have been achieved.

The company announced the cessation of industrial peat production in 2021 and that it would rehabilitate a target of 33,000 ha between 2021-2026 . Rehabilitation measures will continue to be carried out with the focus on re-wetting and rehabilitation of cutover and cutaway areas in line with national policies (such as the National Peatland Strategy, the National Biodiversity Action Plan, The Nature Restoration Law, the Climate Action Plan, the Water Framework Directive, etc.) and rehabilitation guidelines set down by the Environmental Protection Agency. BnM has now transitioned to a Climate Solutions company with a key commercial and development focus being the delivery of renewable energy to support Ireland's Climate Action Plan. In general, BnM will seek to balance and optimise commercial, social, and environmental value of its bogs, and develop integrated land-uses, while taking account of the need for sustainability and their biodiversity value.

These commitments outline the importance of peatland rehabilitation to BnM. The company will continue to demonstrate environmental responsibility and continue to deliver on these commitments in relation to peatland rehabilitation and in relation to the future management of these lands to maximise their benefits, particularly their ecosystem service benefits, along with the sustainable development of a portion of the land bank for other uses, such as renewable energy.

APPENDIX VI: DECOMMISSIONING

1. Condition 10 Decommissioning

Under condition 10.1, BnM must decommission relevant infrastructure and other materials that supported peat extraction, that may result in environmental pollution.

10.1.1 Decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.

To date across all of BnM's peatlands that have been rehabilitated, this has entailed removal of rail infrastructure, plant, equipment, materials, and waste.

In relation to this bog, this was primarily rail to be lifted and any associated polybrane materials, production plant and equipment, any waste materials including stockpile covering, stored at production centers.

During the decommissioning of this bog, these materials were either brought to a central roadside location to be removal via a licensed waste provider or brought centrally to the nearest main works site, either Littleton or Templetuohy for removal as waste, to be either recycled or deposited to landfill.

Records, EWC codes, waste treatment operations, weights, descriptions and final destinations of these wastes are reported each year in the Annual Environmental Report (AER) and the Environmental Performance Report (EPR) and are available at the EPA's Licensing & Enforcement Access Portal (LEAP).

Rail lifting is ongoing in Littleton Bog in 2026 and is expected to be completed this year, as is the removal of some residual pumping infrastructure.

In relation to this bog, the list and tasks would be as follows:

Item	Description	Littleton Decommissioning Plan
1	Clean-up of remaining or unconsolidated waste or materials located in Bogs, Yards, Buildings and Offices	Clean-up of Bog
2	Cleaning Silt Ponds	Cleaning Silt Ponds
3	Decommissioning Peat Stockpiles	Peat Stockpile Management
4	Decommissioning or Removal of Buildings and Compounds	Decommissioning or Removal of Buildings and Compounds
5	Decommissioning Fuel Tanks and associated facilities	Where relevant
6	Decommissioning and Removal of Bog Pump Sites	Where relevant
7	Decommissioning or Removal of Septic Tanks	Where relevant

In addition, condition 7 of the licence requires these now defined waste items to be disposed of or recovered as follows:

7.1 Disposal or recovery of waste shall take place only as specified in *Schedule 2(i) Hazardous Wastes for Disposal/Recovery* and *Schedule 2(ii) Other Wastes for Disposal/Recovery* of this licence and in accordance with the appropriate National and European legislation and protocols. No other waste shall be disposed of/recovered either on-site or off-site without prior notice to, and prior written agreement of, the Agency.

7.2 Waste sent off-site for recovery or disposal shall only be conveyed to a waste contractor, as agreed by the Agency, and only transported from the site of the activity to the site of recovery/disposal in a manner which will not adversely affect the environment.

7.3 A full record, which shall be open to inspection by authorized persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall as a minimum contain details of the following:

7.3.1 The names of the agent and transporter of the waste.

7.3.2 The name of the persons responsible for the ultimate disposal/recovery of the

waste.

7.3.3 The ultimate destination of the waste.

7.3.4 Written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site.

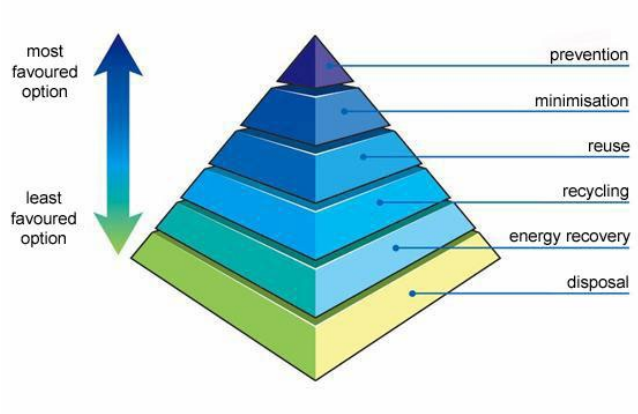
7.3.5 The tonnages and EWC Code for the waste materials listed in *Schedule 2(i) Hazardous Wastes for Disposal/Recovery* and *Schedule 2(ii) Other Wastes for Disposal/Recovery* sent off-site for disposal/recovery.

7.3.6 Details of any rejected consignments.

A copy of this Waste Management record shall be submitted to the Agency as part of the AER for the site.

As required by the licence, these waste items will be removed for recycling or disposal, using external contractors with the required waste collection permits, approved under 7.2, with waste records maintained as required under 7.3.

Where possible, BnM will utilize the appropriate waste hierarchy to identify waste that can reused or recycled ahead of disposal.



The validation of the success of condition 10.1 is carried out through an Independent Closure Audit (ICA), followed by and EPA Exit Audit (EA) and the eventual partial or full surrender of the licence.

2. Enhanced Decommissioning.

The remaining infrastructure does not constitute a risk to the environment and would not be a requirement of condition 10 of the licence. The removal of these are deemed as enhanced measures. These may enhance the future after use of the bog for amenity value, security against access for illegal and unsocial activities and general State and community benefit. In relation to this bog, this would include the infrastructure defined below:

Item	Enhanced Decommissioning Type	Littleton Decommissioning Plan
1	Removal of Railway Lines	Removal of Railway Lines
2	Decommissioning Bridges and Underpasses	Where Applicable
3	Decommissioning Railway Level Crossing	Where Applicable
4	Restricting Access (bogs and silt ponds)	Restricting Access to Bog
5	Removal of High Voltage Power Lines	Where Applicable

APPENDIX VII: GLOSSARY

Cutaway Bog: A BnM site generally becomes cutaway when it is economically unviable to continue industrial peat extraction or when the majority of peat has been removed.

Deep peat cutover bog. Deep peat cutover bog is defined as former raised bogs that have been in industrial peat production, where production has ceased but the residual peat depth is typically in excess of 2m. *Sphagnum* mosses are key species of raised bogs and the majority of the peat mass is formed from these mosses. *Sphagnum* species and other raised bog species are a key part of raised bog habitat function and prefer more acidic, nutrient poor, water-logged conditions. Typical raised bog *Sphagnum* mosses and other bog species do not thrive with the more typical alkaline water chemistry of cutaway bog but do grow well in these more acidic conditions where peat has been re-wetted. There is potential to re-develop *Sphagnum*-rich plant communities in these conditions if the peat can be re-wetted. This brings the opportunity of re-developing *Sphagnum*-rich vegetation communities that are considered Carbon sinks or peat-forming habitats and restoring the carbon sequestration function of these sites.

Dry cutaway bog: Cutaway bog is categorised as dry cutaway where it is not practical or feasible to re-wet these areas completely. It is inevitable that some areas of cutaway will remain relatively dry due to the heterogenous topography of the cutaway, as well as requirements for continued drainage on site for identified after-uses, or off site in relation to neighbouring lands or other infrastructure. Ridges and mounds of glacial deposits can become exposed during peat extraction and form a heterogenous topographical mosaic separated by basins. Dry cutaway may have very thin or no residual peat where ridges and mounds have been exposed. The exposed sub-soils are a mix of glacial gravels, muds and tills that can be quite free-draining. Dry cutaway may also have deeper residual peat, but in a location (i.e. at the margin) where the peat cannot be re-wetted due to boundary constraints. Dry cutaway may also develop in situations where there a relatively steep slope that inhibits re-wetting. The majority of dry cutaway will develop towards grassland, heath, scrub and dry woodland habitats.

Enhanced decommissioning: This is defined as decommissioning carried out under the Scheme, which is proposed to be externally funded.

Enhanced rehabilitation: This is defined as rehabilitation carried out under Scheme, which is proposed to be externally funded. It is proposed by Government that BnM be obligated to carry out enhanced decommissioning, rehabilitation and restoration on peatlands. This Scheme will significantly go beyond what is required to meet rehabilitation and decommissioning obligations under existing EPA IPC licence conditions. Interventions and activities supported by the Scheme will ensure that environmental stabilisation is achieved (meaning IPC obligations are met), and importantly, significant additional benefits, particularly relating to climate action and other ecosystem services, will also be delivered. However, only the costs associated with the additional, enhanced and accelerated measures, i.e., those interventions which go beyond the existing decommissioning and rehabilitation requirements arising from Condition 10 will be eligible for support under the Scheme.

Environmental stabilisation: The key objective of peatland rehabilitation is environmental stabilisation. This means developing habitats and vegetation back onto the bare peat, slowing water movement across the bog, minimising effects to downstream waterbodies and meeting the conditions of the IPC Licence. This is achieved by a combination of re-wetting, where possible, and natural colonisation of the former cutaway, with or without intervention**.** Habitats will develop that reflect the underlying environmental conditions. Other after-use development may also serve to act as environmental stabilisation.

Marginal land. Marginal land is defined as land around the margin of the industrial peat production area. This margin generally contains a range of habitats including scrub, birch woodland, cutover bog and raised bog remnants. It has a variety of land-uses including turf-cutting (private turbary). The Scheme will consider potential rehabilitation and restoration actions (e.g. drain blocking) within marginal land zones, where appropriate.

Rehabilitation: Rehabilitation is defined in general by BnM as environmental stabilisation of the former cutaway. This is generally achieved via re-wetting, where possible, and natural colonisation of the former cutaway, with or without intervention. It is not possible to restore raised bog habitats on BnM cutaway in general in the short-term. In general, most of the peat mass has been removed from many BnM cutaway sites and the environmental characteristics of these areas have therefore changed radically (peat depths, hydrology, water chemistry, substrate type, nutrient status. This means there will therefore be different habitat outcomes (wetlands, fen, heathland, grassland and Birch woodland). Other after-use development may also serve to act as rehabilitation.

Restoration: Ecological restoration is defined as the process of re-establishing to the extent possible the structure, function and integrity of indigenous ecosystems and the sustaining habitats they provide" (SER, 2004). Defined in this way, restoration encompasses the repair of ecosystems (Whisenant, 1999) and the **improvement of ecological conditions in damaged wildlands** through the **reinstatement of ecological processes**. In general, BnM cutaway peatlands cannot be restored back to raised bog in a reasonable timeframe as their environmental conditions has changed so radically (with the removal of the acrotelm – the living layer and much of the peat mass). However, they can be returned to a **trajectory** towards a naturally functioning peatland system (Renou-Wilson, 2012). **Raised bog restoration** is an objective of some BnM sites where there is residual natural raised bog vegetation and where the majority of the peat is still intact.

Standard rehabilitation: This is defined as rehabilitation that is designed to meet the conditions of the EPA IPC Licence. The key objective of rehabilitation is environmental stabilisation. This is achieved by a combination of re-wetting, where possible, and natural colonisation of the former cutaway, with or without intervention**.** Other after-use development may also serve to act as rehabilitation.

Standard decommissioning: This is defined as decommissioning that is designed to meet the conditions of the EPA IPC Licence. This is defined as to render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.

Wetland cutaway bog. Wetland cutaway bog is defined as former raised bogs that have been in industrial peat production, where production has ceased and the majority of peat has been cutaway, and where this cutaway has the potential to be re-wetted. A significant number of BnM sites have pumped drainage and these sites are likely to develop a mosaic of wetland habitats when pumping in reduced or stopped. The water chemistry of wetland cutaway frequently is strongly influenced by the more alkaline sub-soils that have been exposed during peat production. This means that pioneer vegetation is more typical of fen and wetland, rather than raised bog. Wetland cutaway will have a broad range of hydrological conditions depending on the local topography. In some cases, these wetlands may form deep water (> 0.5 m) whilst other areas may have the water table at or just below the surface of the ground.

APPENDIX VIII: EXTRACTIVE WASTE MANAGEMENT PLAN

(Minimisation, treatment, recovery and disposal)

Objective:
The objective of this generic plan is to comply with the requirements of regulation 5 of the Waste Management (Management of Waste from Extractive Industries) Regulations, and to prevent or reduce waste production and its harmfulness.

Scope:
This plan covers IPPC Licence's Ref P0499-01, Littleton Group of Bogs located in Co. Tipperary.

1.0 Extractive Waste:
Waste classified as extractive waste from peat extraction operations arise from three operations associated with this activity.

1.1 Silt Pond excavations and maintenance.
All peat extraction activities in the Littleton bog group are serviced by silt lagoons/ponds. During the excavation of these silt ponds, pre IPPC Licensing in 1999 and since licensing, the excavated material is stored adjacent to the silt pond, where it either remains in situ ores levelled out. As required by condition 6.6, these silt lagoons are cleaned twice per annum or more often if inspections dictate. These silt cleanings are also deposited on the same location, adjacent to the silt pond, where they may be levelled periodically to allow room for subsequent cleanings. These mounds of silt pond excavation material and cleanings are generally no higher that 2-3 metres.

1.2 Power Station screenings:
Lough Ree Power Station screens the peat from the bogs prior to processing. This screening removes oversized peat, stones and bogs timbers. Schedule 3 (ii) of the IPPC licence permits disposal of these peat screenings back to the bog, where it is levelled and graded into the surrounding peat landscape. These locations have been agreed with the Agency as per condition 7.4 of the IPPC Licence, and as per the attached locations.

1.3 Bog Timbers:
During peat extraction operations, bog timbers often arise in the bog surface and are required to be cleared. These timbers consist of bog pine, oak and some yew. Some of these timbers, such as the oak and yew are removed for use in the wood craft industry, with the remaining bog pine stockpiled in locations at the opposite end of each bog, where it generally becomes a habitat for flora and fauna. These piles of timber are generally no higher than 1-2 metres.

2.0 P0499-01 IPPC Licence Extractive Waste Conditions

2.1 Condition 7.5 Extractive Waste Management
The licensee shall draw up a Waste Management Plan (to be known as an Extractive Waste Management Plan) for the minimisation, treatment, recovery and disposal of extractive waste. This Plan shall meet the requirements of regulation 5 of the Waste Management (Management of Waste from the Extractive Industries) Regulations,2009. The Plan shall be submitted for agreement by the Agency by the 31' December 2012. The Plan shall be reviewed at least once every five years thereafter in a manner agreeable to the Agency and amended in the event of substantial changes to the operation of a waste facility or to the waste deposited. Any amendments shall be notified to the Agency.
All extractive waste shall be managed in accordance with the Extractive Waste Management Plan. A report on the implementation of the Extractive Waste Management Plan shall be provided in the AER.

2.2 Condition 7.6 Waste Facility

(i) No new waste facility may be developed or an existing waste facility modified unless agreed by the Agency.
(ii) The licensee shall ensure that all existing waste facilities are managed and maintained to ensure their physical stability and to prevent pollution or contamination of soil, air, surface water or groundwater.
(iii) The licensee shall ensure that all new waste facilities are constructed, managed and maintained to ensure their physical stability and to prevent pollution or contamination of soil, air, surface water or groundwater.
(iv) Operational measures shall be continuously employed to prevent damage to waste facilities from personnel, plant or equipment.
(v) The licensee shall establish and maintain a system for regular monitoring and inspection of waste facilities.
(vi) All records of monitoring and inspection of waste facilities, as required under the licence, shall be maintained on-site in order to ensure the appropriate handover of information in the event of a change of operator or relevant personnel.

2.3 Condition 7.7 Excavation Voids

7.7.1 Unless otherwise agreed by the Agency, only extractive waste shall be placed in excavation voids.
7.7.2 When placing extractive waste into excavation voids for rehabilitation and construction purposes, the licensee shall, in accordance with regulation 10 of the Waste Management (Management of Waste from the Extractive Industries) Regulations, 2009, and the Extractive Waste Management Plan:

- Secure the stability of the waste
- Put in place measures to prevent pollution of soil, surface water and ground water.
- Carry out monitoring of the extractive waste and excavation void.

Condition 7.5. Extractive Waste Management Plan. 5 (1)

3.0 Minimisation.

3.1 Silt pond excavation material and cleanings.

IPPC Licence conditions require all production areas to be serviced by an appropriately designed silt pond based on storage volume and retention time. Condition 6.6 requires all ponds to be cleaned bi-annually and more often if inspections dictate, so the only opportunity for minimisation of same is through Standard Operating Procedures. These are required under condition 2.2.2 (i) regarding minimisation of suspended solids, and are in-place to minimise the generation of silt, which in-turn will minimise the generation of silt pond waste.

3.2 Power Station Screenings.

These screenings cannot be minimised as they are a consequence of peat production, stones, timbers and oversize peat materials are naturally occurring on the bog, and are required to be removed prior to processing.

3.3 Bog Timbers.

Bog timbers are also naturally occurring materials within a bog and are required to be removed prior for production. The volume of these bog timbers varies from bog to bog and as such their minimisation is not controllable or quantifiable.

4.0 Treatment

4.1 Silt pond excavation material and cleanings.

The silt pond excavation material and silt cleanings do not require any treatment for its end use which will be either backfilling these silt pond voids as per condition 7.7.1 above as part of the Bog Rehabilitation Plan, or reincorporated into the surrounding peatlands.

4.2 Power Station Screenings.

The factory screenings are permitted to be returned to the bog as they were naturally occurring materials from the bog, and as such do not require any treatment to serve this purpose.

4.3 Bog Timbers
As per 1.3 above, these timbers are stockpiled at two locations in each bog, as per the attached list of sites and become habitats for various flora and fauna.

5.0 Recovery
5.1 Silt pond excavation material and cleanings.
Condition 2.2.2 (vi) requires the reuse of silt pond waste to be examined. This was undertaken in 2006, the outcome of which was that this waste peat silt material, as a fuel, was contaminated with sub-soils, rendering it unsuitable for combustion. In addition, volumes are small compared to overall peat production volumes.

5.2 Power Station Screenings.
Given the nature of these screenings as outlined in 1.2 above, there is no further use identified and they are permitted to be disposed of back to the bog.

5.3 Bog Timbers
Investigations into processing these materials into smaller fractions for potential heating purposes did not yield any viable results. In addition, these older stockpiles are now classified as habitats and as such would not be considered for reuse as a fuel.

6.0 Disposal
6.1 Silt pond excavation material and cleanings.
Schedule 3 (ii) permits the disposal of silt pond cleanings (Lagoon Sediments) to the bog and these locations, adjacent to the silt pond site, are presented in the attached spreadsheet, with associated grid coordinates.

6.2 Power Station Screenings.
Schedule 3 (ii) permits the disposal of screenings (Peat Screenings) to the bog at designated locations agreed under Condition 7.4, and these locations, are presented in the attached spreadsheet, with associated grid coordinates.

6.3 Bog Timbers
These naturally occurring bog timbers are stockpiled at locations in each bog, grid coordinates attached.

7.0 Extractive Waste Management Plan

5 (2a)(i)
The vast majority of peat extraction bogs were all designed and drained for production prior to the 1960's and as such the production fields layout cannot' be altered. Under our Cleaner Reduction Procedures, various design changes have been implemented to the production machines and process to reduce lost peat which eventually is captured in the silt ponds and requires removal as waste peat silt. This along with training and ongoing research and development will continuously reduce waste peat and subsequently waste silt pond cleanings. Bog timbers are present naturally in various volumes and quantities in different bogs and as peat production involves stripping peat in layers, the exposure, generation and removal of these timbers is unavoidable. Work has been undertaken recently into project looking at grinding of these bog timbers in situ using a timber miller, and if this project becomes viable it will contribute to the reduction of bog timbers.

5 (2a)(ii)
Given the nature and expanse of peat bogs, the stockpiling and storage of these waste materials do not present a visual, storage or stability problem. As required under Condition 10 of the IPPC Licence, the silt pond excavations and screenings will be utilised to backfill the silt pond voids once the bogs have finished and stabilised in accordance with out Bog Rehabilitation Plan. Storage of these wastes in the interim, open to the elements does

not present a change on the nature of these wastes that will threaten the environment or prevent their reuse during the bog rehabilitation process.

5 (2a)(iii)
Under Condition 10 of the IPPC Licence, all silt ponds will be decommissioned once the bog surface has stabilised, in agreement with the Agency. This will involve the removal of weirs and flow controls, returning the silt pond back to its original drain or removing the silt pond from the drainage system. Both of these activities will involve placing the silt pond extraction and cleaning material back into the excavation void.

5 (2a)(iv)
The peat bogs do not contain any topsoil, so this is not required.

5 (2a)(v)
Peat mineral resources do not undergo any treatment.

5 (2b)
These three extractive waste are all being reused and recovered back to their original extraction points and have not undergone any physical, chemical, or biological change.

5 (2c)(i, ii & iii)
These three extractive wastes, stored on the bog for reuse or recovery during the bog rehabilitation phase, do not require any management or monitoring during the operation of these bogs. Silt pond excavations and cleanings are stored adjacent to the silt pond and quickly revegetated and stabilise, the screenings are graded back into the bog at the agreed locations upon disposal and the bog timbers do not prevent any water or airborne danger to the environment.

5 (3)
The three extractive wastes arising from peat extraction operations at this site are classified wastes from mineral non-metalliferous excavation, with an EWC code of 0101 02. The materials are not classified as hazardous under Directive 91/689/EEC20, and do not contain substances or preparations classified as dangerous under Directives 67/548/EEC5 or 1999/45/EC6 above a certain threshold.
The peat excavations and cleanings are stored in locations and in a manner that they could not collapse, and are remote in their nature. The stockpiles are located adjacent to silt ponds that are cleaned regularly and as such these stockpiles are managed and levelled to facilitate further cleanings.
Therefore the material stored at these waste facilities would not be considered to be a Category A waste facility.

Classification in accordance Annex II.

Waste Material	Description	Classification	Chemical Process treatment	Deposition description	Transport System
Silt Pond Excavations and cleanings	Peat and mineral soils associated with peatlands. Stored for reuse during bog rehabilitation, with no displacement of overburden	01 01 02	None	Excavated from silt ponds by excavator and deposited adjacent to the silt pond.	Excavator
Peat Screenings	Stones, timbers and oversized peat particles, reincorporated into low	01 01 02	None	Removed by screen at the factory and	Tractor and trailer.

Waste Material	Description	Classification	Chemical Process treatment	Deposition description	Transport System
	areas, agreed with the Agency, and stabilized under normal natural bog conditions			transported by tractor and trailer to the designated and agreed locations	
Bog Timbers	Pine, Oak and Yew species, stored at locations in each bog. Not subject to any stability issues due to exposure to atmospheric/meteorological conditions.	01 01 02	None	Removed from the bog surface by excavator and transported by tractor and trailer to the agreed locations	Tractor and Trailer

Description of operations.
Silt pond excavations arise from the requirement to have silt ponds treating all peat extraction sites. Silt pond cleanings arise from the removal of peat silt from silt ponds as required under IPPC Licence. Bog timbers arise from preparation of the bogs surface for peat production. Estimated quantities of materials are below:

Closure plan. (Bog Rehabilitation Plan).
Condition 10.1 – 10.3 of the IPPC Licence requires the following:

- 10.1 Following termination of use or involvement of all or part of the site in the licensed activity, the licensee shall:
- 10.1.1 Decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.
- 10.1.2 Implement the agreed cutaway bog rehabilitation plan (refer Condition 10.2).

10.2 Cutaway Bog Rehabilitation Plan:

- 10.2.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of the cutaway boglands within the licensed area. This plan shall be submitted to the Agency for agreement within eighteen months of the date of grant of this licence.
- 10.2.2 The plan shall be reviewed every two years and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the written agreement of the Agency.

10.3 The Rehabilitation Plan shall include as a minimum, the following:

- 10.3.1 A scope statement for the plan; to include outcome of consultations with relevant Agencies, Authorities and affected parties (to be identified by the licensee).
- 10.3.2 The criteria which define the successful rehabilitation of the activity or part thereof, which ensures minimum impact to the environment.
- 10.3.3 A programme to achieve the stated criteria.
- 10.3.4 Where relevant, a test programme to demonstrate the successful implementation of the rehabilitation plan.
- 10.3.5 A programme for aftercare and maintenance.

10.4 A final validation report to include a certificate of completion for the Rehabilitation Plan, for all or part of the site as necessary, shall be submitted to the Agency within six months of execution of the plan. The licensee

shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment. This plan including maps and ecological classifications are available on file at the Allen Clonsast IPPC Licence Coordinators office.
The location in relation to the silt pond excavations and cleanings are adjacent to the silt ponds, which are considered under the Shannon River Basin Management Plan in accordance with the requirements of Directive 2000/60/EC.
Screenings and bog timbers are all naturally occurring elements of peatland and there placement back to the bog in smaller concentrated designated waste facilities does not constitute a risk to the prevention of water compliance.
The lands under where these materials are deposited are peatlands and are un-effected by the placing of this material.

Review.
This plan will be reviewed every five years, the first review to take place in September 2017. This review will entail an inspection of these waste facilities to ensure their placing, management, maintenance and stability comply with the requirements of the Extractive Waste Management requirements and condition 7.5, 7.6 and 7.7 of the Littleton IPPC Licence P0499-01.

APPENDIX IX: CONSULTATION SUMMARIES

Table APXI -1 Consultees contacted.

Bog Name	Contact Organisation	Contact Name	Date of Issue	Format	Date Response Received	Response Format
Consultation undertaken in 2017-2018						
Baunmore	Private individual A		27/11/2017	Letter		
Littleton Bog Group	Irish Peatland Conservation Council	Several staff members		letter	14/02/2018	
Ballysorrell, Templetouhy, Baunmore	National Parks and Wildlife Service	Several staff members	6/02/2018	Site meeting	8/3/2018	
Lanespark	Private individual B		11/04/2018	Site Visit	11/04/2018	
Ballysorrell, Carrickhill Baunmore	NUIG	Several staff members	23/04/2018	Site Visit	23/04/2018	
Littleton Bog Group	Private individual C		25/04/2018	Phone	25/04/2018	
Derryvilla	Slieve Ardagh Rural Development Group	Several members	1/06/2018	Meeting	1/6/2018	
Littleton Bog Group	National Parks and Wildlife Service	Regional staff	24/05/2018	Email	1/06/2018	
Littleton Bog Group	General community meeting – Loch Doire Bhile, site visit to Baunmore		12/06/2018	Site Visit/meeting	12/06/2018	
Littleton Bog Group	National Parks and Wildlife Service	Regional staff	14/06/2018	Site visit	14/06/2018	
Littleton Bog Group	Tipperary County Council	Heritage Officer	23/06/2018	Phone	23/06/2018	
Derryvilla	Private Individual D		27/06/2018	Meeting	27/06/2018	
Littleton Bog Group	Birdwatch Ireland	Several staff members	1/08/2018	Email	3/08/2018	
Littleton Bog Group	Irish Peatland Conservation Council	Several staff members	1/08/2018	Letter	15/08/2018	
Littleton Bog Group	Kilkenny County Council	Heritage Officer	1/08/2018	Email	3/08/2018	

Bog Name	Contact Organisation	Contact Name	Date of Issue	Format	Date Response Received	Response Format
Littleton Bog Group	National Parks and Wildlife Service	Several staff members	1/08/2018	Letter	9/10/2018	
Littleton Bog Group	Irish Peatland Conservation Council	Several staff members	30/08/2018	Meeting	30/08/2018	
Littleton	Forest Service	Several staff members	14/08/2018	Email	14/08/2018	
Baunmore & Littleton	Birdwatch Ireland – Tipperary Branch	Several staff members	1/10/2018	Site visit	1/10/2018	
Littleton Bog Group	Tipperary County Council	Several staff members	5/11/2018	Email	19/11/2018	
Littleton Bog Group	Tipperary Heritage Forum	Several staff members	15/02/2019	Presentation	15/02/2019	
Knockahaw	Private Individual E		1/02/2019	Site Visit	1/02/2019	
Littleton Bog Group	Environmental Protection Agency, National Parks and Wildlife Service, Irish Peatland Conservation Council	Several staff members	26/02/2019	Presentation meeting	26/02/2019	
Baunmore	Irish Wildlife Trust	Several staff members	12/05/2019	Site Visit/Walk	12/05/2019	
Lanespark Derryvilla	National Parks and Wildlife Service and Slieve Ardagh Rural Development Group – Loch Doire Bhile	Several staff members	22/05/2019	Meeting	22/05/2019	
Longford Pass	Private Individual F		5/07/2019	Site visit	5/07/2019	
Ballysorrell	Heritage Week Walk - Ballysorrell	Several staff members	17/08/2019	Site Visit/Wak	17/08/2019	
Baunmore Carrickhill	Limerick Institute of Technology (LIT)	Several staff members	13/09/2019	Site visit	13/09/2019	

APXI -2 Response summary from Consultees contacted (*Note: This includes consultation undertaken as part of the Phase 1 rehabilitation plan).*

Organisation	Summary of Response by Stakeholder	BnM Response
NPWS 8/3/2018	Ballysorrell All walked over the bog and viewed the bog restoration works. MCC outlined work carried out so far and work planned for the future. Planned work is > 75% complete. NPWS staff very complementary of the bog restoration work (drain-blocking with peat dams) carried out so far. All agreed that the bog had significant potential for bog restoration, and future nature conservation. Signs that the bog is already re-wetting in places due to drain-blocking. Review and discussion of NPWS degraded raised bog model outputs for Ballysorrell. Model predicted that 9 ha would have potential for development into active raised bog in the future. General view was that this was probably an under-estimate and that the model likely to be affected by the intensive BnM drainage network. Discussion of potential measures to further increase re-wetting of the bog including berms across high bog at southern section. Bruckana All visited the Bruckana Windfarm. Viewed a cutaway bog area within the windfarm complex where there has been significant natural colonisation for at least 20 years and some targeted hydrological management. Discussion of the former history of Templetuohy Bog as a sod turf production bog. Sod turf cutaway tends to have deeper remnant peat, which in turn can develop Sphagnum-rich vegetation, where conditions suit. Attendees viewed some wet cutaway where there has been some Sphagnum colonisation. Discussion of environmental conditions that led to the development of this specific vegetation type. Discussion of potential to re-wet similar cutaway, with similar environmental conditions and deeper peat, to encourage development of Sphagnum-rich peat-forming vegetation. Discussion of different constraints and opportunities for this type of re-wetting. This Sphagnum-rich peat-forming vegetation only has potential to develop in certain environmental conditions in association with deeper peat. NPWS staff suggested that intensive bunding would have potential to increase the overall re-wetted area. There was general discussion of potential larger project opportunities, in association with planned BnM rehabilitation or future BnM afteruse development. These larger projects could potentially focus on GHG emission reduction, creation of peat-forming habitats, biodiversity enhancement, other ecosystem services enhancement/restoration. Baunmore All visited Baunmore cutaway. Baunmore is a typical milled peat cutaway with pumped drainage and with shallower remnant peat more typical of milled cutaway in the Littleton Bog Group, in contrast to Bruckana. All walked part of the bog where some recent rehabilitation trials have been carried out. MMC pointed out the recent field drain blocking using a bull-dozer that has been carried out so far. The target here was to block drains, re-establish surface drainage and re-wet peat. This work has already successfully held back surface water in places. The cambered fields and variable topography mean that a proportion of the peat fields remain dry. The expected habitat development is a mosaic of poor fen wetland communities, Reed swamp and scrub/wet woodland. MMC explained how blocking the field drains is Phase 1 of the planned rehab trial and that Phase 2 will involve blocking outfalls and cutting new overflow drains to further manipulate overall water levels. The overall strategy is to maximise the area of re-wetted peat with water levels close to the peat surface and emergent wetland communities. NPWS staff also suggested that more intensive bunding would have potential to increase the overall re-wetted area and help manage water levels. All then examined some cutaway that is colonising naturally with pioneer vegetation. This cutaway is much more alkaline compared to Bruckana with indicators such as the presence of Black Bog-rush.	

Organisation	Summary of Response by Stakeholder	BnM Response
Tipperary Cunty Council	The draft plan is an overview of the rehabilitation within the Littleton bog group this comprises of 12 bog areas. The plan is developed under Condition 10 of IPC Licence Ref. P0499-01. (An incorrect licence ref. is given in the plan.) Any consideration for future after uses for the bog areas will be subject to the planning regulatory framework and the Environment section will be obliged to comment at this time on a more detailed proposal. The rehabilitation plan should include best practice measures for the restoration of an optimal range of biodiversity and ecosystems. The aftercare management activities on the level, quantity and quality of water both on site and in the surrounding landscape should avoid any unnecessary deterioration in the quality and quantity of ground and surface waters. After use, peatland water levels and flow regimes should be restored to as close to the natural reference conditions as possible. Any works carried out must be detailed and all stakeholders consulted.	
Irish Peatland Conservation Council	The IPCC welcome the zonation of Ballysorrell Bog for biodiversity and the decision not to develop it for peat resources (Page 3). Ballysorrell Bog is quite southerly in its location and its rehabilitation and zonation for biodiversity will help to extend the range of raised bog habitat in Ireland, which according to "The Status of EU Protected Habitats and Species in Ireland | 2013" (NPWS, 2013) is "BAD". We have a few questions and points to make on the draft rehabilitation plan with the aim to improving its content. It is good to see that BnM will be restoring the hydrology of the high bog through drain blocking as mentioned on Page 4 and that you also intend to carry out a trial rehab programme of a selected area for training purposes. Could you please elaborate on this? What training/trials do you intend to conduct and is it only inhouse training for BnM staff? The rehabilitation process may be a good time to test the Canadian method of Sphagnum transfer as there would be time to prepare the site prior to drain blocking. Please give this suggestion consideration as you indicated the peat present as light red brown Sphagnum peat (Page 9). There is Sphagnum on site that could be harvested and used as a donor inoculum for a Sphagnum trial. Page 5 gives information on the short and long-term time-frames of the plan. Could you give more details on the methods that will be utilised to monitor the hydrology i.e. will piezometers be used to measure water levels and will they be measured before drain blocking? This could ensure that any hydrological successes will be shown. In addition, how frequently will the ecotope mapping be conducted? Page 3 details the time-line for the development of Ballysorrell ("Ballysorrell was originally developed....."). Could this historical timeline be re-written as it is difficult to follow. For instance, when did the private sodpeat cutting around the bog cease? When did the milled peat production cease? Could you please specify how Ballysorrell Bog will help to achieve the national conservation target for active raised bog and supporting habitat in Ireland? Are there plans to formally designate this site in the future? Thank you for giving us this opportunity to make some comments on this welcome initiative by Bord na Mona.	
NPWS 9/10/2018	The Department, particularly, welcomes the restoration measures proposed for Ballysorrell Bog and Knockahaw Bog which will result in the development of active raised bog habitat and acknowledge that this will significantly aid Ireland in meeting its commitments under the EU Habitats Directive. Whilst it is appreciated that "the rehabilitation measures will be adapted to the various baseline conditions" (Part 1, pg.20) the Department recommends that BnM consider more fully the potential for forward-planning during production phases of its operation so that the topography of the commercial fields could be engineered so as to best facilitate rewetting of the sites. Such an approach would better conform to Principle 17 (afteruse of cutaway peatlands) of the National Peatlands Strategy (2015). The Department recommends that the ongoing research into the interaction between rehabilitation measures and carbon emissions is prioritized so as to better inform future rehabilitation plans. In the absence of the assimilation of such research outputs into rehabilitation planning it is nonetheless recommended that serious consideration is giving to reprofiling works within the Littleton Bog Group. In relevant sites this could greatly improve the baseline conditions for rewetting and would be justified on the basis that rewetted cutaway has lower carbon emissions that dry, bare cutaway. The foregoing is in line with Principle 19 (contribution of peatland rehabilitation and restoration to climate change mitigation and adaption) of the National Peatlands Strategy. There is some difficulty interpreting the maps due to their complexity and the size of the legend. Maps showing specific restoration actions would be useful, possibly in the form of an	

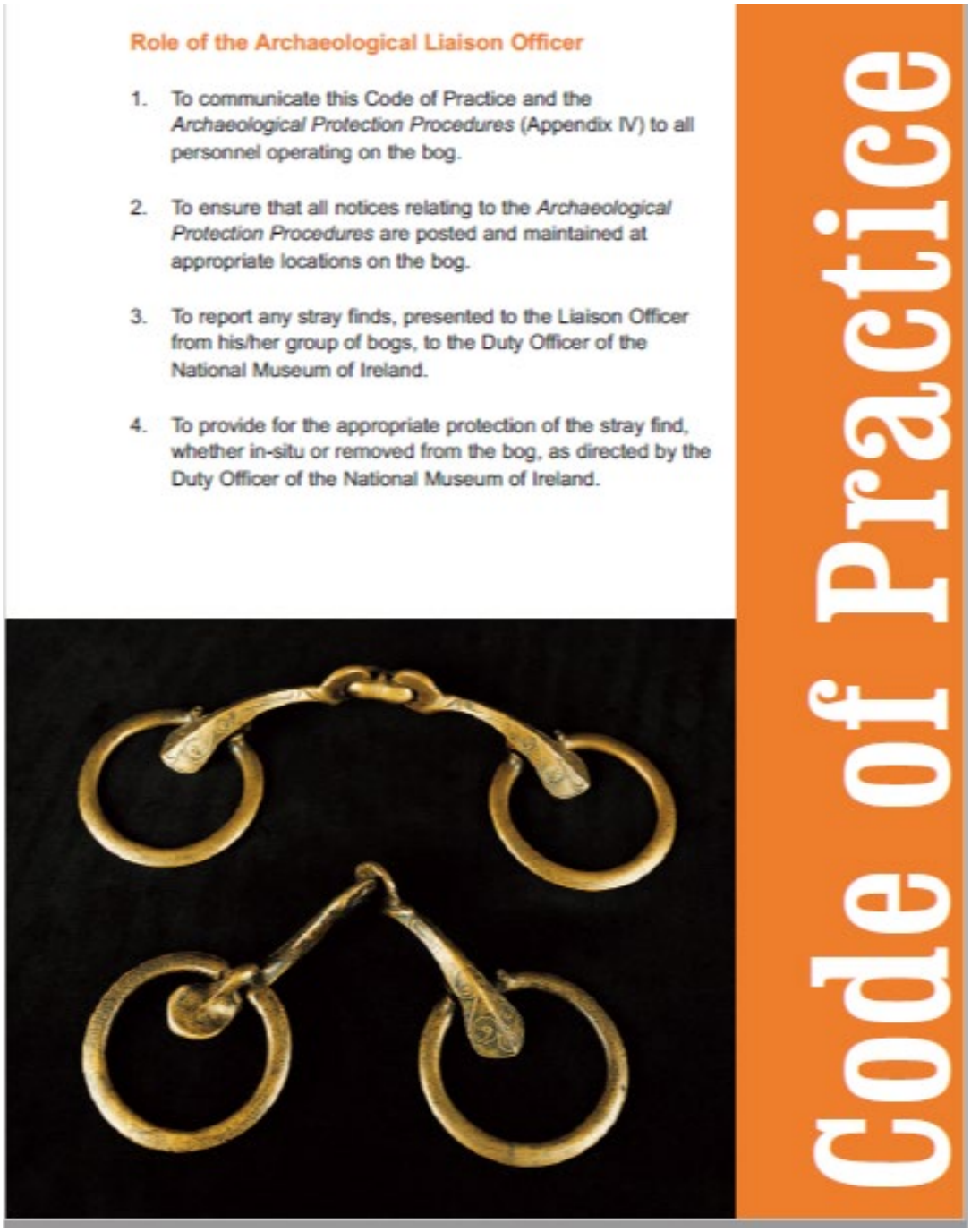
Organisation	Summary of Response by Stakeholder	BnM Response
	overview grid at a scale 1:35,000 with more detailed mapping as per grid squares. Eco-hydrological modelling based on LiDAR/DTM would be essential to ascertain the potential to achieve wet habitats with the potential to turn into carbon sinks. ….. 2 The Department is keen to continue engagement with BnM as regards investigating more engineered restoration techniques likely to provide results in line with the principles of the National Peatlands Strategy. The NPWS of the Department would welcome an opportunity to meet with you to allow for the Plan to be presented by your Ecology Team and to further explore the options of external funding such as EU LIFE funding, as discussed in previous meetings.	
IPCC 15/08/2018	Could you please clarify the correct area for the group of 12 sites included: is it 5050ha (Page 11, Section 4.2) or is it 4824ha (Page 11, Table 1). If it is the latter could you clarify what the other 226ha constitutes please. IPCC's principal interest in this plan lies in the future of existing acid peat bog remnants, the potential of the cutaway areas to provide biodiversity value and priority habitats for nature conservation, climate change mitigation and the extent to which the plan meets requirements of the National Peatlands Strategy 2015. The area of peatland included in the Littleton Bog Group is significant in the county of Tipperary as it represents one third of the original area of raised bog that occurred in the whole County particularly concentrated in South Tipperary (Hammond 1979 Peatland Map of Ireland) the southern distribution range for raised bogs described in the Status of EU Protected Habitats and Species. In your plan on Table 5 only two bog restoration sites (Ballysorrell and Knockahaw) are proposed covering an area of 567ha. Can you explain the method used in choosing these areas for bog restoration and were any other sites considered within the group? IPCC maintain that two sites is far too little considering the area of the land in the Littleton Group and the lack of any sites of conservation value in this area of former raised bog distribution. We note that Killeens Bog contains acidic peat and that it appears to be earmarked for horticultural peat (sod moss judging from the satellite photograph) should this be required. On Page 16 in conclusion 5 the plan states that this bog could be restored if horticultural peat extraction is stopped. IPCC strongly recommend the immediate cessation of this activity on this site and its inclusion in the restoration sites plan. We have reasoned with BnM on numerous occasions about the continued national production of horticultural peat as we do not agree that this use represents responsible management as defined in principle P24 in the National Peatlands Strategy. We understand that Sod Moss is regarded in economic terms as a "lost leader" product which negates any economic argument for keeping this site in production. Here in Littleton where BnM have exploited over 5000ha of Tipperary's natural peatland resources, all peat production should cease and every effort should be made to restore suitable acid peat resources to living bog where they exist. In this regard on Page 15 (Section 4.3.1.1 [ii]) two further sites with acid peat are mentioned - Carrickhill (substantial raised bog cutover east and west of the cutaway) & Inch (raised bog cutover to the south west of the cutaway) - why are these sites not being included in the bog restoration sites line-up? In the IPCC Sites Database we have a site named Longford Pass - Littleton Bog which is a remnant raised bog that we surveyed with a former BnM employee Sean Canney and which we subsequently used for educational purposes with local schools with the agreement of BnM. We would like to see this site included in the bog sites restoration list. (Grid ref. = S 23023 59319). IPCC are very unclear about your aims for the non-designated sites with considerable wildlife interest described on Page 21 of the plan. We estimate that there are 10 sites mentioned that are noteworthy for birds, crustaceans and invertebrates. In addition a further 3 rehabilitation sites are included in the BnM Biodiversity Plan. On the one hand BnM makes use of the fact that cutaway bogs are rich in biodiversity as part of the "Naturally Driven" image you like to portray but we can see no substantial commitment to undertake targeted management actions in relation to enhancing and maintaining these species on the sites. For example on Page 19 you state that without additional funding targeted conservation works for breeding birds will not be a feature of this plan. This is wrong and is at odds with Principle 15 in the National Peatlands Strategy 2015. In relation to climate	

Organisation	Summary of Response by Stakeholder	BnM Response
	change this rehabilitation plan needs to ensure that all of the cutaway bogs within the Littleton Group are rewetted to prevent carbon leakage. In our experience through visits to Mount Lucas, Ballycon and Lullymore cutaway bogs there are substantial areas within these rehabilitated sites that are dry and emitting carbon. Why does BnM not recontour sites with un-even topography to ensure that the majority of the bare peat is rewetted? Surely at the peat production stage more effort could be made to extract the peat so that flat substrate remains. Can you indicate within the plan the percentage of peat that will be rewetted and be carbon neutral? This is an important consideration in line with national climate change policy. IPCC find that the plan is overstating the company's intention to cease peat production for electricity by 2030 as their contribution to climate change policy	
Private Individual C	Phone call to discuss potential to develop greenway amenity across the Littleton Bog Group.	
Private Individual D	Meeting to discuss boundary issues and potential impact of rehabilitation on adjoining land	
Private Individual F	Meeting to discuss rare orchids at Longford Pass railway cutting	
Littleton Bog Group PCAS Consultation undertaken in 2025		
Uisce Éireann (formerly Irish Water)	In their response, Uisce Éireann stated that they are 'supportive of the key objective of achieving environmental stabilisation of the bogs and stabilising/improving key emissions to water. Uisce Éireann understand that restored peatlands are generally beneficial for drinking water sources downstream by improving water quality and by creating water retention and slowing the flow from the site. We are therefore in support of the Cutaway Bog Decommissioning and Rehabilitation Plan and believe that it could help to achieve to improvements the quality of drinking water sources downstream in terms of suspended sediment, colour, ammonia and dissolved organic carbon. Uisce Éireann provided suggestions and recommendations around water quality monitoring and the management of silt ponds during and post rehabilitation.	BnM acknowledged the response and responded to the queries raised. Consultation is ongoing.
Iarnród Éireann/Irish Rail	The location is approximately 10km from the nearest Iarnród Éireann railway line in Thurles, so Iarnród Éireann have no comments to make about the proposed work.	BnM acknowledges the response.
Minister of State with responsibility for Nature, Heritage and Biodiversity - Christopher O'Sullivan TD.	Acknowledge receipt of consultation.	BnM acknowledges the response.
Tipperary County Council	In their submission, Tipperary County Council highlighted that the rehabilitation plan should 'ensure that future options for amenity or tourism uses of the lands are not discounted, having regard to the Council's aspirations to develop eco-tourism projects throughout the county'. Further, it was	BnM acknowledged the response. Consultation is ongoing.

Organisation	Summary of Response by Stakeholder	BnM Response
	highlighted that archaeological impacts associated with rehabilitation of Killeen bog, given the rich archaeological heritage of the lands, should be assessed. Recognition of the Littleton Labyrinth projects is welcomed by Tipperary County Council. The rehabilitation of the bog should have regard to future access and way-leaves for access and services of the adjacent Lisheen Mines National Bioeconomy Campus. Tipperary County Council provided information on the relevant policies and objectives within the Tipperary County Council's Climate Action Plan 2024-2029 that aligned with peatland restoration. Other information focused on the Tipperary Decarbonising Zone, and how peatland restoration would benefit such decarbonisation. Other information was provided on the council's policies on Land-use, Land-use Change and Forestry (LULUCF). It notes that the 'management of agricultural ecosystems, such as grasslands and peatlands' are emitters of CO2 and 'the management of agricultural ecosystems, such as grasslands and peatlands 'an important area for climate mitigation measures'. 'For example, alternative land management measures such as raising the water table in existing pastures and peatlands, new crop types, forestry etc could make this sector a net remover of GHGs'. The submission notes that 'BnM is to be commended for its decarbonisation programme aimed at reducing the carbon emissions from its activities. This programme supports the National policy position and objective of achieving a transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050'. The submission requests: • 'stakeholder collaboration to deliver concerted efforts towards carbon and GHG emissions reductions within the DZ, which can lead the way for wider application across Tipperary'. • 'BnaM are requested to considered if there are opportunities for collaboration with stakeholders, including Tipperary County Council, as part of the delivery of their PCAS programme'. • 'The Mid-Tipperary Decarbonising Zone is within the JTF area and thus there are opportunities to engage local communities, including those previously employed in the peat harvesting industry, in areas related to training and upskilling and sustainable local job creation'. • 'BnaM are requested to consider the referring of the Mid-Tipperary DZ in their relevant publications and projects. In particular to include details on the Mid-Tipperary Decarbonising Zone in the relevant Rehabilitation Plans and associated Map Books'. • 'The strategic location of the national Bioeconomy Campus (Irish Bioeconomy Foundation) at Lisheen should be noted and it is requested that BnaM consider the vision for the National Bioeconomy campus as part of their overall plans in the Mid-Tipperary DZ areas'. 'BnaM are requested to consider, given the particular role of the national DZ programme in emissions reduction, if there is an opportunity to monitor the changes in carbon emissions from a current baseline within the Killeen bog and report on reduced the carbon emissions in support of the national objective of achieving a transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. Thus, the rehabilitation plans can explicitly state how emissions will be monitored and reported. Such reporting will also support Tipperary County Council objectives for supporting moves towards low-carbon communities within the Decarbonising Zone'.	
An Taisce	In their submission, An Taisce welcomed 'any efforts made to rehabilitate and eventually restore Ireland's network of heavily degraded bog lands. This is crucial in the context of the intertwined biodiversity and climate emergencies, and the crucial carbon sequestration function of healthy bogland alongside other ecosystem services'. Expressed that peatlands should not be subject to future development 'which could have negative ecological impacts in terms of hydrological regime, critical wildlife habitat, carbon sequestration function and other ecosystem services'	BnM acknowledged the response. Consultation is ongoing.

Organisation	Summary of Response by Stakeholder	BnM Response
	An Taisce 'highlight an example of a rare species returning to a naturally regenerating bog on BnM lands, namely the Crane, which was absent as a successfully breeding species in Ireland for hundreds of years.2 This demonstrates the positive and regenerative cascading effects across an ecosystem when it is devoid of intensive industrial activity and allowed to regenerate and eventually flourish. We submit that the subject rehabilitation should be considered with these benefits in mind, and that resumption of any type of industrial activity should be excluded within boglands with the highest restoration potential or in those which have already been rehabilitated/restored'. Queries if Coillte conifer plantation forestry could be included in the rehabilitation plan. For Bord na Mona to prevent small-scale illegal turf cutting within the subject site. A request for continuous ecological monitoring to be carried out at the site to ascertain its full ecological value and potential. An Taisce 'welcome the commitment to bunding as a measure throughout the peatland restoration proposal, which is recognised by stakeholders such as the NPWS and IPCC as effective for rewetting purposes'. Concerns were raised 'about the effects of drought and wildfire risk, as well as excess rainfall events and subsequent flooding effects'.	

APPENDIX X: ARCHAEOLOGY



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Code of Practice

5. To arrange for the delivery or collection of the stray find, as directed by the Duty Officer of the National Museum of Ireland.

6. To complete the Report of Discovery of Archaeological Object(s) in Bogs (Appendix V), as directed by the Duty Officer of the National Museum of Ireland.

7. To maintain a file of all stray finds and associated documentation and provide copies to the Project Archaeologist.

8. To provide assistance, where required, to the Department during archaeological surveys.

9. To provide assistance, where required, to Bord na Móna's Consultant Archaeologists, during investigation and mitigation of monuments.

10. To report to the Bord na Móna members on the Archaeology Management Liaison Committee any planned developments or new activities on cutaway peatland areas within his/her group of bogs.



1. Purpose

The purpose of this procedure is to describe the arrangements within Bord na Móna (BnM) for the identification, protection and reporting of archaeological material, including stray finds and known archaeological features.

All objects, sites or monuments, no matter how fragmentary, are important elements of our national heritage. The protection of archaeological resources is a legal requirement and forms part of Bord na Móna's environmental and cultural heritage responsibilities.

This procedure also sets out operational controls to ensure that archaeological features and their associated buffer zones are protected during rehabilitation activities.

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2. Procedure

2.1 Archaeological Awareness

1. Verify whether any known archaeological monuments or constraints exist within the proposed work area prior to commencing works. These can be identified using the BnM GIS system, including the relevant PCAS layers and associated field maps.
2. All archaeological locations and their associated buffer zones shall be clearly marked on the bog in advance of any rehabilitation activities, irrespective of whether works are planned within those areas. The Survey Team will endeavour to mark all zones prior to commencement of rehabilitation works on a given bog; however, this is subject to the availability of survey resources. Where features are located in areas that are unsafe to access (e.g. water-covered areas), physical marking is not required.
3. These markings must be installed prior to machinery entering the field where all rehabilitation measures are taking place.
4. Archaeological features located within fields will be marked by the Survey Team using a visible red "X" to clearly alert operators to the presence of an archaeological constraint. These features are typically accompanied by a 20 m buffer zone, which may restrict access to up to three adjacent fields.
5. Operators must not drive over or across these markers, including when moving between work areas. Operators must navigate around the marked locations and their associated buffer zones.
6. If operators are observed driving over archaeological markers in order to move to the next work area, this must be reported to the Site Supervisor or **Archaeological Liaison Officer** immediately so corrective action can be taken.
7. Archaeological areas and their associated buffer zones must not be used for machine travel, idle travel, turning, or equipment positioning.

2.2 Stray Finds Procedure

1 Be vigilant at all times. Objects or traces of structures may be found:

- on field surfaces
- in drain faces
- on bog margins
- caught within the mechanics of machinery.

2 If a n object is discovered:

- Leave it in place if it is safe to do so.
- Note its position.
- Immediately contact the **Archaeological Liaison Officer**, who will assess the situation and contact the Duty Officer of the National Museum of Ireland where required.

3 Resist the temptation to investigate the find spot further, as this may disturb fragile archaeological deposits.

4 If the object has already been dislodged or is in imminent danger:

- Remove it carefully.
- Mark the find location.
- Report it immediately to the **Archaeological Liaison Officer**.

5 Objects made of **wood, leather or textile**, particularly those removed from peat, must be kept in conditions similar to those in which they were found. This may include:

- packing the object in peat, or
- placing waterlogged items in a clean basin of water and sealing the container.

6 Do not attempt to clean or remove peat from the object.

7 If **timbers, gravel, stones or other materials that may form part of a man-made structure** are discovered:

- mark the location
- report immediately to the **Archaeological Liaison Officer**
- do not expose the structure further.

8 Report anything that appears **unnatural or unusual in the bog**. The **Archaeological Liaison Officer** will determine whether the find requires referral to the relevant authorities.

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3. Important Note

Our archaeological heritage is a finite and non-renewable resource. Once a site is destroyed, its information is lost forever. Protecting archaeological remains allows us to better understand our past, our landscape and the people who lived here before us.

All Bord na Móna staff and contractors must therefore ensure that archaeological features, buffer zones and potential stray finds are treated with care and protected at all times during operations.

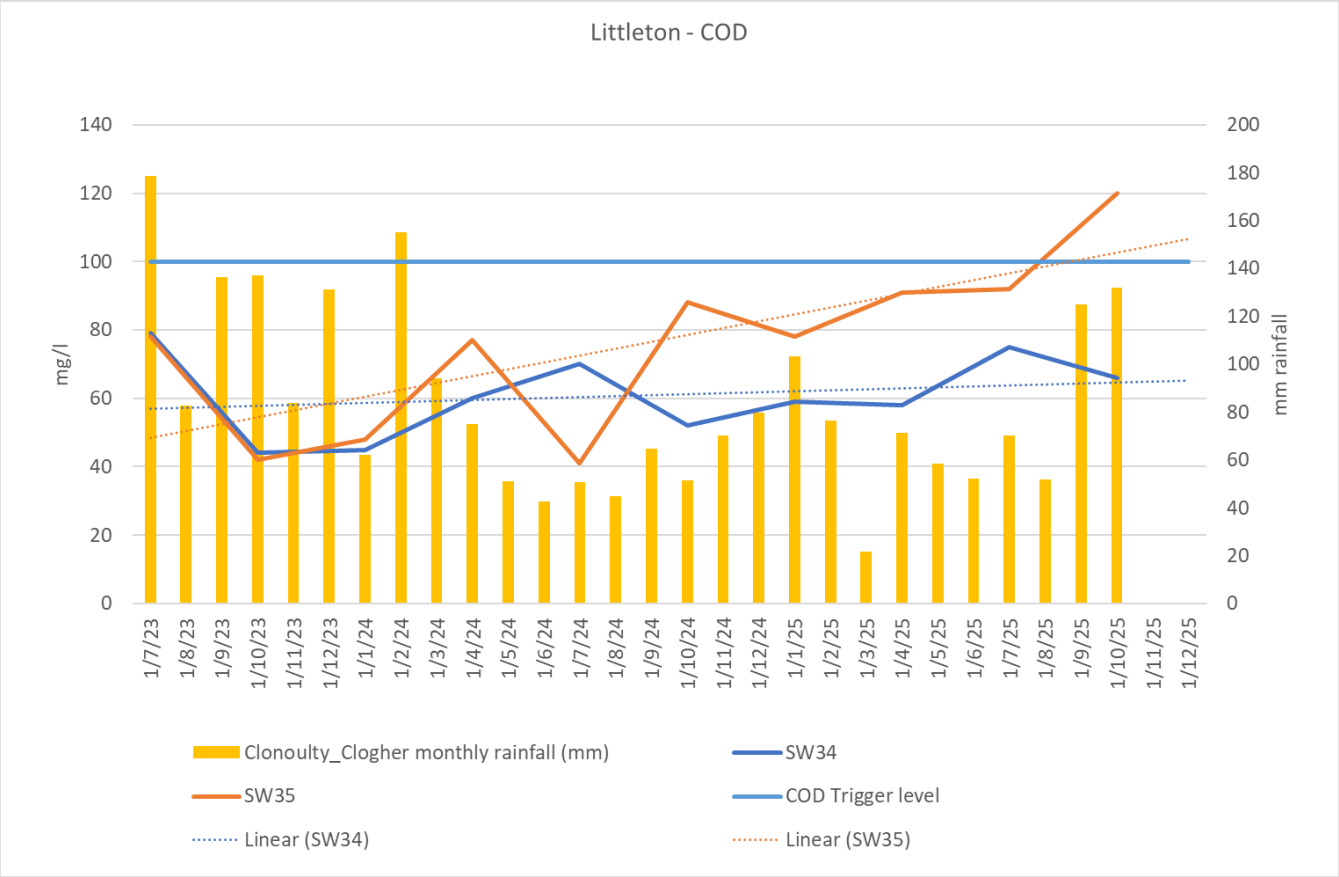
Your Archaeological Liaison Officer is Enda McDonagh

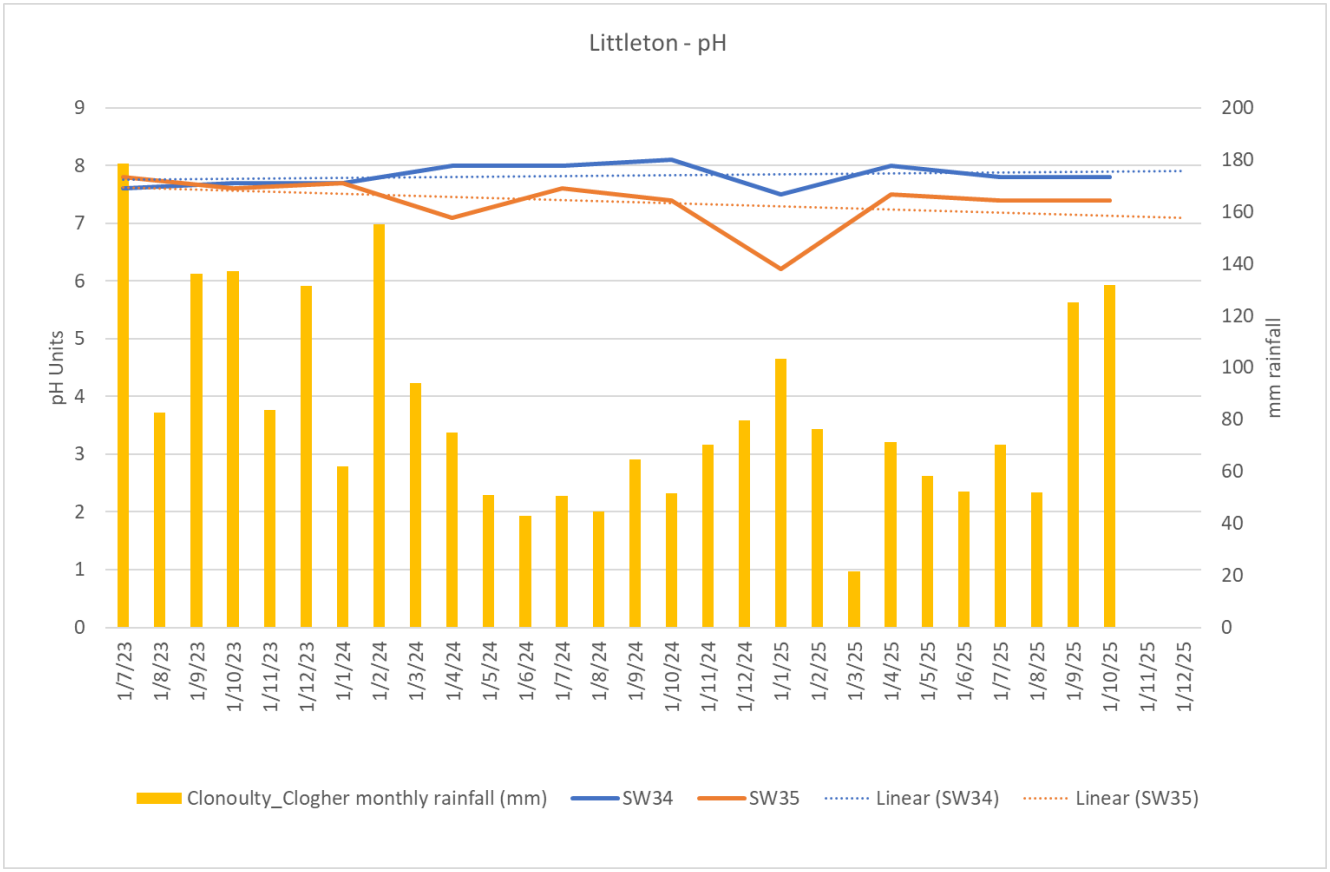
Revision Index			
Revision	**Date**	**Description of change**	**Approved**
1	13/19/2020	First release	EMcD
1	24/11/2025	Change to logo and header	SG

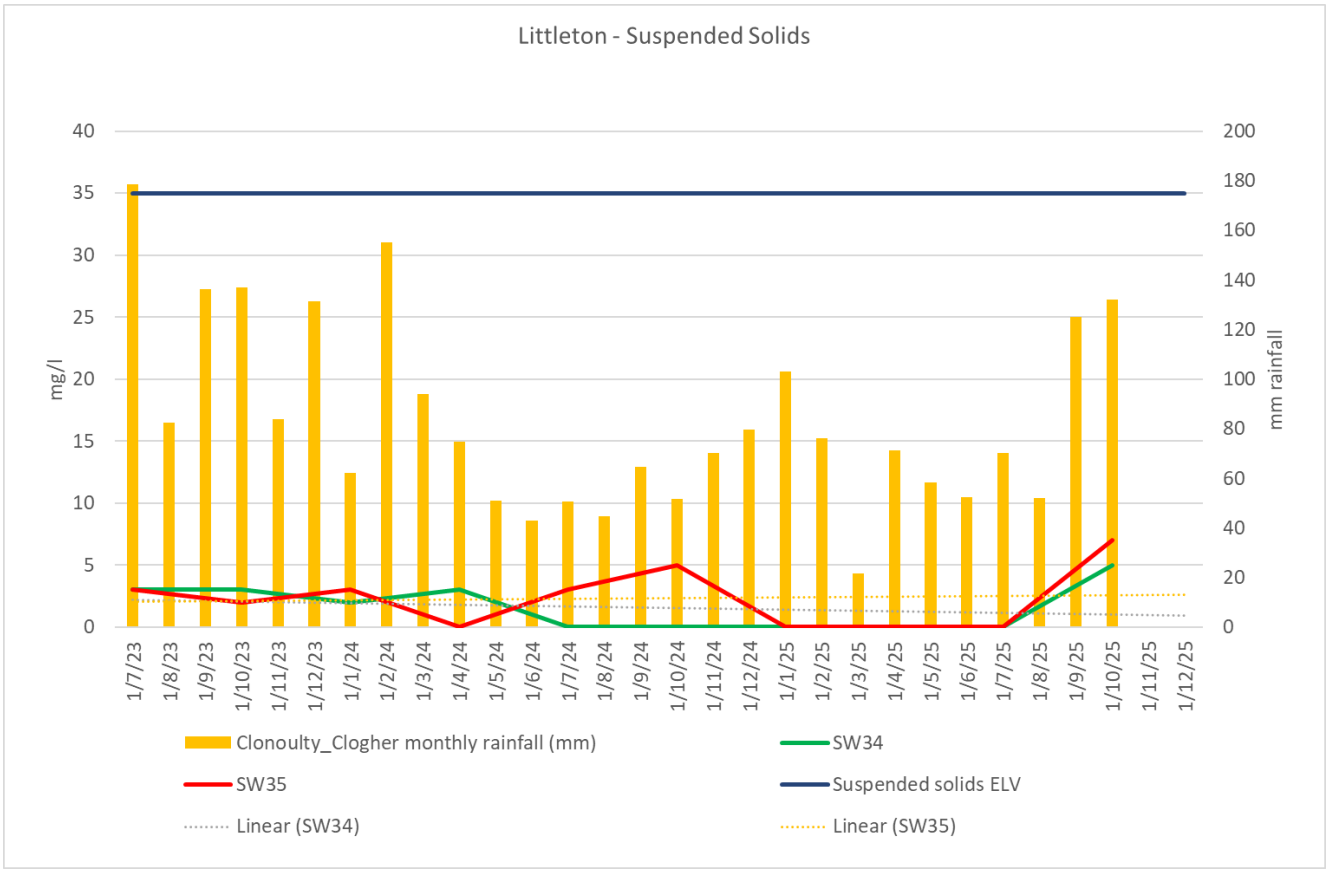
2	10/03/2026	Addition of Archaeological Awareness and change of SOP Title	EMcD

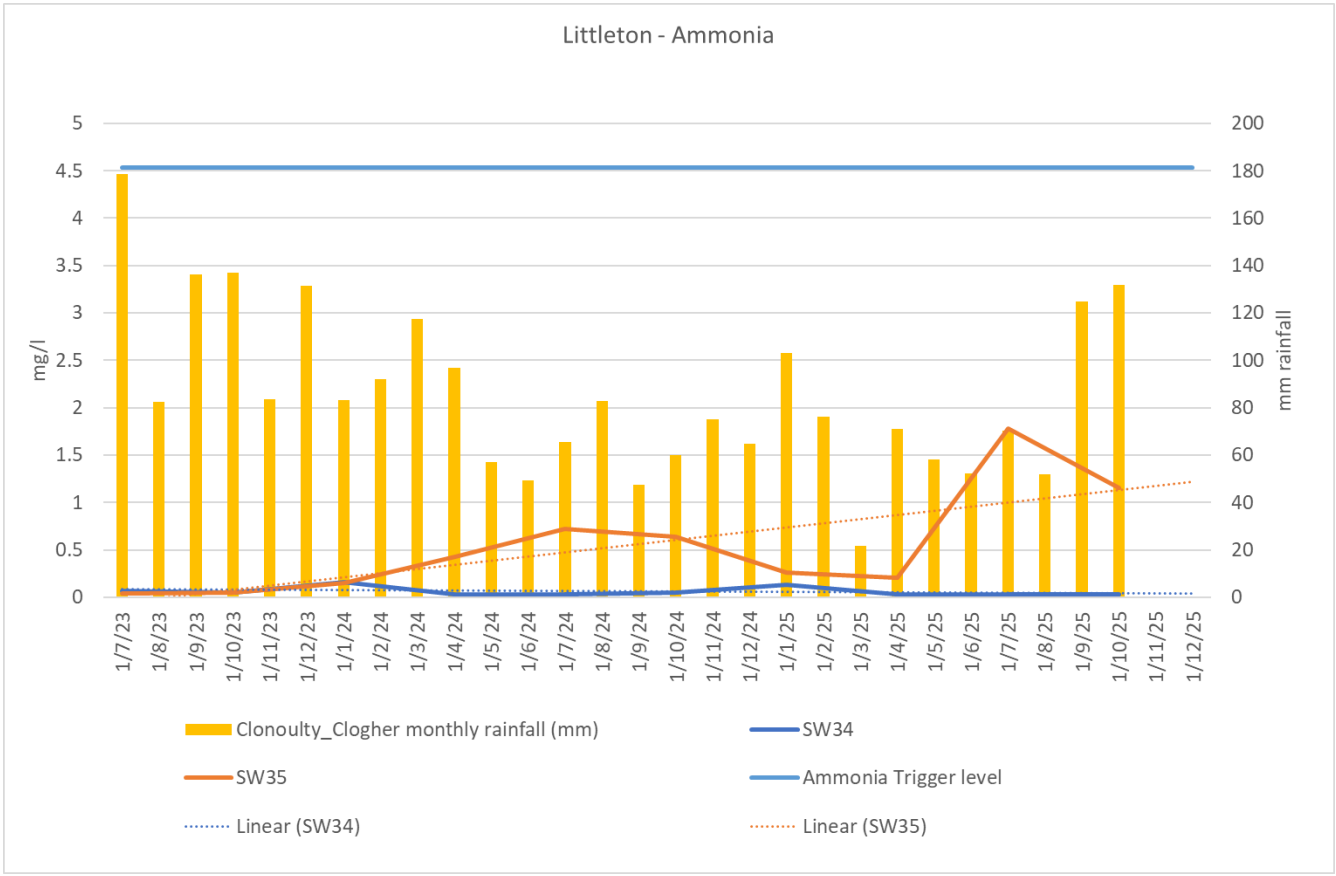
APPENDIX XI: WATER QUALITY MONITORING RESULTS FOR LITTLETON BOG

Water quality monitoring (2023-2025) indicates that suspended solids are well below the emission limit value and continuing to trend downwards, with ammonia trending upwards in one of the sites, as is COD, which would be indicative of naturally occurring nutrient, associated chemical oxygen demand and higher water retention periods. They remain below the associated trigger levels with one exceedance at SW 35 in October 2025. Ammonia levels would be indicative of background levels and would be expected to stabilise as the bogs rehabilitates further and bare peat gets revegetated. The following graphs provide the water quality monitoring results for 2 of the surface water emission locations at Littleton from July 2023 onwards.




Littleton - pH
pH Units
mm rainfall
0
1
2
3
4
5
6
7
8
9
0
20
40
60
80
100
120
140
160
180
200
1/7/23
1/8/23
1/9/23
1/10/23
1/11/23
1/12/23
1/1/24
1/2/24
1/3/24
1/4/24
1/5/24
1/6/24
1/7/24
1/8/24
1/9/24
1/10/24
1/11/24
1/12/24
1/1/25
1/2/25
1/3/25
1/4/25
1/5/25
1/6/25
1/7/25
1/8/25
1/9/25
1/10/25
1/11/25
1/12/25
Clonoulty_Clogher monthly rainfall (mm)
SW34
SW35
Linear (SW34)
Linear (SW35)


Littleton - Suspended Solids
mg/l
mm rainfall
0
5
10
15
20
25
30
35
40
0
20
40
60
80
100
120
140
160
180
200
1/7/23
1/8/23
1/9/23
1/10/23
1/11/23
1/12/23
1/1/24
1/2/24
1/3/24
1/4/24
1/5/24
1/6/24
1/7/24
1/8/24
1/9/24
1/10/24
1/11/24
1/12/24
1/1/25
1/2/25
1/3/25
1/4/25
1/5/25
1/6/25
1/7/25
1/8/25
1/9/25
1/10/25
1/11/25
1/12/25
Clonoulty_Clogher monthly rainfall (mm)
SW34
SW35
Suspended solids ELV
Linear (SW34)
Linear (SW35)


Littleton - Ammonia
mg/l
mm rainfall
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
200
180
160
140
120
100
80
60
40
20
0
1/7/23
1/8/23
1/9/23
1/10/23
1/11/23
1/12/23
1/1/24
1/2/24
1/3/24
1/4/24
1/5/24
1/6/24
1/7/24
1/8/24
1/9/24
1/10/24
1/11/24
1/12/24
1/1/25
1/2/25
1/3/25
1/4/25
1/5/25
1/6/25
1/7/25
1/8/25
1/9/25
1/10/25
1/11/25
1/12/25
Clonoulty_Clogher monthly rainfall (mm)
SW34
SW35
Ammonia Trigger level
Linear (SW34)
Linear (SW35)

FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

APPENDIX 8

Cutaway Bog Decommissioning and Rehabilitation Plan for Longfordpass Bog



Longford Pass Bog

Cutaway Bog Decommissioning and Rehabilitation Plan

2026

This document seeks to address the requirements of Condition 10.2 of IPC Licence Ref. P0499-01:

> "*The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of the cutaway boglands within the licensed area.*"

This licence condition requires BnM agree with the EPA the measures that will provide for rehabilitation, i.e., stabilisation of Longford Pass Bog upon cessation of peat production and compliments the licence requirement to decommission the site.

***Rehabilitation** generally comprises site stabilisation with natural colonisation with or without targeted management.*

Industrial peat production has now fully ceased at Longford Pass Bog. A rehabilitation programme was carried out at Longford Pass Bog in 2018-2021.

BnM have defined the key rehabilitation outcome at Longford Pass Bog as environmental stabilisation, re-wetting and setting the bog on a trajectory towards development of naturally functioning peatland and wetland habitats.

Any consideration of any other future after-uses for Longford Pass Bog will be conducted in adherence to the relevant planning guidelines and consultation with relevant authorities and will be considered within the framework of this rehabilitation plan.

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NON-TECHNICAL SUMMARY

- BnM (formerly known as Bord na Móna) is updating the rehabilitation plan prepared in 2018 for Longford Pass Bog, located in Co. Tipperary.
- BnM Industrial peat harvesting ceased at Longford Pass Bog in 2017.
- Longford Pass Bog was in industrial peat production since 1940 and had a pump-based drainage regime. Longford Pass Bog initially was developed as a sod turf production site. It then supplied peat to the Littleton Briquette Factory.
- In 2017, BnM announced the closure of the Littleton Briquette factory and the cessation of industrial peat production in a number of cutaway bogs within the Littleton Bog Group.
- A rehabilitation programme was carried out by BnM between 2018-2021 (Phase 1) with targeted drain-blocking through the site.
- Large bare peat areas were re-wetted with intensive drain-blocking.
- Longford Pass Bog had a partially pumped drainage regime until the pump was permanently depowered in 2022 so pumping across the site has now ceased. This has contributed to the development of large wetlands.
- Some areas were constrained from rehabilitation and re-wetting including boundary drains and some areas adjacent to the new motorway.
- The site is now developing a mosaic of pioneer cutaway habitats and there are large areas of open shallow water. Bare peat cover is shrinking as pioneer vegetation cover establishes. Other sections that ceased peat extraction at an earlier stage have more developed vegetation and pioneer habitats.
- This rehabilitation plan has been prepared by BnM as part of obligations to carry out peatland rehabilitation via an IPC licence issued by the Environmental Protection Agency.
- The key objective of peatland rehabilitation is environmental stabilisation. This means developing habitats and vegetation back onto the bare peat (putting a “skin” back onto the peat), and minimising effects to downstream waterbodies.
- In general, soggy ground conditions are preferred. This means the remaining peat is wet and that plants that prefer wetter conditions, like Bog Cotton will thrive.
- Some sections with deeper residual peat have the capacity to regrow *Sphagnum* moss again, where there are suitable hydrological conditions. *Sphagnum* is a key species for restoring naturally functioning raised bog conditions.
- A project called the BnM/Coillte Midlands Native Woodland Project has been proposed for Longford Pass Bog. The main objective of this proposed project is to develop and enhance native woodland in areas of cutaway that would remain naturally dry, developing woodland habitat that would naturally complement wetland and peatland habitats already developing across the bog. This proposed project has not been approved by the Forest Service yet. The area proposed as part of the native woodland project will be constrained from additional rehabilitation.
- Rehab measures included drain-blocking and other measures to raise water levels to the surface of the bog, thus encouraging the development of naturally functioning cutaway peatland habitats.
- These rehabilitation measures were planned by a team consisting of expert ecologists and engineers. It is a guiding principle of BnM rehabilitation planning that no actions or activities will be undertaken that would negatively impact on adjacent land. No boundary drains will be blocked. Water will still leave the bog via the existing outlets.

- Peatland rehabilitation of this bog will bring a range of benefits to the local community via improvements to the local landscape and is also important for supporting national policies and strategies in relation to reduction of carbon emissions from these peatlands, supporting biodiversity and improvements to water quality.
- Rehabilitation at Littleton Bog will result in improved water quality, climate benefits with the reduction of carbon emissions and enhanced biodiversity when the residual peat is re-wetted.
- Many BnM bogs cannot be restored back to raised bog, as the majority of peat has been removed and the environmental conditions have been modified. However other natural habitats will develop, like poor fen and regenerating wet deep peat vegetation communities (on deeper peat); and wetlands with Reedbeds and Birch woodland on shallower peat. In time a naturalised peatland can be developed.
- It will take some time for vegetation and habitats to fully develop at Longford Pass Bog, and a peatland ecosystem to be restored. However, it is expected that any bare peat will be developing pioneer habitats after 5-10 years.
- The development of a range of habitats at Longford Pass Bog will support biodiversity including plants, insects, birds and mammals. This includes some species that are rare and protected in the wider landscape.
- This peatland rehabilitation plan does not consider future after-use or development. BnM continually reviews its land-bank to consider future commercial or industrial developments. Any other proposed development will be planned in adherence to relevant planning guidelines and will consider the rehabilitation and the condition of the bog.

1. INTRODUCTION

BnM (formerly known as Bord na Móna) operates under IPC Licence issued and administered by the EPA to extract peat within the Littleton Bog Group (Ref. P0499-01) (see Appendix I for details of the bog areas within this Group). As part of Condition 10.2 of this licence, a rehabilitation plan must be prepared for permanent rehabilitation of the boglands within the licensed area. Longford Pass Bog is located in Co. Tipperary.

This document seeks to address the requirements of Condition 10.2 of IPC Licence Ref. P0499-01:

> "*The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of the cutaway boglands within the licensed area.*"

It also seeks to outline measures to optimise climate action and other ecosystem services benefits, mainly through hydrological management.

This plan is a specific rehabilitation plan for the bog and outlines:

- Description of site management and status.
- Main issues and approaches to rehabilitation.
- Consultation to date with interested parties.
- Interaction with other policy and legislative frameworks (Appendix V).
- The planned rehabilitation goals and outcomes.
- The scope of the rehabilitation plan.
- Criteria which define the successful rehabilitation and key targets to validate rehabilitation.
- Proposed rehabilitation actions.
- Proposed timeframe to implement these measures.
- Budget and Costings.
- Associated aftercare, maintenance, and monitoring.

Note: This plan should be read in conjunction with the accompanying Map book.

Longford Pass Bog is part of the Littleton Bog Group. BnM made the decision to close this brickette factory in 2017 and to rehabilitate the Littleton Bog group. Longford Pass Bog was rehabilitated by BnM during 2018-2021.

This updated rehabilitation plan supersedes the previous rehabilitation plan prepared and submitted to the EPA in 2018.

1.1 Constraints and Limitations

This document covers the area of **Longford Pass Bog** shown in drawing number *BNM- ECO-26-11-01: Site Location Map*.

Some margins of Longford Pass Bog were developed as private mature conifer forestry. This is mapped as a constraint.

There are no known rights of way around the margins of Longford Pass Bog. None of the rehabilitation proposed as part of this plan will affect these rights of way. Part of the site has been leased to Thurles Gun Club and this area has been mapped as a constraint on the rehabilitation plan.

Rehabilitation in other areas of the bog may also be constrained due to other property issues or archaeological features. There is known archaeology at Longford Pass Bog.

2. METHODOLOGY

This rehabilitation plan was developed with a combination of desktop and field surveys, consultations with internal and external stakeholders. The development of this rehabilitation plan considered recently published guidance issued by the EPA, '*Guidance on the Process of Preparing and Implementing a Bog Rehabilitation Plan' (EPA, 2020)*.

The ecological information and site information collected during the BnM ecological baseline survey, additional confirmatory site visits (covering the period 2010 to 2025 inclusive) and monitoring and desktop analysis forms the basis for the development of the rehabilitation plan for the bog, along with:

- Experience of 40 years of research on the after-use development and rehabilitation of the Bord na Móna cutaway bogs (Clarke, 2010; Bord na Móna, 2016)
- Significant international engagement during this period with other counties in relation to best practice regarding peatland rehabilitation and after-use through the International Peat Society and the Society for Ecological Restoration (Joosten & Clarke, 2002; Clarke & Rieley, 2010; Gann *et al*., 2019)
- Consultation and engagement with internal and external stakeholders
- GIS Mapping
- BnM drainage surveys
- Bog topography and LIDAR data
- Previous research studies on site
- Hydrological modelling

2.1 Desk Study

The desk study involved collecting all relevant environmental and ecological data for the study area. The development of the rehabilitation plan also takes account of research, experience and engagement with other peatland restoration and rehabilitation projects and peatland research including Irish, UK, European and International best practice guidance (full citations are in the References Section):

- Anderson *et al*. (2017). An overview of the progress and challenges of peatland restoration in Western Europe.
- Barry, T.A. *et al*. (1973). A survey of cutover peats and underlying mineral soils. Soil Survey Bulletin No. 30. Dublin, Bord na Móna and An Foras Taluntais.
- Bonn *et al*. (2017). Peatland restoration and ecosystem services- science, policy and practice.
- Carroll *et al*. (2009). *Sphagnum* in the Peak District. Current Status and Potential for Restoration. Moors for the Future Report No 16.
- Clark & Rieley (2010). Strategy for responsible peatland management.
- Eades *et al*. (2003). The Wetland Restoration Manual.
- Farrell & Doyle (2003). Rehabilitation of Industrial Cutaway Atlantic Blanket Bog, NW Mayo, Ireland.
- Gann *et al*. (2019). International Principles and Standards for the practice of Ecological Restoration.
- Hinde *et al*. (2010). *Sphagnum* re-introduction project: A report on research into the re-introduction of *Sphagnum* mosses to degraded moorland. Moors for the Future Research Report 18.
- Joosten & Clarke (2002). Wise Use of mires and peatlands – Background and Principles including a framework for Decision-making.

- Lindsay (2010). Peatbogs and Carbon: a Critical Synthesis to Inform Policy Development in Oceanic Peat Bog Conservation and Restoration in the Context of Climate Change.
- Mackin *et al*. (2017). Best practice in raised bog restoration in Ireland. Irish Wildlife Manuals, No. 99. National Parks and Wildlife Service,
- McBride *et al*. (2011). The Fen Management Handbook (2011), Scottish Natural Heritage.
- McDonagh (1996). Drain blocking by machines on Raised Bogs. Unpublished report for National Parks and Wildlife Service.
- NPWS (2017a). National Raised Bog Special Areas of Conservation management plan. Department of Arts, Heritage and the Gaeltacht.
- Pschenyckyj et al., (2021). Optimising Water Quality Returns from Peatland Management while Delivering Co-Benefits for Climate and Biodiversity. An Fóram Uisce.
- Quinty & Rochefort (2003). Peatland Restoration Guide, second edition. Canadian *Sphagnum* Peat Moss Association and New Brunswick Department of Natural Resources and Energy.
- Regan*, et. al.* (2020). Ecohydrology, Greenhouse Gas Dynamics and Restoration Guidelines for Degraded Raised Bogs. EPA Research Report. Prepared for the Environmental Protection Agency by Trinity College Dublin.
- Renou-Wilson *et al*. (2011). BOGLAND - Sustainable Management of Peatlands in Ireland. STRIVE Report No 75 prepared for the Environmental Protection Agency.
- Schouten (2002). Conservation and Restoration of Raised Bogs: Geological, Hydrological and Ecological Studies. Dúchas - The Heritage Service of the Department of the Environment and Local Government, Ireland.
- Thom, *et al*. (2019). Conserving Bogs – The Management Handbook, second edition.
- Wheeler & Shaw (1995). Restoration of Damaged Peatlands – with Particular Reference to Lowland Raised Bogs Affected by Peat Extraction.
- Wittram *et al*. (2015). A Practitioners Guide to Sphagnum Reintroduction. Moors for the Future Partnership.

Additional on-line resources were also incorporated into the desk study, including:

- Littleton Integrated Pollution Control Licence
- Littleton Annual Environmental Reports
- Review of the National Biodiversity Data Centre (NBDC) webmapper
- Inland Fisheries Ireland (IFI) Reports
- Environmental Protection Agency database (www.epa.ie)
- EPA Guidance on Requests for Alterations to a Licensed Industrial or Waste Activity
- Birdwatch Ireland online data (including I-WeBS and CBS datasets; www.birdwatchireland.ie)
- Geological Survey of Ireland - National Draft Bedrock Aquifer map
- Geological Survey of Ireland - Groundwater Database (www.gsi.ie)
- Historic Environment Viewer at https://webgis.archaeology.ie/historicenvironment/
- National Parks & Wildlife Services Public Map Viewer (www.npws.ie)
- Water Framework Directive catchments.ie/maps/ Map Viewer (www.catchments.ie)
- OPW Indicative Flood Maps (www.floodmaps.ie)
- CFRAM Preliminary Flood Risk Assessment (PFRA) maps (www.cfram.ie)
- River Basin Management Plan for Ireland 2022-2027

- BnM Annual Report 2025
- Spatial data in respect of Article 17 reporting, available online at https://www.npws.ie/maps-and-data/habitat-and-species-data/article-17

2.2 Consultation

A number of stakeholders have been identified during the course of BnM's rehabilitation and Biodiversity Action Plan activities and are contacted during the rehabilitation planning process for their views. See Section 4.

2.3 Field Surveys

BnM carried out a baseline ecological survey of all of its properties in 2009-2012 and developed habitat maps. As part of this exercise, Longford Pass Bog was surveyed in 2010, with additional surveys in 2012 and 2017. Habitat maps were updated in 2018. Habitat maps have been updated, where required. This rehabilitation plan is informed by the original baseline survey as well as subsequent confirmatory site walk-over surveys and visits, and updates to baseline data.

Habitat mapping followed best practice guidance from Smith *et al.* (2011). Map outputs including all habitat maps and target notes were produced using GIS software application packages (ArcGIS). General marginal habitats and other habitats that had not been modified significantly by industrial peat extraction were classified using Fossitt *et al*. (2000). Plant nomenclature for vascular plants follows Stace (2019), while moss and liverwort nomenclature follow identification keys published by the British Bryological Society (2010).

A detailed ecological survey report for Longford Pass Bog is contained in Appendix II.

3. SITE DESCRIPTION

Longford Pass (Pope's Bog) is located in Co. Tipperary, 5km south-west of Urlingford. The overall area of the bog is 278 hectares.

The bog is situated adjacent to the old N8 Cork-Dublin road and the newer M8 motorway bisects the southern part of the site. It is bordered to the south by a minor road (that separates Longford Pass from the adjacent Littleton BnM property).

Industrial peat extraction ceased at Longford Pass Bog in 2017. Rehabilitation took place at Longford Pass Bog between 2018-2021. Bare peat areas were targeted with intensive drain-blocking. Some outfalls were adjusted with hydrological management to raise water-levels across the site.

More intensive rehabilitation was carried out across the bare peat areas. Field drains were regularly blocked. Pumping ceased in the northern section of the site after 2022. This has contributed the development of large wetlands to the east of the site. The pump at Longford Pass Bog is now permanently depowered and scheduled for removal.

There has been a relatively long period of industrial peat extraction at Longford Pass Bog. Up until 2017, the majority of the site was managed for industrial milled peat production. This bog had a partially pumped drainage regime. The bog became cutaway on a phased basis and there were older cutaway sections that were already vegetating and developing cutaway habitats. A BnM industrial railway passes through Longford Pass Bog along the eastern margin and connected this former industrial peat production bog and bogs to the north to the wider Littleton network, where milled peat was formerly transferred to Lanespark Briquette factory.

Several small areas have underlying glacial sub-soil where the bog was completely cutaway. Large wetlands were developing across some of the older cutaway where drainage was breaking down naturally.

An area of cutaway bog to the south of the railway has been developing prior to 1995 and split into two sections by the construction of the new M8 motorway between 2006-2010. The northern side of the motorway is re-colonising naturally with a mosaic of habitats including Birch scrub, Heather and poor fen. Part of the site south of the motorway was reclaimed as farmland by a local farmer under licence from BnM.

There are also two separate sections of bog at the southern end of the site that lie south of the old N8 Dublin-Cork road and adjacent to Littleton bog to the south. These sections were never developed for milled peat production. The former BnM industrial railway passes along the eastern side of the western section. These areas were used for private sod peat production in the past. The eastern section is also used by Littleton Shooting Club.

There are no EPA mapped watercourses flowing through the bog. The Drish_050 River (EPA Name: TEMP_16V04 EPA code: 16V04) is located along of the southern boundary of the western section of Longford Pass Bog.

See Drawing number *BNM-ECO-26-11-01: Site Location Map*, included in the accompanying Mapbook[1] , which illustrates the location of Longford Pass Bog in context to the surrounding area.

[1] Cutaway Bog Decommissioning and Rehabilitation Plan – Killeen Bog Map Book

3.1 Status and Situation

3.1.1 Site history

Industrial peat production commenced in Longford Pass Bog in the 1940's and continued until 2017. Longford Pass Bog initially was developed as a sod turf production site. Longford Pass Bog then formerly supplied peat to the Littleton Briquette Factory. In 2017, BnM announced the closure of the Littleton Briquette factory and the cessation of industrial peat production in the majority of cutaway bogs within the Littleton Bog Group.

The site was bisected by the construction of the N8 Motorway in 2000s. A small area between the new motorway and R639 (old main road) was leased and developed for farmland in 2018.

Part of the site north of the M8 re-vegetated, with pioneer vegetation maturing and developing a mosaic of typical cutaway habitats with Birch woodland predominating. Parts of the site (younger cutaway) naturally colonising for > 10 years and developed a mosaic of cutaway habitats. Some areas of shallow peat cutaway on site are developing pioneer cutaway vegetation communities with deep peat areas slower to colonise. Natural re-colonisation of the cutaway was effective.

Rehabilitation commenced at Longford Pass Bog in 2018, with a program of drain blocking. A large part of the site has been re-wetted.

Pumping continued at the site until 2022, when the pumping ceased operation.

3.1.2 Current land-use

Industrial peat extraction has now completely ceased. Pumping at the bog continued until 2022. Pumps have been permanently depowered and are scheduled for removal. Some remedial drainage was carried out to manage water-levels via gravity flow.

The former BnM industrial railway is still present on site with the exception of the western portion of it. The remaining former railway is expected to be decommissioned shortly.

Part of the site north of the M8 is developing into a woodland. Older cutaway areas have continued to develop and mature, and are also responding to the re-wetting around the site. Areas that were bare peat in 2018 are colonising with pioneer vegetation however some areas of bare peat still remain.

Longford Pass is proposed to be included in the Coillte/BnM Midlands Native Woodland Project (Midlands Native Woodland - Coillte). The main objective of this proposed project is to develop and enhance native woodland in areas of cutaway that would remain naturally dry, developing woodland habitat that would naturally complement wetland and peatland habitats already developing across these sites. This proposed project is currently being considered for consent by the Forest Service. Areas proposed to be included in Native Woodland Project have also been mapped as constrained land in the rehabilitation plan.

The Littleton Labyrinth is a proposed amenity project that was also developed during this period, in partnership with Tipperary County Council. Initially a feasibility study was carried out that looked at developing greenway amenity, and associated facilities across the Littleton Bogs, and potential links to existing infrastructure and local villages/towns. The first phase of this project was developed by Tipperary County Council in 2023/24, and a greenway was constructed on former BnM industrial railway though Killeen and Lanespark Bog to link with Loch Doire Bhile amenity, north of Lanespark. There potential to extend the greenway development through Longford Pass Bog.

A small section of broadleaf forestry borders the western section of bog. The eastern section of the southern parcel of the site has been leased to Thurles Gun Club.

Tipperary County Council has currently included the area of Longford Pass Bog within the Mid-Tipperary Decarbonising Zone in the Tipperary Climate Action Plan.

3.1.3. Socio-Economic conditions

BnM has historically been a vital employer for the rural communities in the Irish midlands. BnM compiled a report on the role of peat extraction in the midlands historically in which they report that in 1986, by the end of BnM's Third Development Programme, a total of twenty-three work locations had been established around the country. The company had an average employment of approximately 4,688 in the mid 1980's, with a peak employment of 6,100 during the production season, which placed it among the country's largest commercial employers. The importance of such levels of employment were largely due to its regional concentration in the Midlands and the lack of alternative employment opportunities in these areas at the time.

According to the Energy Crop Socio-Economic Study undertaken by Fitzpatrick Associates in 2011, there were an estimated 1,443 jobs supported by the peat-to-power industry in Ireland at the time, some 81% of which were located in the catchment areas of the three peat-fired generating stations (Lough Ree, West Offaly, and Edenderry Power Stations). These constituted jobs in the plants and in peat extraction, jobs indirectly supported in upstream supply industries and jobs induced through the trickle-down effects of the wages and salaries of those supported directly or indirectly. These job numbers have now declined with the cessation of peat extraction.

In respect of Longford Pass Bog, jobs included in the above study would have included those to facilitate extraction of peat at this bog and associated processing and transfer to Littleton Briquette Factory.

As the primary employer in many Midland counties, BnM played a central role in building communities through several initiatives, including development and construction of local housing complexes, education bursaries, support of local sporting clubs, the provision of community gain funds, charity programmes and the provision and building of amenity areas.

Employment numbers have now significantly declined following the cessation of industrial peat extraction at this bog.

3.2 Geology and Peat Depths

3.2.1 Sub-soil geology

The underlying geology[2] at Longford Pass Bog comprises four different bedrock units; Waulsortian Limestones (Dolomitised massive fine-grained limestone), Crosspatrick Formation (Pale-grey cherty crinoidal limestone), Waulsortian Limestones (Massive unbedded lime-mudstone) and Ballysteen Formation (Dark muddy limestone, shale).

The underlying geology of Longford Pass is predominantly Dolomitised massive fine-grained limestone (Waulsortian Limestones). The northwestern section is made up of Pale-grey cherty crinoidal limestone (Crosspatrick Formation (CDCROS)). The southern section is made up of a small section of Massive unbedded

[2] https://www.gsi.ie/en-ie/data-and-maps/Pages/Bedrock.aspx

lime-mudstone (Waulsortian Limestones (Code: CDWAUL)) and the furthest south section of the site which borders Littleton bog is made up of Dark muddy limestone, shale (Ballysteen Formation (Code: CDBALL)).

The Dolomitised Waulsortian formation is classified as a regionally important aquifer (Rkd) because of its diffuse karstification, while the unbedded lime-mudstone Waulsortian formation is classified as a regionally important (Rk) as it is subject to karstification.

The Crosspatrick Formation is considered a Locally Important Aquifer - Bedrock which is Generally Moderately Productive (Lm). The Ballysteen Formation is also considered a Locally Important Aquifer Bedrock but is Moderately Productive only in Local Zones (LI).

Quaternary subsoil mapping maps most of the Longford Pass area as cut peat, surrounded by a mix of Deep poorly drained mineral - Derived from mainly calcareous parent materials as well as Deep well drained mineral - Deep well drained mineral.

3.2.2 *Peat type and depths*

The majority of Longford Pass Bog has very shallow peat remaining (0-1m) particularly within the western and southern section of the former production area. A significant portion of Longford Pass is considered to have relatively deep residual peat, and the eastern section of the bog is estimated to have between 2m - 5m of peat remaining.

3.3 Key Biodiversity Features of Interest

3.3.1 Current habitats

The most common vegetation communities/habitats[3] present at Longford Pass Bog include:

- Poor fen vegetation (pJeff/pEang) (in mosaic) (Codes refer BnM classification of pioneer habitats of production bog. See Appendix II).
- Dry heath (dHeath) (in mosaic)
- Open Birch scrub (oBir) (in mosaic)
- Dry/wet grassland (gMol)
- Temporary open water (TOW) (wet sections)
- Bare peat
- Riparian zones (old silt ponds and culverted streams/drains along motorway embankment)
- Small wetland pools with open water and poor fen vegetation (pRos)
- Access routes (Acc) (railways, travel paths and gravel paths with associated scrub/dry heath verges)

Cutaway habitats are continuing to develop across Longford Pass Bog. Birch scrub and woodland has significantly expanded across the site on some of the drier, more elevated ground on the western side. The eastern and northern sections all have natural basins that are developing as wetlands. Pumping at this site ceased in 2022 and this has supported the expansion of wetlands. Pioneer vegetation is continuing to develop across the site and the bare peat cover is rapidly shrinking.

[3] Codes refer BnM classification of pioneer habitats of production bog

In general, cutaway habitats are developing according to the underlying environmental conditions and reflect the varying topography, hydrology and peat depths. Drain-blocking and other rehabilitation measures have had a significant positive impact across the site in re-wetting residual peat and enhancing the development of wetland habitats. Ceasing pumping has also had a significant impact and has supported extensive wetland development across the site.

	More established vegetation in older cutaway to the west of the site. Typical Bog Cotton-dominated poor fen reflecting shallow cutaway peat
	Pioneer vegetation developing on bare peat in 2018. Pioneer vegetation quickly establishing across bare peat areas after the peat extraction activity ceasing. Re-wetting not implemented in this area at the time.
	Typical Birch scrub and Rush-dominated pioneer vegetation developing in the central part of the site.

	2019. Northern part of the site. Site now re-wetted. Pumping reduced.

See Drawing number *BNM-ECO-26-11-17: Habitat Map (2018)*, included in the accompanying Mapbook, which illustrates the habitats at Longford Pass Bog. See also Table 3.1 for photographic plates of habitats (taken in 2018 and 2019).

3.3.2 Species of conservation interest

Biodiversity is continually adapted to the changing conditions across the site. A number of species of conservation interest utilize the habitats available at Longford Pass Bog. The following is a summary of the records of these species available within both BnM and NBDC records.

- Multiple mammal species have been recorded as part of BnM surveys on or in close proximity to the bog including Mountain hare (*Lepus timidus*) (AR1719 code: 1334), Badger (*Meles meles*), Rabbit (*Oryctolagus cuniculus*) and Red Fox (*Vulpes vulpes*).
- Bird species of conservation interest recorded from the bog include the BOCCI[4] red listed species Snipe (*Gallinago gallinago*) and Meadow Pipit (*Anthus pratensis*). The BOCCI amber listed species Willow Warbler (*Phylloscopus trochilus*), Mallard (*Anas platyrhynchos*) and Swallow (*Hirundo rustica*) have also been recorded at Longford Pass Bog.

Peatland rehabilitation can result in increases on the relative abundance or proportion of species of conservation interest utilising bogs post rehabilitation. This can include red or amber listed species of breeding waders along with wintering species including Swans and other wildfowl. Re-wetting has created new habitat for species such as Black-Headed Gull. Wetland birds (Mallard, Teal and small flocks of Whooper Swan) continue to use the more established wetlands on the western side of the site.

3.3.3 Invasive species

The NBDC holds records for the high impact invasive species Japanese Knotweed (*Fallopia japonica*), which has been recorded between the southern boundary of Longford Pass and the northern boundary of Littleton bog. NBDC also holds records for the invasive mammal species Fallow deer (*Dama dama*) within Longford Pass bog.

A broad range of common garden escapes are occasionally present around the margins of BnM bogs, and although spatial overlap with the rehabilitation areas is expected to be limited, these will be treated in line with best practice during all activities.

3.4 Statutory Nature Conservation Designations

There are no European Designated Sites i.e. Special Areas of Conservation (SAC) or Special Protection Areas (SPA) in close proximity (i.e. within a 5km radius at minimum) to Longford Pass Bog.

The nearest European Designate Sites to Longford Pass bog are as follows:

- The Loughans SAC (000407)- 7.4km east
- Spahill and Clomantagh Hill SAC (000849)- 9.4km northeast
- River Barrow and River Nore SAC (002162) (002162)-11.4km southeast
- Galmoy Fen SAC (001858)- 11.8km northeast
- Lower River Suir SAC (002137) - 12.1km southwest
- Cullahill Mountain SAC (000831)- 13.8km northeast

There are also no NHA's (Natural Heritage Areas) or pNHA's (proposed Natural Heritage Areas) within a 5km radius of Longford Pass Bog. A number of non-statutory designated sites which overlap with European designated

[4] https://birdwatchireland.ie/app/uploads/2021/04/BOCCI4-leaflet-2-1.pdf

sites occur in the wider area. There are also a number of pNHA's that occur within 10km of Longford Pass bog including:

- Kilcooly Abbey Lake (000958) – 5.9km southeast,
- The Loughans pNHA (000407) - 7.4km east,
- Spahill and Clomantagh Hill pNHA (000849) - 9.4km northeast and
- Cabragh Wetlands pNHA (001934) – 9.6km west.

See drawing *BNM-ECO-26-11-23: Proximity to Designated Sites* in the accompanying map book.

3.4.1 Other Nature Conservation Designations

The Ramsar Convention entered into force in Ireland on 15th March 1985. Ireland currently has 45 sites/wetlands designated as Wetlands of International Importance (Ramsar Sites). These cover a surface area of 66,994ha.

There are no Ramsar sites in close proximity to Longford Pass Bog with the closest located in excess of 35km.

3.5 Hydrology and Hydrogeology

Longford Pass Bog forms part of the Suir Catchment (Catchment ID: 16) as defined by the EPA under the Water Framework Directive (WFD). The bog lies within the Suir_SC_040 sub catchment. Longford Pass had a partially pumped system, but the pump has been permanently depowered since 2022 and is scheduled for removal. Longford Pass now has a gravity-based drainage system. Some remedial drainage was carried out to manage water-levels via gravity flow to the north under the road.

The bog contains two drainage pathways and discharge locations, discharging to streams (via silt ponds), which eventually flow into the River Suir.

The Dolomitised Waulsortian formation is classified as a regionally important aquifer (Rkd) because of its diffuse karstification, while the unbedded lime-mudstone Waulsortian formation is classified as a regionally important (Rk) as it is subject to karstification.

The Crosspatrick Formation is considered a Locally Important Aquifer - Bedrock which is Generally Moderately Productive (Lm). The Ballysteen Formation is also considered a Locally Important Aquifer Bedrock but is Moderately Productive only in Local Zones (LI).

An aquifer is an underground body of water-bearing rock or unconsolidated materials (gravel or sand) from which groundwater can be extracted in useful amounts. GSIs Aquifer classes are divided into three main groups based on their resource potential, and further subdivided based on the type of openings through which groundwater flows. There are nine aquifer categories in total. Locally important aquifers are capable of supplying locally important abstractions (e.g. smaller public water supplies, group schemes), or good yields (100-400 m^3/d). This data gives an indication of sub-surface deposits (bedrock and unconsolidated materials) in terms of their groundwater resource potential and dominant groundwater flow type.

Regionally important aquifers are those in which the network of fractures, fissures and joints, through which groundwater flows, is well connected and widely dispersed, resulting in a relatively even distribution of highly permeable zones. There is good aquifer storage and groundwater flow paths can be up to several kilometres in

length. There is likely to be substantial groundwater discharge to surface waters ('baseflow') and large (>2,000 m^3/d), dependable springs may be associated with these aquifers.

The majority of the cutover bog is located in an area mapped by GSI as of low groundwater vulnerability with some peripheral sections having moderate groundwater vulnerability (GSI Mapviewer). Groundwater vulnerability for the area surrounding Longford Pass Bog ranges from predominantly high to extreme vulnerability. Groundwater Vulnerability is a term used to represent the intrinsic geological and hydrogeological characteristics that determine the ease with which groundwater may be contaminated by human activities. Groundwater vulnerability maps are based on the type and thicknesses of subsoils (sands, gravels, glacial tills (or boulder clays), peat, lake and alluvial silts and clays), and the presence of karst features. Groundwater is most at risk where the subsoils are absent or thin and, in areas of karstic limestone, where surface streams sink underground at swallow holes. These data indicate there is generally low risk of any groundwater contamination occurring at this site. Groundwater Vulnerability is typically used to indicate the susceptibility to groundwater pollution.

3.6 Emissions to surface-water and watercourses

Longford Pass Bog has 2 treated surface water outlets (SW17 and SW18) from previously active peat extraction catchment, which discharge to the Drish 20 river (EPA Code: IE_SE_16D020068) to the north east of the site and to the TEMP_16V04 stream, a tributary of the Drish 16 river (IE_SE_16D020200) from the west of the site. The Drish 16 river is classed as Poor water quality status and the TEMP_16V04 stream is classed as Good water quality status (River Waterbody WFD Status 2019-2024).

The locations of silt ponds, associated surface water emission points and those being monitored and sampled as part of the IPC licence are detailed on the *BNM-ECO-26-11-02 Longford pass: Structures and Sampling*, along with the water quality map (*BNM-ECO-26-11-WQ01: Water Quality Map*) in the associated map book.

Peat extraction is identified as a pressure in the third cycle of the River Basin Management Plan (Water Action Plan for Ireland) all be it not a significant pressure. The main emission limit value (ELV) associated with these bogs is 35mg/l suspended solids, with trigger levels for ammonia of 3.6 mg/l and COD 100mg/l.

An analysis of the results over a number of years of the IPC licence environmental monitoring of some of the discharges from these bogs (appendix XII), indicates that results were under the Emission Limit Value for Suspended Solids 100% of this period, with a similar level of compliance for COD and under the trigger level for Ammonia, all trending in the right direction.

Ammonia averaged 0.5mg/l and ranged from 0.015 to 2.9 mg/l with Suspended Solids ranging from 2 to 39 mg/l and averaging 7.52mg/l.

Rehabilitation of cutaway peatland is closely linked with control of emissions. One of the criteria for successful rehabilitation is stabilisation through re-vegetation, which will stabilise all substrates and in turn remove the need for further silt control measures. This site is already vegetated in some areas. Re-wetted peat also aids the primary objective of stabilizing peat, as when peat is re-wetted it is not vulnerable to wind erosion. Re-wetted peat and the development of wet peatland habitats can also act as sinks for silt and mobile peat, and increases additional retention time for solids, and the peatland vegetation can quickly stabilise this material within blocked drains on site (by acting like constructed wetlands).

Water quality of water discharges from restored peatlands normally improves as a result of bog restoration measures and the restoration of natural peatland processes (Bonn *et al*., 2017). Bog restoration is also expected to improve water attenuation of the site as the drains are blocked, slowing water movement and water release from the site. Restored peatlands help slow the release of water and aid the natural regulation of floods downstream (Minayeva *et al*., 2017). The draft National River Basin Management Plan (NRBMP) 2022-2027 (DHPCLG, 2022) is the key national plan for Ireland to achieve the objectives of the Water Framework Directive (WFD). The NRBMP outlines how key actions such as the BnM peatland rehabilitation is expected to have a positive impact on water quality and help the NRBMP deliver its objectives in relation to the WFD.

Water will still discharge from designated emission points when rehabilitation at Longford Pass has been completed. This discharge will have improving water quality and there will be increased wetland attenuation, meaning slower release of water. This is expected to have a positive impact on status of downstream water bodies. While water quality improvements assist in meeting water frameworks directive ambitions and targets, they can also improve drinking water sources in applicable catchments with drained peatlands and the potential for associated reduction in treatment requirements at drinking water treatment facilities.

Decommissioning and Rehabilitation Programme Water Quality Monitoring.

Initial quarterly results are included in Appendix XII, for Longford Pass.

BnM have been providing the Local Authority Water Programme (LAWPRO) with details of the surface water emissions points associated with this bog.

This is necessary to ensure that there is alignment with the WFD monitoring programme and that where possible, the monitoring programme will enable any improvements in water quality or establishing trends to be quantified against any available WFD monitoring data. It will also enable the periodic sharing of data which will inform the monitoring reports, success criteria and enable LAWPRO under the Water Framework Directive to track any changes in pressures and be aware of changes in water chemistry.

Monitoring results will be maintained, trended every six months and reported on each year and as required, as part of the requirement to report on Condition 10.1 of the IPC Licence on Bog Rehabilitation in the Annual Environmental Report, and will be provided to LAWPRO and the EPA as required to inform progress and national monitoring requirements under the WFD.

These results will also be available in May each year as a requirement of the Annual Environmental Report at www.epa.ie.

The parameters to include as per condition 6.2 of the IPC Licence include monthly monitoring for pH, Flow, Suspended Solids, Total Solids, Total Phosphorus, Total Ammonia, Colour & COD.

3.7 Fugitive Emissions to air

None.

The bog is no longer in industrial peat production. Rehabilitation of the cutaway peatland will seek to re-wet the dry peat where possible and re-vegetate all areas (whether wet or dry). Collectively, ceasing industrial peat production, re-wetting and re-vegetating will minimise any risk of emission to air from dust.

3.8 Carbon emissions

Irish peatlands are a huge carbon store, containing more than 75% of the national soil organic carbon (Renou-Wilson *et al.* 2012). Peatland drainage and extraction transforms a natural peatland which acts as a modest carbon sink (taking in 0.1 to 1.1 t of carbon as CO_2-C /ha/yr) into a cutaway ecosystem which is a large source of carbon dioxide (releasing 1.3 to 2.2 t of carbon as CO_2-C /ha/yr) based on Tier 1 Emission factors (Evans *et al*. 2017). Renou-Wilson *et al.* (2018) reported losses of between 0.81 – 1.51 CO_2-C /ha/yr from drained peatlands located in Ireland.

Re-wetting of dry peatlands will increase methane emissions (Gunther *et al*. 2020) as a consequence of the anoxic conditions within the peat body that provide a suitable environment for the microbial breakdown of plant litter and root exudates. Tanneberger *et al.* (2021) describes how peatland management has to choose between CO_2 emissions from drained peatlands or increased methane (CH_4) emissions from rewetted industrial peatlands. However, when radiative effects and atmospheric lifetimes of both GHG gases are considered and modelled, postponing rewetting increases the long-term warming effect of continued CO_2 emissions (Gunther *et al*. 2020). This means the increase in methane due to rewetting of dry peatlands is still negated by the CO_2 emissions reductions. Further, Wilson *et al.* (2022) confirmed the benefit of rapid rewetting to achieve strong carbon reductions and potentially altering the warming dynamics from warming to cooling depending upon the climate scenario.

It is expected that Longford Pass Bog will become a reduced carbon source following rehabilitation. The potential of any cutaway site to develop as a carbon sink in the longer-term depends on the success of the rehabilitation measures, the extent of development of *Sphagnum*-rich or other peat-forming habitats, the balance of carbon fluxes from different cutaway habitats and future climatic conditions. Much of this bog is expected to develop wetland habitats on shallow peat with open water, reed swamp and fen habitats with alkaline emission factors and a smaller proportion will develop as regenerating wet deep peat vegetation on deep peat areas. Birch woodland is expected to develop on the drier mounds and along peripheral headlands.

3.9 Current ecological rating

(Following NRA (2009) Evaluation Criteria)

The majority of this site is deemed to be of low ecological value due to the dominance of bare peat or open water on bare peat as a result of industrial peat production. Areas still dominated by bare peat are rated as having a low-moderate local ecological value in general. These bare peat and associated pioneer habitats are currently deemed to be of **local importance, lower value.**

A proportion of the site has higher biodiversity value in a local context and is rated as **Local Importance (higher value)** as the site supports developing semi-natural habitats and pioneer cutaway habitats such as the wetland area, Birch woodland and some of the marginal remnant habitats are also included in this higher ecological rating.

4. CONSULTATION

4.1 Consultation with interested parties

There has been ongoing consultation about rehabilitation, biodiversity and other general issues over the years about Littleton bog group, including Longford Pass Bog, with various stakeholders in relation to:

- General consultation with range of stakeholders at annual Bord na Móna Biodiversity Action Plan review days 2010-2018.
- Open consultation with range of stakeholders at annual BAP review days 2010-2018.
- Consultation with the North Tipperary Heritage Forum during the period 2010-2015.
- General consultation at a local community event in Littleton in Dec 2016.
- General consultation with Tipperary County Council and other stakeholders in relation to the Littleton Labyrinth Project Feasibility Study.
- Ongoing engagement with Lisheen Mine.
- Archaeological Liaison Committee (National Museum of Ireland & Dept of Culture Heritage and the Gaeltacht).
- Midlands & East Regional WFD Operational Committee (River Basin Management Plans).
- Ongoing consultation with Coillte – proposed Coillte/BnM Midlands Native Woodland Project.
- Ongoing consultation with Slieve Ardagh Rural Development Group.
- General consultation with Tipperary County Council and other stakeholders in relation to the Midlands Network Trail.
- Specific Consultation with Tipperary Climate Action Officer and Biodiversity Officer relating to the Tipperary Climate Action Plan and the Mid-Tipperary Decarbonising Zone.

There was specific consultation and engagement about rehabilitation of the Littleton Bog group, including Longford Pass, with various stakeholders during the period 2018-2021:

- Lisheen Mine.
- Irish Peatland Conservation Council.
- NPWS (site visits).
- Tipperary County Council (2018).
- Tipperary Heritage Forum.
- Kilkenny County Council.
- Consultation with members of the local community.
- Consultation with local community groups.
- Slieve Ardagh Rural Development.
- National University of Galway.
- Limerick Institute of Technology.
- Irish Wildlife Trust.
- Environmental Protection Agency.
- Birdwatch Ireland.
- Birdwatch Ireland Tipperary Branch.
- Forest Service.
- Coillte.

To inform the original Plan (Phase 1 Rehabilitation), both national and local stakeholders, and local representatives of national bodies (such as Regional National Parks and Wildlife Service staff) and relevant offices in County Councils (such as the Heritage or Environmental Offices) were contacted. Any identified local interest groups were informed of the opportunity to engage with this rehabilitation plan and were invited to submit their comments or observations in relation to the proposed rehabilitation (Phase 1) at Longford Pass Bog or the programme in general

4.2 Issues raised by Consultees

Some issues were raised by consultees during the consultation process for the rehabilitation plan for Longford Pass Bog and for response to consultation for rehabilitation across the Littleton Bog Group between 2018-2025, and these are summarised below.

NPWS welcomed the restoration and rehabilitation measures proposed for the Littleton Bog Group in 2018, particularly where it could result in the development of Annex I active raised bog or would significantly aid Ireland in meeting its commitments under the EU Habitats Directive.

NPWS (2018) suggested that BnM consider more fully the potential for forward-planning during production phases of its operation so that the topography of the commercial fields could be engineered so as to best facilitate rewetting of the sites. Consideration should be given to reprofiling works within the Littleton Bog Group.

NPWS (2018) highlighted the potential for more intensive rehabilitation during initial consultation and the potential for larger project opportunities focusing on GHG emission reduction creation of peat-forming habitats, biodiversity enhancement, other ecosystem services enhancement/restoration. The use of bunding at several sites was discussed.

Birdwatch Ireland (2018) welcomed the proposed restoration/rehabilitation of the Littleton Bog Group and highlighted need to take consideration of bird nesting season when carrying out works, particularly for Lapwing and Curlew.

IPCC (2018) requested clarity around the scope of sites included in the Littleton Rehabilitation Programme and recommended that priority be given to raised bog restoration, where possible. IPCC were concerned about the fact that milled peat extraction was projected to continue at Killeen Bog (in 2018, subsequently ceased in 2021). The IPCC were also unclear about the aims and objectives for sites with biodiversity interest. The IPCC recommended the use of contouring as a methodology to improve re-wetting outcomes.

The IPCC (2018) highlighted that monitoring of changes to water-levels as a result of rehabilitation could be improved using piezometers and queried the frequency of ecotope mapping. NPWS (2018) recommended that ongoing research into the interaction between rehabilitation measures and carbon emissions is prioritized so as to better inform future rehabilitation plans.

The Irish Farmers Association (IFA), The Department of Agriculture Food and the Marine, individual local residents and ICMSA queried likely impacts relating to the finalisation of several bog rehabilitation plans in 2021 and 2022. They raised concerns based on the proposed re-wetting in relation to flooding on adjoining lands and, specifically, with regards to the maintenance of drains. In previous submissions, the IFA also raised the issue of Health and Safety in relation to raising water levels as well as possible impacts on land and property prices.

Several individuals who owed adjacent land to bogs within the Littleton Bog Group expressed concerns about the potential impacts of re-wetting to their land (2018).

Several individuals and organisations expressed interest in the development of amenity and greenways through the Littleton Bog Group (2018). IPCC highlighted a bog area at the north of Littleton Bog that had been used for educational purposes in the past.

Tipperary County Council (2018) highlighted the need to avoid any unnecessary deterioration in the quality and quantity of ground and surface waters. Tipperary County Council (2018) also suggested that peatland water levels and flow regimes should be restored to as close to the natural reference conditions as possible.

Queries about future nature conservation designations were also submitted by IPCC, discussed with IWT and with Birdwatch Ireland Tipperary Branch. Birdwatch Ireland, Tipperary Branch (2018) suggested further management of sites for to improve habitat for breeding wetland birds.

The Irish Farmers Association (IFA) (2021-2022) expressed concerns regarding the future ownership of the BnM bogs subject to rehabilitation, in submissions made on earlier rehabilitation plans. They expressed a desire for contingency planning for potential future ownership of designated bogs so as to ensure no negative impacts arise on adjacent properties from any new ownership.

University of Galway (2017) were interested in developing an INTEREG Project on peatland sites and were discussing the inclusion of several BnM sites in this proposed project. (This subsequently became the CarePeat INTEREG Project and Cavemount Bog Co. Offaly was included in the project, which is now completed).

Limerick Institute of Technology (LIT) were interested in developing a project on peatlands and paludiculture and were discussing the potential availability of land within the Littleton Bog Group. This proposal ultimately did not develop into a project on BnM lands.

An individual highlighted the presence of several rare Bee Orchid varieties along the BnM railway at Longford Pass.

Tipperary County Council developed a Climate Action Plan in 2024 and have developed an area called the Mid Tipperary Decarbonizing Zone. This Decarbonising Zone within the local authority area is to act as a test bed for a range of climate mitigation, adaptation and biodiversity measures in a specifically defined area through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective (Tipperary County Council 2024).

4.3 BnM response to issues raised during consultation and rehabilitation 2018-2021

BnM carried out extensive consultation and engagement with all interested parties during 2018-2021.

Consultees during the Phase 1 rehabilitation (2018-2021), including NPWS and the IPCC, suggested the use of more intensive rehabilitation measures such as contouring and bunding. These ultimately were beyond the scope of the rehabilitation budget allocated to these sites by BnM at the time (2018-2021). PCAS is now an opportunity to carry out some of these suggested measures (e.g. bunding, recontouring) through the Littleton Bog Group as part of Phase 2 rehabilitation and various additional phase 2 rehab has been proposed for Templetouhy, Carrickhill, Derryville, Baunmore, Inch, Ballybeg, Derryvilla and Killeens. This additional Phase 2 rehab is dealt with by the 2025 update to the Ballybeg-Lanespark-Derryvilla Rehabilitation Plan 2025.

Sphagnum inoculation is one measure that was initially suggested by IPCC (in 2018) for use at Ballysorrell to support raised bog restoration. This measure was ruled out initially by BnM in 2018 due to its relatively high cost, lack of resources and other logistical issues such as lack of suitable local *Sphagnum* donor sites. Since then, BnM has developed the Peatlands and People LIFE Project (Home | Ireland's Climate Action Catalyst | Peatlands &

People) and one of the main objectives of this project on BnM land is to inoculate approx. 800 ha of suitable residual deep peat with *Sphagnum* plugs to speed up the trajectory of development of *Sphagnum*-rich embryonic bog vegetation. So far, 350 ha has been inoculated across midlands bogs. The future selection of sites within the Littleton Bog Group for *Sphagnum* inoculation will be dependent on availability of resources for planting. Site visits to Lanespark and Littleton (2025) has also shown that *Sphagnum* is present on site and is recolonising and spreading in certain areas quickly in response to the re-wetting in 2018-2021.

Rehabilitation measures should positively impact the water quality in receiving water bodies through enhancing the water attenuation across rehabilitated sites. The robust water monitoring programme implemented will be used to assess water quality leaving rehabilitated sites at designated points. BnM also advised that decommissioning of silt ponds will only be carried out when the EPA are satisfied that adequate stabilisation of the bog has been achieved and silt ponds are no longer required. This decommissioning will be determined by water quality results and EPA approval.

During Phase 1 of the rehabilitation across Littleton Bogs, individual landowners who expressed concerns were met on site. No boundary drains were blocked and, in several instances, (Ballybeg) some internal drainage was modified to allow water draining from external lands to flow through these sites unhindered. It is the intention of BnM that the re-wetting of the bogs will be carried out in such a manner that does not impact on third party lands. Where it is deemed that blocking of a shared drain would cause any adjoining lands to be adversely affected, this will be avoided, and alterations made to the rehabilitation plan. In general, drains around the margins of the bog will not be blocked. It is intended that rehabilitation measures will not significantly alter the existing topographical catchments and that the spine of the drainage networks, those which the upstream catchments drain through, will be retained by BnM. If issues arise with boundary drainage in the future, then these will be dealt with by BnM.

BnM and Tipperary County Council carried out a feasibility study of the potential for amenity development across the Littleton Bog Group called Littleton Labyrinth in 2018-2020. The first phase of this amenity has been completed, and a greenway has been constructed at Killeen Bog to Loch Doire Bhile. A further extension (Phase 2) is proposed at Ballybeg and Derryvella Bog. There is potential for future extensions to this greenway network in the future. These greenways can be integrated into the rehabilitated landscape with no significant impact to the previous re-wetting.

Rehabilitation plans are not intended to plan out future management of these sites. Known or planned after-use (way-leave, Littleton Labyrinth greenway feasibility) has been incorporated, where possible, in the rehabilitation plan. Peatland rehabilitation is not intended to constrain future land-uses, where they are compatible with this environment.

BnM will continue to manage their land bank into the future. As industrial peat production has now ceased on BnM lands and rehabilitation measures carried out, a regular drainage maintenance programme will not be required or carried out as would have been the case in the past. However, if issues arise with the BnM internal drainage system that affects upstream or downstream landowners, then these issues will be addressed by BnM.

BnM considers issues regarding estate security, fire risk, invasive species and water pollution of utmost importance. BnM intends to maintain security and manage fire risk over the entirety of the estate. In this regard, rehabilitation should have no detrimental impact on these issues. Regarding water pollution, BnM is regulated by the EPA and as such adheres to the strict water pollution measures laid out by the same. BnM will consider future opportunities for biodiversity enhancement, subject to availability of resources and funding, where possible. BnM intends to maintain a “No Shooting” policy on Longford Pass Bog.

It is the intention of BnM to keep secure the estate and ensure that any anti-social behaviour that occurs within the estate is reported and dealt with by the appropriate authorities.

5. REHABILITATION GOALS AND OUTCOMES

The rehabilitation goals and outcomes outline what BnM want to achieve by implementing the rehabilitation. These include:

- Meeting conditions of IPC Licence.
- Stabilisation or reduction in water quality parameters of water discharging from the site (e.g. suspended solids).
- Reducing pressure on receiving waterbodies that have been classified as *At Risk* from peatlands and from peat extraction, via stabilization or improving water-quality from this bog, and therefore, reducing pressures.
- Optimising hydrological conditions for **climate action benefits.**
- Optimising hydrological conditions for the development of reed swamp and fen on shallow more alkaline peat and other subsoils, or *Sphagnum*-rich regenerating wet deep peat vegetation communities on deep residual peat, where present.
- Optimising hydrological conditions for the protection of exposed archaeological structures, their retention in situ and preservation into the future.
- Integrating rehabilitation measures with existing land-use (e.g. conifer forestry). Supporting other potential future land-uses. Integrating rehabilitation measures with future potential land-uses on site. It is not proposed to carry out any rehabilitation actions to change or negatively affect any infrastructure.
- The main goal and outcome of this plan is the successful rehabilitation (environmental stabilisation) of peatlands used for industrial peat production at the bog in a manner that is acceptable to both external stakeholders and to BnM and which optimise climate action and other ecosystem service benefits.

The rehabilitation goals and outcomes take account of the following issues.

- BnM have carried out rehabilitation at Longford Pass Bog in 2018-2021 (Phase 1 rehabilitation). Significant drain-blocking and re-wetting was carried out during this phase.
- It will take some time for stable naturally functioning habitats to fully develop at Longford Pass Bog. This will happen over a longer timeframe than the implementation of this rehabilitation plan.
- Re-wetting residual peat will initially maintain and enhance the carbon storage capacity of the bog. There is scientific consensus that restoration of hydrology in damaged bog can improve carbon storage, water storage and attenuation and help support biodiversity both on the site and in the catchment (See Section 3.8). This will reduce carbon emissions from the site from a larger carbon source to a smaller carbon source. In time, the site has the capacity to develop in part as a carbon sink.
- It is not expected that the cutover bog in the former production area has the potential to develop active raised bog (ARB) analogous to the priority EU Habitats Directive Annex I habitat within the foreseeable future (c.50 years). Longford Pass Bog has some sections with relatively deep residual peat across the site, with sections of the bog containing shallow residual peat and proportions of the bog cutaway with exposed gravel ridges. Therefore, there are areas that have potential to develop *Sphagnum*-rich habitats in this timeframe. Nevertheless, re-wetting across the entire bog, will improve habitat conditions of the whole bog. Other peatland habitats such as wetland or scrub/woodland will develop in a wider mosaic that reflects underlying conditions.

- Rehabilitating former industrial peat production bog will also in the longer-term support other ecosystem services such as such the development of new habitat to support biodiversity and local attenuation of water flows from the bog.
- WFD status in receiving water bodies can be affected by peatlands and peat extraction but is also affected by other sources such as agriculture. In addition, receiving water bodies that are assessed as At Risk from peatlands and from peat extraction are likely to have several contributary sources of impacts (private peat extraction and BnM). Reducing pressures due to former peat extraction activities at Longford Pass Bog will contribute to stabilising or improving water quality status of receiving water bodies in general. Ultimately, improving the WFD status of the receiving water body will depend on reducing pressure from a range of different sources, including peatlands in general (private and BnM).
- Re-wetting in general will benefit the future preservation of most known and unknown archaeological features.

6. SCOPE OF REHABILITATION

The principal scope of this enhanced rehabilitation plan is to rehabilitate the bog. This is defined by:

- The area of Longford Pass Bog within the rehabilitation footprint.
- EPA IPC Licence - Ref. P0499-01. As part of Condition 10.2 of this licence, a rehabilitation plan must be prepared for permanent rehabilitation of the boglands within the licensed area.
- The eastern portion of the site has rewetted bare deep residual peat. Much of the remainder of the site already has establishing pioneer cutaway habitats with some areas having well-developed habitats. Targeted drain-blocking, wetland outfall management and deep peat measures are the most suitable rehabilitation approach for the site.
- BnM have defined the key goal and outcome of rehabilitation at Longford Pass Bog as **environmental stabilisation** and **optimising residual peat re-wetting,** to enhance the development of compatible habitats.
- Rehabilitation of Longford Pass Bog will support multiple national strategies of climate action, biodiversity action and other key environmental strategies such was the Water Framework Directive.
- Rehabilitation of Longford Passs Bog also supports and aligns with the goals and objectives of the Tipperary Decarbonizing Zone.

6.1 Key constraints

- **Bog conditions.** Rehabilitation outcomes are constrained by the environmental characteristics of the particular bog. For example, there is potential for raised bog restoration at some sites where there has not been significant industrial peat extraction, and the peat body is largely intact (deep peat sites that are drained). At other sites, most of the peat mass has been removed, the environmental characteristics of these areas have therefore changed radically (peat depths, hydrology, water chemistry, substrate type, nutrient status, etc.) and there will therefore be different habitat outcomes (wetlands, fen, heathland, grassland and Birch woodland).
- The majority of Longford Pass has shallow residual peat with a significant areas of deep residual peat. One pump is still present on site but remains non-functional. The bog now has a gravity-based drainage regime. Areas of residual deeper peat are likely to develop *Sphagnum* rich deep peat vegetation in time. Wetland habitats (fen, wetland, reedswamp) and dry cutaway habitats (birch woodland, scrub and heath) are the most likely habitats to develop in areas with shallower peat. These habitats are already developing in places.
- **Surrounding landscape and neighbours.** Another key constraint is the interaction between the BnM bogs and the surrounding landscape. Care has to be taken that no active rehabilitation management is carried out that could negatively and knowingly impact on surrounding land. This includes any hydrological management on neighbouring farmland. It is anticipated that the work proposed here (blocking drains and re-wetting cutaway peatlands) will not have any flooding impacts on adjacent land.
- **Archaeology**. The discovery of monuments or archaeological objects during peatland rehabilitation may potentially constrain the rehabilitation measures proposed for a particular area. The rehabilitation will optimise hydrological conditions for the protection of exposed archaeological structures, their retention in situ and preservation into the future. Any newly discovered archaeology may require rehabilitation measures to be reviewed and adapted. An Archaeological Impact Assessment (Appendix XII) will be carried out to mitigate against any impact on archaeology that may be found at the bog. Should any

previously unknown archaeological material be uncovered during the rehabilitation works, it will be avoided and reported to the BnM Archaeological Liaison Officer and the National Museum of Ireland.

- **Conifer plantation Forestry and agricultural grassland**. Conifer plantation forestry and parcels of agricultural grassland border the bog. These areas have been identified as constrained land where they overlap the rehabilitation footprint.
- **Leases**: Part of the site has been leased to Thurles Gun Club and this area has been mapped as a constraint on the rehabilitation plan.
- **Coillte/BnM Midlands Native Woodland Project.** Longford Pass is proposed to be included in the Coillte/BnM Midlands Native Woodland Project (Midlands Native Woodland - Coillte). The main objective of this proposed project is to develop and enhance native woodland in areas of cutaway that would remain naturally dry, developing woodland habitat that would naturally complement wetland and peatland habitats already developing across these sites. This proposed project is currently being considered for consent by the Forest Service. Areas proposed to be included in Native Woodland Project have also been mapped as constrained land in the rehabilitation plan.
- **Amenity development**. Tipperary County Council and BnM carried out a feasibility study of the potential for amenity development across the Littleton Bog Group called Littleton Labyrinth. There is potential for future extensions to this greenway network through Longford Pass Bog. The proposed rehabilitation measures will not impact on the delivery of any future amenity as a route is still available across the bog, and there is no constraint to rehabilitation.

6.2 Key Assumptions

- It is assumed that BnM will have all resources required to deliver this project.
- It is expected that weather conditions will be within normal limits over the rehabilitation plan timeframe. Long periods of wet weather have the capacity to significantly affect ground conditions and constrain drain blocking and other ground activities.

6.3 Key Exclusions

The scope of this rehabilitation plan does not cover:

- Areas subject to turf cutting are excluded should any still exist.
- The longer-term development of stable naturally functioning habitats at Longford Pass Bog. The plan covers the short-term rehabilitation **actions** and **an additional monitoring and after-care programme** to monitor the rehabilitation and to respond to any needs.
- This plan is not intended to be an after-use or future land-use plan for Longford Pass Bog.
- The longer-term management of this site, potentially as a nature conservation site, or for amenity, or for other uses in the future.

7. CRITERIA FOR SUCCESSFUL REHABILITATION

This section outlines what criteria will be used to indicate successful rehabilitation and what critical success factors are needed to achieve successful rehabilitation. All criteria used will be measured to validate the achievement of the rehabilitation goals and outcomes and validate the completion of the rehabilitation.

The key objective of this enhanced rehabilitation plan is **environmental stabilisation** and the stabilisation of any emissions from the site that related to the former industrial peat extraction activities.

Rehabilitation is generally defined by BnM as:

- stabilisation of bare peat areas via targeted active management (e.g. drain-blocking/re-wetting) slowing movement of water across the site and encouraging natural colonisation; and
- mitigation of key emissions (e.g. potential run-off of suspended solids).

In addition, BnM wish to optimise climate action and other ecosystem service benefits via enhanced rehabilitation measures.

7.1 Criteria for successful rehabilitation to meet EPA IPC licence conditions:

- Rewetting of residual peat in the former area of industrial peat production to offset potential silt run off and to encourage and accelerate development of vegetation cover via natural colonisation and reducing the area of bare exposed peat. See Table 7.1 for a summary of the criteria for successful rehabilitation and associated monitoring. The target will be the delivery of measures and this will be measured by an aerial survey after rehabilitation is completed.
- That there is a stabilizing/improving concentration of suspended solids and ammonia in discharges from BnM sites, associated with the measures undertaken to stabilize the peat surface by the blocking of the internal drainage system and the maximized rewetting of the peat surface. This will be demonstrated by developing a stable or downward trajectory of water quality indicators (suspended solids and ammonia) towards what would be typical of a re-wetted cutaway bog. This will be measured via water quality monitoring (suspended solids and ammonia) for at least 2 years after the rehabilitation has been completed.
- Receiving water bodies have been classified under the River Basin Management Plan and this classification includes waters that are *At Risk* from peatlands and peat extraction. The success criteria will be that the *At Risk* classification will see improvements in the associated pressures from this peatland or if remaining *At Risk*, that there is an improving trajectory in the pressure from this peatland.

Table 7-1 Summary of Success criteria, targets, how various success criteria will be measured and expected timeframes.

Criteria type	Criteria	Target	Measured by	Expected Timeframe
IPC validation	Rewetting in the former area of industrial peat production	Delivery of rehabilitation measures Reduction in bare peat.	Aerial photography after rehabilitation has been completed – to demonstrate measures (drain-blocking) Establishment of a baseline for future monitoring of bare peat, vegetation establishment and habitat condition.	2025-2027
IPC validation	Key water quality parameters Ammonia, Phosphorous, Suspended solids, pH and conductivity	Reduction or stabilisation of key water quality parameters associated with this bog	Water quality monitoring for a period after rehabilitation has been completed	2025-2027
IPC validation	Reducing pressure from peat production on the local water body catchment (WFD)	Where this section of the water body, that this bog drains to, has not been identified as under pressure from peat extraction, that the intervening EPA monitoring programme associated with its Programme of Measures for this water body, confirms that its classification remains at not being at risk from peat extraction associated with activities at this bog.	EPA WFD monitoring programme	WFD schedule

Meeting climate action verification criteria and monitoring of these criteria after the scheme has been completed is dependent on support from the Climate Action Fund or other sources of funding. Note that monitoring and verification of the overall scheme will be stratified – not all these criteria will be measured at each individual site. Baseline monitoring to be carried out during the scheme when rehabilitation is complete. Sites can be re-monitored in the future and compared against this baseline.

7.2. Critical success factors needed to achieve successful rehabilitation as outlined in the plan

The achievement of successful rehabilitation as outlined in the plan requires:

- **Funding to pay for resources required to deliver the planned rehabilitation (BnM and external).** BnM maintains a provision on its balance sheet to pay for these future costs. BnM is fully committed to meeting its obligations relating to rehabilitation and decommissioning under the Integrated Pollution Control Licence. It is expected that additional costs of enhanced rehabilitation will be supported by Government through the Climate Action Fund and Ireland's National Recovery and Resilience Plan.
- **BnM to have sufficient resources (staff and training) to deliver the planned rehabilitation with required associated skills and competencies.**
- **BnM to have sufficient resources (suitable machinery) and staff to maintain this machinery.**
- **Weather conditions to be within normal limits over the rehabilitation plan timeframe.** Long periods of wet weather have the capacity to significantly affect ground conditions and constrain the delivery of rehabilitation. The potential impact of wet weather on ground conditions can be reduced by appropriate planning and management. BnM have significant experience of managing these issues through 70 years of working in these peatland environments.
- **Rehabilitation measures to be effective.** The rehabilitation measures proposed in this plan are based on 40 years of BnM experience of peatland management and best practice applied internationally in peatland management. Measures proposed in this plan have already been shown to be affective at other sites. BnM will apply a flexible and adaptable approach to the more innovative rehabilitation measures proposed in this plan**.** If measures are not initially effective, BnM will review any requirement for additional practical rehabilitation.
- **Natural colonisation of vegetation to develop semi-natural habitats at a rate within the normal limits.** The development of naturally functioning semi-natural habitats on degraded bog takes time. It may take 30-50 years for active raised bog vegetation to re-develop on suitable cutaway that was previously bare peat. However, BnM experience has demonstrated the effectiveness of these type of measures for re-wetting bog and creating carbon sinks (Renou-Wilson *et al*. 2018).
- Rehabilitation measures have been designed to accelerate and work with natural colonisation and other natural processes. BnM experience of rehabilitation has shown that re-wetting improves conditions for natural colonisation and that natural colonisation is accelerated where the environmental conditions are most suitable. Rehabilitation measures have been designed to modify the conditions of areas within sites where conditions are less suitable for natural colonisation (modifying hydrology, topography, nutrient status or availability of potential seed sources).
- **Monitoring to be robust and effective.** Rehabilitation Monitoring will be established to validate the success of rehabilitation as required by Condition 10 of the IPC Licence and to verify the benefits of the proposed enhanced measures to optimise climate action. This will focus on a collecting a range of scientific data that can then quickly be adapted and into metrics that can be used to measure changes in various ecosystem services.

8. Rehabilitation Actions and Time Frame

Peatland rehabilitation requires detailed planning and the use of data from desktop surveys and field surveys. This data in association with topographical and hydrological modelling will be important in planning the future peatland landscapes and planning the use of the most appropriate rehabilitation methodologies to maximise climate action benefits. Hydrological modelling indicates those areas that are likely to re-wet when drains are blocked, based on the current topography, and areas where water levels may have to be modified, where needed. Enhanced rehabilitation measures will look to optimise hydrological conditions for re-wetting peat in other areas. This planning is also essential for matching the most sustainable rehabilitation methodology to the most suitable cutaway environment to maximise the benefits of the resource outlay (maximising cost/benefit).

A number of illustrative figures have been produced to inform Rehab Planning and Design, including Aerial Photography, Peat Depths, LiDAR Surface Maps, and Depression Analysis modelling; these are included in the accompanying Mapbook as the drawings referenced below:

BNM-ECO-26-11-21 Longford Pass Bog: Aerial Imagery 2000

BNM-ECO-26-11-22 Longford Pass Bog: Aerial Imagery 2020

BNM-ECO-26-11-04 Longford Pass Bog: Peat Depths

BNM-ECO-26-11-03 Longford Pass Bog: LiDAR Map

BNM-ECO-26-11-09 Longford Pass Bog: Depression Analysis

The rehabilitation actions themselves will be a combination of measures to re-wet peat. The distribution of these measures is provisionally outlined in drawing titled *BNM-ECO-26-11-20 Longford Pass Bog: Standard Rehab Measures* in the accompanying Mapbook (note that the actual distribution of these measures may be subject to change in response to stakeholder consultation and refinement of the enhanced rehabilitation measures.)

Extensive drain-blocking was already carried out as part of the rehabilitation programme between 2018-2021.

Rehabilitation measures for Longford Pass included below.

Re-assessment of the pumping regime

- Initial hydrological modelling indicated that a part of the site would develop a mosaic of wetland habitats with some permanent deeper water if the pump was decommissioned. Hydrological management looked to optimise summer water levels to maximise the development of wetland vegetation (by looking to set water depths at < 0.5 m, where possible. It is inevitable that some sections will naturally have deeper water due to the topography at this site and restrictions on lowering the level by gravity due the level of the outfall pipe under the road. Water-levels were adjusted at outfalls and by adjusting piped drainage, where possible. More sustainable permanent gravity drainage solutions were examined. It is expected that a natural seasonal regime of water fluctuation will develop, with water-levels fluctuating in association with levels of surrounding rivers.
- A targeted drain-blocking programme was implemented across the cutaway, where possible. In general, field drains were blocked where possible to re-wet cutaway and re-wet to the optimum water-level. More intensive measures were targeted towards the bare peat.
- Less intensive measures (targeted drain-blocking) were used in areas where habitats have already established.
- Hydrological measures included modifying outfalls and managing water levels with overflow pipes.

The existing silt ponds were retained and maintained during the rehabilitation phase. During the monitoring and verification phase the silt pond wase continually inspected and maintained, where appropriate. When it is deemed that the silt pond is not required, as the bog has been successfully stabilised and there is no silt run-off, the condition of the silt pond will be reviewed. The silt pond will either be de-watered (water levels lowered to a level where the silt pond will naturally develop as a small wetland feature), left in situ, or infilled (where discharges do not require silt control).

8.1 Completed

- A rehabilitation programme was carried out in Longford Pass between 2018-2021. This comprised of a range of measures outlined in *BNM-ECO-26-11-20 Longford Pass Bog: Standard Rehab Measures*. These measures varied in intensity, were targeted in places and reflected the existing environmental conditions.
- Some areas of bare peat had regular drain-blocking (Drain-blocking).
- Some areas were subject to reducing or ceasing pumping (Hydrological management).
- Some areas had minimal intervention as there were already re-vegetated and developing a mosaic of wetland, woodland and peatland habitats (Minimal intervention).
- Some areas were allowed to continue to develop as wetland due to the natural breakdown of drainage and ceasing drain maintenance (Wetland).
- Cutaway habitats are continuing to develop across Longford Pass Bog. Birch scrub and woodland has significantly expanded across the site on some of the drier, more elevated ground on the western side. The eastern and northern sections all have natural basins that are developing as wetlands. Pumping at this site ceased in 2022 and this has supported the expansion of wetlands. Pioneer vegetation is continuing to develop across the site and the bare peat cover is rapidly shrinking.
- In general, cutaway habitats are developing according to the underlying environmental conditions and reflect the varying topography, hydrology and peat depths. Drain-blocking and other rehabilitation measures have had a significant positive impact across the site in re-wetting residual peat and enhancing the development of wetland habitats. Ceasing pumping has also had a significant impact and has supported extensive wetland development across the site.

8.2 Short-term planning actions (0-1 years)

- Seek formal approval of this plan.
- Ensure all activities comply with the environmental protection requirements of the IPC Licence.

8.3 Short-term practical actions (0-2 years)

- Silt ponds will be monitored during this period and there will be continued maintenance and cleaning to prevent potential run-off of suspended solids from the site during the rehabilitation phase.

8.4 Long-term (>5 years)

- Evaluate success of short-term rehabilitation measures outlined above and remediate where necessary.
- Delivery of a monitoring, aftercare and maintenance programme (See section 9 below).

- Decommissioning of silt-ponds will be assessed and carried out, where required.
- Reporting to the EPA will continue until the IPC Licence is surrendered.

8.5 Timeframe

- **2026**: Short-term planning actions.
- **2025-2026**: Short-term delivery actions.
- **2026**: Long term delivery actions. Evaluate success of short-term rehabilitation measures outlined above and remediate where necessary.
- **2028**: Decommission silt-ponds, if necessary.

8.6 Budget and costing

BnM maintains a provision on its balance sheet to pay for the future costs of standard rehabilitation and decommissioning. This is updated every year - for more information see the BnM Annual Report (BnM, 2025). BnM is fully committed to meeting its obligations relating to rehabilitation and decommissioning under the Integrated Pollution Control Licence.

At this time, a 'standard' rehabilitation provision (sufficient to discharge the requirement of Condition 10 in the licence) has been allocated to the site based on the area of different cutaway types across the site

9. AFTERCARE AND MAINTENANCE

9.1 Programme for monitoring, aftercare and maintenance

This programme for monitoring, aftercare and maintenance has been designed to meet the Conditions of the IPC Licence. This is defined as:

- There will be **initial quarterly monitoring assessments** of the site to determine the general status of the site, the condition of the silt ponds, assess the condition of the rehabilitation work, monitoring of any potential impacts on neighbouring land, general land security, boundary management, dumping and littering.
- **Water quality monitoring** at the bog will be maintained. The main objective of this water quality monitoring will be to establish a baseline and then monitor the impact of peatland rehabilitation on water quality from the bog.
- Monitoring results will be maintained, trended and reported on each year as part of the requirement to report on Condition 10.1 of the IPC Licence on Bog Rehabilitation in the Annual Environmental Report, which will be available in April each year at www.epa.ie.
- The parameters to be included (as per condition 6.2 of the IPC Licence) include monthly monitoring for pH, Suspended Solids, Total Solids, Total Phosphorus, Total Ammonia, Colour, and COD and DOC.
- If, after two years, key criteria for successful rehabilitation are being achieved and key targets are being met, then the water quality monitoring will be reviewed, with consideration of potential ongoing research on site. The water quality data, the aerial surveys and the habitat mapping will be collated and will be submitted to the EPA as part of the final validation report.
- If, after two years, key criteria for successful rehabilitation have **not** been achieved and key targets have **not** been met, then the rehabilitation measures and status of the site will be evaluated and enhanced, where required. This evaluation may indicate no requirement for additional enhancement of rehabilitation measures but may demonstrate that more time is required before key criteria for rehabilitation has been achieved. Monitoring of water quality will then also continue for another period to be defined.
- Where other uses are proposed for the site that are compatible the provision of biodiversity and ecosystem services, these will be assessed by BnM in consultation with interested parties. Other after-uses can be proposed for licensed areas and must go through the required assessment process and planning procedures.

9.2 Rehabilitation plan validation and licence surrender – report as required under condition 10.4

IPC Licence Condition 10.4. *A final validation report to include a certificate of completion for the Rehabilitation Plan, for all or part of the site as necessary, shall be submitted to the Agency within six months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.*

Reporting to the EPA will continue until the IPC Licence is surrendered. The bog will be included in the full licence surrender process as per the Guidance to Licensees on Surrender, Cessation and Closure of Licensed Sites EPA, 2012, when:

- The planned rehabilitation has been completed.

- The key criteria for successful rehabilitation have been achieved and key targets have been met;
- Water quality monitoring demonstrates that water quality of discharge is stabilising or improving; and
- The site has been environmentally stabilised.

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APPENDIX I: BOG GROUP CONTEXT

The Littleton Bog Group IPC Licenced area was in industrial peat production for several decades until 2017. There are 11 defined bog units covering a total area of 4,421 ha. Each bog area further comprises a range of habitats from bare milled peat former production areas to re-colonising cutaway to workshops areas and transport infrastructure. Industrial peat extraction from these sites mainly supplied briquettes (Littleton Brickette Factory), horticulture and commercial turf for domestic use.

Industrial peat extraction across the majority of the Littleton Bog Group ceased in 2017. (Killeen extended to 2021). Littleton Brickette Factory finally ceased production in 2021. All licences for sod turf production also ceased during this period.

The Littleton Rehabilitation Programme started in 2018. Rehabilitation was planned and implemented across all of the Littleton Bogs. A range of different strategies was implemented across different sites, which reflect variable underlying environmental conditions and land-uses and potential future land-uses at the time.

Drain-blocking was carried out at Ballysorrell Bog and Knockahaw Bogs with the objective of raised bog restoration. These bogs had not had significant peat extraction and retained raised bog restoration potential. Rehabilitation measures at Templetouhy took account of the Bruckana Windfarm, which was is operational since 2015. Bawnmore, Littleton, and Derryville were developing cutaway habitats already as scrub and wetland, and targeted measures were carried out through these sites to enhance these developing habitats. More intensive drain-blocking was carried out across Carrickhill, Inch, Ballybeg, Derryvilla, Longford Pass and Killeen Bogs, particularly where there was recent industrial peat extraction and there were functional drains and bare peat dominated. Pumping ceased at Carrickhill, Inch and Baunmore. Some pumping continued for various periods at Derryville, Longford Pass and Littleton, due to operational issues. Some fertiliser treatments were carried out at Carrickhill and Derryvilla in 2020 as a pilot rehabilitation project.

Rehabilitation measures so far has been very effective. The majority of the targeted areas have been re-wetted. Ballysorrell and Knockahaw Bogs are responding quite quickly to the new conditions with the development of Sphagnum and improvement in bog conditions. Areas at Templetuohy, Bawnmore, Littleton and Derryvilla are changing quickly with the development of existing habitats and new pioneer vegetation where there was bare peat. Habitats at Killeen and Lanespark are developing and integrating with the new greenway amenity. Areas in Carrickhill, Inch and Killens that where large areas of bare peat in 2018 have been slower to recolonise due to underlying environmental factors (deeper residual peat).

A project called the BnM/Coillte Midlands Native Woodland Project was developed over the same period (Midlands Native Woodland - Coillte). It was proposed to be funded and administered by the Forest Service. The main objective of this proposed project is to develop and enhance native woodland in areas of cutaway that would remain naturally dry, developing woodland habitat that would naturally complement wetland and peatland habitats already developing across these sites. An initial feasibility study was carried out in 2018 and a project was developed across the Littleton bogs, which finally identified 120 ha of cutaway to be developed as woodland. This project has piloted alternative methods to establish native woodland, including seeding, and these trials were carried out at Bawnmore. This proposed project has not been approved by the Forest Service yet. Areas of cutaway at Carrickhill, Bawnmore, Inch, Ballybeg and Killeen have been proposed as part of this project.

The Littleton Labyrinth is a proposed amenity project that was also developed during this period, in partnership with Tipperary County Council. Initially a feasibility study was carried out that looked at developing greenway

amenity, and associated facilities across the Littleton Bogs, and potential links to existing infrastructure and local villages/towns. The first phase of this project was developed by Tipperary County Council in 2023/24, and a greenway was constructed on former BnM industrial railway though Killeen and Lanespark Bog to link with Loch Doire Bhile amenity, north of Lanespark. There are proposals to develop a Phase 2 shortly, with additional links being planned in Ballybeg and Derryvilla Bogs. This project is in pre-planning and is funded via Failte Ireland.

BnM rehabilitated several bogs in the Littleton Bog Group via Peatland Climate Action Scheme in 2025. The main objective of this proposed Phase 2 rehabilitation is to look at enhancing re-wetting and development of pioneer vegetation to support climate action, where possible. Measures are likely to include targeted drain-blocking, use of fertiliser to encourage pioneer vegetation growth, water-level management (adjustment of outfalls and use of over-flows). Bogs included Templetouhy, Derryville, Carrickhill, Baunmore, Inch, Ballybeg, Inch and Killeens.

A breakdown of the component bog areas for the Littleton Bog Group IPC Licence Ref. P0499-01 is outlined in Table Ap-1. Industrial peat production history varies across the Littleton bog group, so there is a wide range of peat depths at present.

Table Ap-1: Littleton Bog Group names, area and indicative status

Bog Name	Area (ha)	Stage of development	Land-Use and History	Peat Production Cessation	Rehab Plan Status
Carrickhill	170 ha	Cutover Bog Industrial peat production started in the 1970's and ceased in 2017. There is residual deep peat across much of this site. Carrickhill had a partially pumped drainage system.	Carrickhill Bog formerly supplied peat to the Littleton briquette factory. Some areas of shallow peat cutaway on site are developing pioneer cutaway vegetation communities. The pump was decommissioned in 2018. Drain blocking was carried out in 2018. A fertiliser treatment on part of the headland was carried out in 2021. The majority of the site is still mostly bare peat. Carrickhill is proposed for the Coillte/BnM Midlands Native Woodland Project. 28 ha is proposed for planting at this site. This proposed project is currently being considered for consent by the Forest Service.	2017	Draft 2018 Phase 1 Rehab measures implemented 2018-2021. Updated 2025. Phase 2 PCAS measures ongoing 2026
Templetuohy	737 ha	Cutover Bog Industrial peat production commenced at Templetuohy Bog in 1940's. Areas began to develop as cutaway during the 1980s as peat extraction ceased on a phased basis. Industrial peat extraction finally ceased in 2017. This bog has a partially pumped drainage system. Part of the site has developed pioneer cutaway habitats. Areas re-developed for peat extraction in 2015-17 are now revegetating quickly. Areas that were used for peat extraction upto 2017 are a	Templetuohy Bog formerly was developed to supply fuel sod peat and also supplied peat to the Littleton briquette factory. BnM have constructed a 40MW Wind Farm with 14 turbines and road network on cutaway at Templetuohy bog called Bruckana Wind Farm. This windfarm is operational. Pumping is still operational across this site to support the windfarm infrastructure.	2017	Draft 2018 Phase 1 Rehab measures implemented 2018-2021 Updated 2025. Phase 2 PCAS measures ongoing 2026

Bog Name	Area (ha)	Stage of development	Land-Use and History	Peat Production Cessation	Rehab Plan Status
		mosaic of re-wetted bare peat and pioneer communities.			
Derryville	250 ha	Cutover Bog Industrial peat production commenced at Derryville Bog in 1970's. Areas began to develop as cutaway during the 2000s as peat extraction ceased on a phased basis. Peat extraction finally ceased in 2017. This bog has a partially pumped drainage system.	Derryville Bog formerly supplied peat to the Littleton briquette factory. Part of the site has been developed for conifer forestry and is leased to Coillte. Part of the site was sold to Lisheen Mine and removed from the IPC Licence in the 2000s. Much of the former production area on site is developing pioneer cutaway vegetation communities, the remainder of the site is bare peat and developing wetland. Pumping continued at Derryville until 2022. Pumping has now ceased, and measures have been implemented in 2024 to manage water levels across the site and to decommission the pump.	2017	Finalised 2018 Phase 1 Rehab measures implemented 2018-2021 Updated 2025 Phase 2 PCAS measures ongoing 2026
Bawnmore	531 ha	Revegetating cutover bog. Industrial peat production commenced at Baunmore Bog in 1970's. Areas began to develop as cutaway during the 2000s as peat extraction ceased on a phased basis. Peat extraction finally ceased in 2017. Much of the site is now developing a mosaic of woodland, peatland and wetland habitats. Baunmore had a partially pumped drainage regime.	Bawnmore Bog formerly supplied peat to the Littleton briquette factory. Much of the site is developing pioneer cutaway habitats and the site has significant biodiversity value. Pumping ceased in 2018. Part of the access is used for log biomass storage (for Edenderry Power). Bawnmore is proposed for the Coillte/BnM Midlands Native Woodland Project. 39 ha is proposed for planting at this site. This proposed project is currently being considered for consent by the Forest Service.	2017	Finalised 2018 Phase 1 Rehab measures implemented 2018-2021 Updated 2025 Phase 2 PCAS measures ongoing 2026
Ballysorrel	196 ha	Drained raised bog – This site was initially drained for peat extraction. It was developed for peat production in the 1970s, but milled peat harvesting only occurred over a short 2 year timeframe. The site was then left as a peat reserve to be re-developed in the future. Restoration/drain blocking carried out in in 2018.	Much of the site was bare peat in the early 2000s. The site has since re-vegetated naturally (in a drier situation) since then and is now responding quickly to the recent re-wetting. Much of the high bog has re-colonised with Heather-dominated vegetation. Small hummocks of *Sphagnum* capillifolium and S. subnitens are present. *Sphagnum* spp. are also present in some low-lying areas that are permanently waterlogged and are spreading.	2017	Finalised 2018 Phase 1 Rehab measures implemented 2018-2021 Updated 2025 Phase 2 PCAS measures ongoing 2026
Inch	120 ha	Cutover Bog Industrial peat production since 1970s. Finally ceased in 2017. Inch had a partially pumped drainage regime.	Inch Bog formerly supplied peat to the Littleton briquette factory. Some areas of shallow peat cutaway on site are developing pioneer cutaway vegetation communities with deep peat areas slow to colonise and remaining mostly bare peat. Pumping ceased in 2018.	2017	Finalised 2018 Phase 1 Rehab measures implemented 2018-2021

Bog Name	Area (ha)	Stage of development	Land-Use and History	Peat Production Cessation	Rehab Plan Status
			Inch is proposed for the Coillte/BnM Midlands Native Woodland Project. 19 ha is proposed for planting at this site. This proposed project is currently being considered for consent by the Forest Service.		Updated 2025 Phase 2 PCAS measures ongoing 2026
Longford Pass (Popes Bog)	214 ha	Cutaway Bog Peat production at Longford Pass bog commenced in the 1940's and finally ceased in 2017. Peat extraction ceased and cutaway habitats began to develop on a phased basis. Longford Pass has a partially pumped drainage system.	Longford Pass Bog initially was developed as a sod turf production site. It then formerly supplied peat to the Littleton briquette factory. The site was bisected by the construction of the N8 Motorway in 2000s. A small area between the new motorway and R639 (old main road) was leased and developed for farmland in 2018. Longford Pass is part of the proposed Littleton Windfarm Project. This project is currently in pre-planning. Some areas of shallow peat cutaway on site are developing pioneer cutaway vegetation communities with deep peat areas slower to colonise. Pumping continued at the site until 2022, when the pumping failed. Since then, measures have been carried out to manage water-levels.	2017	Finalised 2018 Rehab measures implemented 2018-2021 Updated 2026
Ballybeg, Lanespark and Derryvilla	474 ha	Cutaway Bog Industrial peat production since 1970s and finally ceased in 2017. Peat extraction ceased and cutaway habitats developed on a phased basis during this period. .	Ballybeg, Lanespark and Derryvilla initially were developed for sod turf production, and then formerly supplied peat to the Littleton briquette factory. Part of the site has been developed for conifer forestry and is leased to Coillte. Part of Lanespark/Derryvilla (Loch Doire Bhile) was developed as fishing lake and an amenity site in 1999-2002. This site is leased to Slieve Ardagh Rural Development. A greenway was constructed across the site as part of the Littleton Labyrinth Project in 2024, connecting the historical site of Derrynaflan to Loch Doire Bhile amenity, via Lanespark. Additional greenway is proposed to extend amenity through Derryvilla and Ballybeg as part of Failte Ireland. Midlands Trail project. This is currently in pre-planning. Ballybeg and Lanespark are proposed for the Coillte/BnM Midlands Native Woodland Project. 21 ha is proposed for planting at this site. This proposed project is currently being considered for consent by the Forest Service .	2017	Finalised 2018 Phase 1 Rehab measures implemented 2018-2021 Updated 2025 Phase 2 PCAS measures ongoing 2026
Killeen	632 ha	Industrial peat production commenced at Killeen Bog in 1980s. Industrial peat extraction finally ceased in 2021.	Killeen bog formerly supplied peat to the Littleton briquette factory and the horticultural market. Re-wetting was carried out across the site in 2021. Some areas of shallow peat cutaway on site are developing pioneer cutaway vegetation	2017	Finalised 2018 Phase 1 Rehab measures implemented 2018-2021

Bog Name	Area (ha)	Stage of development	Land-Use and History	Peat Production Cessation	Rehab Plan Status
			communities with deep peat areas slower to colonise since the site was re-wetted. A greenway was constructed across the site as part of the Littleton Labyrinth Project in 2024, connecting the historical site of Derrynaflan to Loch Doire Bhile amenity, via Lanespark. Killeen is proposed for the Coillte/BnM Midlands Native Woodland Project. 31 ha is proposed for planting at this site. This proposed project is currently being considered for consent by the Forest Service .		Updated 2025 Phase 2 PCAS measures ongoing 2026
Littleton	1,020 ha	Cutaway Bog Littleton is a relatively old industrial peat production bog. Large-scale industrial peat production began in the 1940's where sod peat was produced for fuel. Sod peat production was mechanised during the 1950's. Milled peat production began in the 1970's and milled peat was supplied to the Briquette factory (constructed in 1981) at Lanespark. Peat extraction ceased and cutaway habitats developed on a phased basis since the 1890s and some well-established cutaway habitats have developed. Industrial peat extraction finally ceased in 2018. Littleton has a partially pumped drainage system.	Littleton Bog formerly supplied sod peat before supplying peat to the Littleton briquette factory. Older cutaway has already extensively colonised with pioneer cutaway, wetland and scrub habitats. Part of the site has been developed for conifer forestry and is leased to Coillte. A small area (10 ha) was used as a pilot biomass project and Eucalyptus was planted in 2018. Some pumps in Littleton Bog have been decommissioned and some have been retained but are non-functional.	2017	Finalised 2018 Rehab measures implemented 2018-2021 Updated 2026

See Drawing number *BNM-ECO-26-11-24 Littleton: Bog Group Map*, included in the accompanying Mapbook which illustrates the location of Longford Pass Bog and the Littleton Bog Group in context to the surrounding area.

APPENDIX II: ECOLOGICAL SURVEY REPORT

Ecological Survey Report

Note: This report outlines an ecological survey of the bog. This report should not be taken as a management plan for the site as other land-uses may still be considered. Information within this report may inform the development of other land-uses and identify areas with particular biodiversity value.

Sections of this report were written pre cessation of industrial peat production. Updated information post peat production is indicated as 2026 data.

Bog Name:	**Longford Pass (Pope's Bog**	**Area (ha):**	278ha
Works Name:	Littleton	**County:**	Tipperary
Recorder(s):	MMC & BO'L	**Survey Date(s):**	28/04/2010 (section adjacent to motorway) 10/09/2012 11/12/2017

Habitats present (in order of dominance)

The most common habitats present at this site include:

- Bare peat
- Poor fen vegetation (pJeff/pEang) (in mosaic) (Codes refer BnM classification of pioneer habitats of production bog)
- Dry heath (dHeath) (in mosaic)
- Open Birch scrub (oBir) (in mosaic)
- Dry/wet grassland (gMol)
- Temporary open water (TOW) (wet sections)
- Riparian zones (old silt ponds and culverted streams/drains along motorway embankment)
- Small wetland pools with open water and poor fen vegetation (pRos)
- Access routes (Acc) (railways, travel paths and gravel paths with associated scrub/dry heath verges)

Description of site

Longford Pass (Pope's Bog) is located in Co. Tipperary, 5 km south-west of Urlingford. It is part of the Littleton Bog Group. Littleton Bog is located to the south of Longford Pass and Bawnmore is located to the north. A BnM railway passes through Longford Pass Bog along the eastern margin and connects this bog and bogs to the north to the wider Littleton network, where milled peat is transferred to Lanespark Briquette factory. The bog is also situated adjacent to the old N8 Cork-Dublin road and the new M8 motorway bisects the southern part of the site. The bog is located in a lowland landscape and is surrounded on two sides by farmland. Peatland to the north and south of the main site has been developed for conifer forestry and is also used for private sod peat cutting. The main section can be accessed from the northern end with a travel path along the eastern margin leading south to a tea centre. A local road marks the northern boundary of the site.

Former production bog section

The majority of the main part of the bog was in active milled peat production until recently and is bare peat. The southern margin of this section is marked by the railway and this divides this section from the adjacent cutaway. The railway also branches at the southern end and there is a small side-branch that extens along the south-west and southern margins to the south-west corner of the site. There are several small areas where the underlying glacial sub-soil is being exposed and there is some colonisation at the drain margins. These areas are generally associated with low mounds and ridges underlying the bog that are now being exposed. This vegetation is generally dominated by Soft Rush (pJeff) but can also contain Purple Moorgrass (gMol) and other frequent grasses like Bog Cotton, Creeping Bent and Sweet Vernal-grass (gAn-Ho-Eq). Other typical species include Rosebay Willowherb and Colt's-foot. A small area at the south-west corner has come out of production recently and is being vegetated by pioneer poor fen (pJeff). There is also some open water and several small pools in this small section.

There are several small areas around the industrial peat production bog that contain open water. This is probably temporary as there is very little wetland development or any emergent vegetation associated with these pools. A deep outfall has been dug in the south-west section and left open. Both sides are now vegetated by Birch scrub that has colonised the spoil from the outfall, some of which is dense. The southern end has some exposed gravel (glacial

mixed till) and some more open grassland habitat (gCal, gMol, DisTuss). The most recent survey (December 2017) noted areas of open water present in parts of the northern, southern and eastern sections of the site. Surface water ponding in these areas is considered to be temporary in some areas with no wetland vegetation recorded within areas of open water.

The very southern part of this section has a small area of industrial peat production bog west of the railway. A small pool was located just north of the spilt in the railway. This was filled with water during the first survey (2010) but has subsequently been drained and is vegetated by pioneer Bulbous Rush-dominated poor fen. Further west there is a small depression where there is some Bog Cotton colonisation along the southern margin.

The majority of the northern part of the bog has been developed for industrial peat production and there is very little typical marginal peatland habitat along the eastern margin. A small section at the north-east corner has some remnant peat and is dominated by Gorse scrub and some dry heath and Purple Moorgrass-dominated vegetation, as it is so disturbed. Scrub extends along the eastern margin but only really forms a hedgerow. The western margin of the bog supports mature birch woodland in association with Holly (*Ilex aquifolium*). The ground flora constitutes Honeysuckle (*Lonicera periclymenum*), Ivy (*Hedera helix*), Bramble (*Rubus fruticosus* agg.), Fern sp. (*Dryopteris* sp.) and the mosses *Pseudoscleropodium purum* and *Thuidium tamariscinum*. There are also several open sections with degraded bog habitats (Heather-dominated vegetation). There are also several small sections along the south-west margin that have remnant high bog (one of which was developed for milled peat production in past) and now contain typical very degraded high bog or secondary cutover bog habitats with scrub, Heather-dominated dry heath and Purple Moor-grass (*Molinia caerulea*) dominated vegetation. Furthermore, there is an area of remnant raised bog located in the north-western section of the site which supports degraded raised bog communities (facebank and marginal ecotopes) and supports several relic high hummocks (>25cm) of *Sphagnum capillifolium* (subsp. *rubellum*) and *Sphagnum subnitens*. Other typical raised bog plant communities and mosses included Ling Heather (*Calluna vulgaris*), Deer-grass (*Trichophorum germanicum*), Cross-leaved Heath (*Erica tetralix*), Common Cotton-grass (*Eriophorum angustifolium*), Hare's-tail Cotton-grass (*Eriophorum vaginatum*), Reindeer Lichen (*Cladonia portentosa*) and *Sphagnum papillosum*. Sphagnum cover is less than 10%.

Former production-related cutaway north of motorway

The eastern side of the area between railway and the motorway has been out of production for some time (prior to 2000) and has naturally recolonised with a mosaic of pioneer habitats. These pioneer habitats are mainly dry and dominated by dry heath (Heather dominated), open Birch scrub and poor fen vegetation dominated by Soft Rush. They are still in the pioneer stage and there are still significant patches of bare peat or areas covered just with bryophytes within the vegetation mosaic. Some Rowan, Pine and Sitka Spruce are present in the scrub along with Birch and Willow. There are a series of small pools present towards the eastern side of this mosaic that contain Bottle Sedge (pRos) and other aquatic and emergent species such as Mint, Bog Cotton and Pondweed. These pools may be the result of some more recent activity or disturbance as they look to be younger than the surrounding cutaway. *Calliergonella cuspidata* and *Fissidens* sp. were present in a drain with some impeded drainage. The central zone contains small patches with exposed sub-soil that are also being colonised by Heather, Birch, Soft Rush and mosses such as *Campylopus introflexus* and *Polytrichum juniperum.* These habitats extend north in sections as far as the BnM railway. The railway side of this area is more open and there are several sections of bare peat and/or bare peat/poor fen mosaics where there has been more recent industrial peat production.

The western side of this area (adjacent to the railway) is not so well-developed and is dominated by bare peat. These fields have been out of production for a shorter period (between 2000-2004) compared to the western side. There are small areas of bare peat/poor fen vegetation dominated by Soft Rush. This section is at a somewhat lower level compared to the adjacent higher ground being vegetated by the mosaic. Some of the ground is wet and the drainage is impeded and some of the ground has heavy bog timber cover.

Plastic located in this section of bog has now been removed.

Former production-related cutaway south of motorway

This area has been leased and is now being developed for agriculture.

Isolated sections at the south of the site

There are two separate sections of bog at the southern end that lie south of the old N8 Dublin-Cork road and adjacent to Littleton bog to the south. These sections were never developed for milled peat production. The railway passes along the eastern side of the western section. Both sections are used for private sod peat production. The eastern section is also used by Littleton Shooting Club. A band of conifer plantation has been planted along the road to form a screen.

The western section still has some intact high bog, although much of the surface of this section is now bare peat, and has been developed in the past 12 years. . The eastern section is much more disturbed and contains some sections that are in active use, which have bare peat, and some inactive sections of various ages that are recolonising with a range of typical pioneer cutaway habitats.

Designated areas on site (SAC, NHA, pNHA, SPA other)

None

There are no European Designated Sites in close proximity (i.e. within a 5km radius at minimum) to Longford Pass Bog.

The nearest European Designate Site is the The Loughans SAC (site code: 000407) which is located approximately 7.4km to the east of Longford Pass Bog.

There are also no NHA's (Natural Heritage Areas) or pNHA's (Proposed Natural Heritage Areas) within a 5km radius of Longford Pass Bog.

Adjacent habitats and land-use

The area surrounding the site is dominated by improved farmland, which is grazed by cattle or being used for production of potatoes. Some adjacent peatland was developed for conifer forestry (WD4) and some remnant high bog (PB1) is also being cut privately for sod peat (PB4).

Watercourses (major water features on/off site)

- Longford Pass is located within the River Suir catchment.
- The main section of bog is divided into two main catchments. The western half flows towards the south-west corner of the bog and is treated by a silt-pond at this location. This silt-pond drains west via channelized streams/drains to the Dinish River.
- The eastern section flows north and is treated by a silt-pond north of the road. A pump has been installed to pump water from this catchment across the road. This silt-pond drains north via a drain to meet the Black River.
- There are no significant rivers or lakes on or adjacent to this site.
- A small stream/drain that flows along the southern boundary of part of the site has been culverted and has a typical riparian zone. A second new drain has been developed along the embankment of the new motorway. A settlement pond is located adjacent to the site and the motorway at the eastern side.

Peat type and sub-soils

Dark fen peat is the main peat type exposed in the northern section of bog. There may be some patches of more acidic peat exposed in the production-related cutaway areas that have now colonised with Heather-dominated vegetation.

The main section of production bog seems to be underlain by a glacial mixed till, which is found under most of the other bogs in the Littleton group. This till is a mixture of gravel, pebble, rock and silty marl.

The eastern section of the main production bog has a relatively deep peat reserve with between 4-5 m of peat. This section may have been the original basin where there bog formed and therefore may be underlain by some lacustrine shell marl deposits.

Fauna biodiversity

Several species were noted on the site during the survey.

- Bird species recorded include Willow Warbler, Blackbird, Swallow, Wren, Chiffchaff and Grey Crow (2010)
- Bird species recorded in 2012 included Wood Pigeon, Wren, Rook (40), Grey Crow (5), Redpoll, Goldcrest, Blackbird and Swallow.
- Birds recorded in 2017 included Chaffinch, Great Tit, Redpoll, Blackbird, Robin, Wren, Meadow Pipit, Buzzard and Snipe.
- Mammal species noted on site included Fox and Rabbit (2010 & 2017).
- Signs of Rabbit noted at several locations around the bog (2012).

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APPENDIX III: ENVIRONMENTAL CONTROL MEASURES TO BE APPLIED TO BOG REHABILITATION

- Bog restoration/rehabilitation measures will be restricted to within the footprint of the proposed rehabilitation area.
- The proposed rehabilitation will have due regard to noise limits and hours of operation (i.e. dusk and dawn) to minimise any potential disturbance on resident and local fauna that utilise the site and immediate environs.
- All plant and equipment for use will comply with the Construction Plant and Equipment Permissible Noise Levels Regulations (SI 359/1996).
- The proposed activities will be restricted to daylight hours and there will be no requirement for artificial lighting.
- Silt ponds will be inspected and maintained as per the IPC Licence.
- During periods of heavy precipitation and run-off, activities will be halted.
- Measures will be carried out using a suitably sized machine and in all circumstances, excavation depths and volumes will be minimised where possible.
- All machines will be regularly checked and maintained prior to arrival at the site to prevent hydrocarbon leakage.
- Hoses and valves will be checked regularly for signs of wear and will be closed and securely locked when not in use.
- Fuelling and lubrication of equipment shall only be carried out in designated areas away from surface water drainage features and ecologically sensitive areas.
- Waste oils and hydraulic fluids will be collected in leak-proof containers and removed from the site for disposal or re-cycling.
- Vehicles will never be left unattended during refuelling.
- No direct discharges to waters will be made. No washings from vehicles, plant or equipment will be carried out on site.
- All plant refuelling will take place using mobile fuel bowsers. Only dedicated trained and competent personnel will carry out refuelling operations.
- Mobile storage such as fuel bowsers will be bunded to 110% capacity to prevent spills. Tanks for bowsers and generators shall be double skinned. When not in use, all valves and fuel trigger guns from fuel storage containers will be locked. All pumps using fuel or containing oil will be locally and securely bunded where there is the possibility of discharge to waters.
- Potential impacts caused by spillages etc. during rehabilitation will be reduced by keeping spill kits and other appropriate equipment on-site.
- Site activities will be carried out in accordance with 'best practice'. In order to ensure compliance and implementation of 'best practice', these measures will be communicated to relevant BnM staff and updated as required.

APPENDIX IV: BIOSECURITY

The potential for importation or introduction of non-native plant species (such as Japanese Knotweed, Himalayan Balsam, etc.) during future rehabilitation management, such as drain-blocking using excavators, has the potential to result in the establishment of invasive species within the site. Section 49 of the European Communities (Birds and Natural Habitats) Regulations 2011 prohibits the introduction and dispersal of invasive alien species (particularly plant species) listed on Part 1 (third column) of the 'Third Schedule'.

This section aims to reduce the risk from, and impacts of, invasive species and protecting biodiversity on lands under BnM ownership. Rehabilitation and decommissioning in the bog will have due regard to the relevant biosecurity measures outlined below:

- Records of problematic invasive species within the various bog units will be marked out with signs to highlight areas of infestation to personnel.
- All plant machinery will be restricted from disturbing known colonies of invasive species.
- All plant machinery will avoid unnecessary crossings to adjoining lands.
- Good site hygiene will be employed to prevent the introduction and spread of problematic invasive alien plant species (i.e. Japanese Knotweed (*Fallopia japonica*), Himalayan Balsam (*Impatiens glandulifera*), Himalayan Knotweed (*Persicaria wallichii*), etc.) by thoroughly washing vehicles prior to entering the area.

The biosecurity measures outlined above are in line with best practice guidelines issued by the National Roads Authority (NRA, 2010) – The Management of Noxious Weeds and Non-native Invasive Plant Species on National Roads and broadly based on the Environment Agency's (2013) – The Knotweed Code of Practice: Managing Japanese Knotweed on Development Sites (Version 3, amended in 2013).

In addition to the above, Best Practice measures around the prevention and spread of Crayfish plague[5] will be adhered with throughout all rehabilitation measures and activities.

[5] https://www.biodiversityireland.ie/projects/invasive-species/crayfish-plague/

APPENDIX V: POLICY AND REGULATORY FRAMEWORK

BnM Plc (BnM) is a publicly owned company, originally established in 1934 to develop some of Ireland's extensive peat resources for the purposes of economic development and to support energy security. In the decades since its establishment the company has employed tens of thousands of people in its fuel, energy, and horticultural growing media businesses. For much of its history the company's support of important national policy aims has been enabled and encouraged in a variety of ways by Government.

Today, BnM is undertaking a number of highly significant actions in support of climate policy. These actions involve a radical transformation and decarbonisation of nearly the entire BnM business. This transformation will be driven by unlocking the full potential of our land and creating significant value for Ireland and the Midlands in particular.

BnM is an integral part of the economic, social, and environmental fabric of Ireland and Irish life. As a key employer in the Midlands, the company is conscious that its obligations go beyond purely commercial and environmental – there is also a social responsibility to employees and the communities served by BnM. It is the company's role and absolute priority to ensure that its long-term strategy delivers on all of these important areas in a robust and balanced way.

There are a wide range of policies, plans, legislation and land designations that inform the development of this BnM peatland rehabilitation plan. BnM have also developed and operate various policies and strategies that also inform the development of this rehabilitation plan.

1 EPA IPC Licence

BnM operates under IPC Licence issued and administered by the EPA to extract peat within the Littleton Bog group (Ref. P0-499-01). As part of Condition 10.2 of this licence, a rehabilitation plan must be prepared for permanent rehabilitation of the boglands within the licensed area. The bog is part of the Littleton Bog group. This regulatory requirement is the main driver of the development of this rehabilitation plan.

2 The Peatlands Climate Action Scheme (PCAS)

BnM (BnM) understand that it is the Minister's (DECC) intention to impose an obligation on BnM to develop a programme of measures, 'the Scheme', for the enhanced decommissioning, rehabilitation and restoration of boglands previously used to supply peat for electricity generation within the State. The enhanced decommissioning, rehabilitation and restoration of the peatlands funded by the Scheme (PCAS) will deliver benefits across climate action (GHG mitigation through reduced carbon emissions and acceleration towards carbon sequestration), enrich the State's natural capital, increase eco-system services, strengthen biodiversity, improve water quality and storage attenuation as well as developing the amenity potential of the peatlands.

It is envisaged that BnM carry out an enhanced decommissioning, rehabilitation and restoration, under the Scheme (PCAS), and supported by the Climate Action Fund and Ireland's National Recovery and Resilience Plan across a footprint of 33,000 ha. This scheme will significantly go beyond what is required to meet rehabilitation and decommissioning obligations under existing EPA IPC licence conditions. Interventions and measures supported by the Scheme will ensure that environmental stabilisation is achieved (meaning IPC obligations are met), and importantly, significant additional benefits, particularly relating to climate action and other ecosystem services, will also be delivered. However, only the additional costs associated with the additional and enhanced

rehabilitation, i.e., those activities which go beyond the existing decommissioning and rehabilitation requirements arising from Condition 10 will be eligible for support under the Scheme.

3 National Climate Policy

The National Policy Position establishes the fundamental national objective of achieving a transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. It sets out:

- the context for the objective;
- clarifies the level of GHG mitigation ambition envisaged; and
- establishes the process to pursue and achieve the overall objective.

The evolution of climate policy in Ireland will be an iterative process based on the adoption by government of a series of national plans over the period to 2050. GHG mitigation and adaptation to the impacts of climate change are to be addressed in parallel national plans – respectively through the National Climate Action Plan. The plans will be continually updated, as well as being reviewed on a structured basis at appropriate intervals and, at a minimum, every five years. This will include early identification and ongoing updating of possible transition pathways to 2050 to inform sectoral strategic choices.

BnM is following a decarbonisation programme aimed at reducing the carbon emissions from its activities. Industrial peat production has now ceased, and several other decarbonisation measures are being implemented. The company aims to further develop renewable energy and resource recovery markets with a key objective of reducing the carbon intensity of all products. In addition, the carbon emission mitigation benefits associated with the post-peat extraction rehabilitated peatland following re-wetting, revegetation and colonisation of significant areas with native woodland will make a significant contribution to achieving the State's carbon emission reduction targets.

4 National Peatlands Strategy

The National Peatlands Strategy (2015) contains a comprehensive list of actions, necessary to ensure that Ireland's peatlands are preserved, nurtured and become living assets within the communities that live beside them. It sets out a cross-governmental approach to managing issues that relate to peatlands, including compliance with EU environmental law, climate change, forestry, flood control, energy, nature conservation, planning, and agriculture. The Strategy has been developed in partnership between relevant Government Departments/State bodies and key stakeholders through the Peatlands Council.

The strategy recognises that Ireland's peatlands will continue to contribute to a wide variety of human needs and to be put to many uses. It aims to ensure that Ireland's peatlands are sustainably managed so that their benefits can be enjoyed responsibly. It aims to inform appropriate regulatory systems to facilitate good decision making in support of responsible use. It also aims to inform the provision of appropriate incentives, financial supports and disincentives where required. The strategy attempts to strike an appropriate balance between different needs, including local stakeholders like turf-cutters and semi-state bodies such as BnM.

In line with a National Peatlands Strategy recommendation, a Peatlands Strategy Implementation Group (PSIG), was established, assisted in the finalisation of the Strategy, is overseeing subsequent implementation and will report to Government on an annual basis on the implementation of the actions and principles contained within the Strategy.

BnM is a key stakeholder in the National Peatlands Strategy and the Peatlands Strategy Implementation Group. The strategy recognises the potential for some BnM sites to be restored and to contribute to the national SAC and NHA network of protected raised bog sites. The strategy (agreed in 2015) also recognises the various different values of cutaway bog and developed six key principles (with BnM) for the after-use of cutaway bog.

- BnM will continue to assess and evaluate the potential of the company's land bank, using a land use review system. The assessment will help prepare a set of evidence-based management plans for the various areas of peatland. These plans will also inform its cutaway bog rehabilitation.
- The policy of BnM is not to open up any undrained new bogs for peat production.
- Lands identified by BnM as having high biodiversity value and/or priority habitats will be reserved for these purposes as the principal future land use.
- Generally, BnM cutaway bogs that flood naturally will be permitted to flood unless there is a clear environmental and/or economic case to maintain pumped drainage.
- In deciding on the most appropriate afteruse of cutaway peatlands, consideration shall be given to encouraging, where possible, the return to a natural functioning peatland ecosystem.
- This will require re-wetting of the cutaway peatlands which may lead in time to the restoration of the peatland ecosystem.
- Environmentally, socially and economically viable options should be analysed to plan the future use of industrial cutaway peatlands, in conjunction with limiting factors as outlined in BnM's Strategic Framework for the Future Use of Peatlands.

The National Peatlands Strategy highlights the importance and value of developing peatland rehabilitation plans for BnM cutaway sites and implementing this peatland rehabilitation. Some of these principles have now been superseded by the company's decision to cease industrial peat extraction. The National Peatlands Strategy is currently being reviewed by Government.

5 National River Basin Management Plan 2022-2027 (Water Framework Directive)

The River Basin Management Plan for Ireland 2022-2027 (Department of Housing, Local Government and Heritage, 2022) is the key national plan for Ireland to achieve the objectives of the Water Framework Directive (WFD). In broad terms, the objectives of the WFD are (1) to prevent the deterioration of water bodies and to protect, enhance and restore them with the aim of achieving at least good status and (2) to achieve compliance with the requirements for designated protected areas.

The NRBMP 2022-2027 outlined how peat extraction can be a potentially significant pressure on various water quality parameters. Peatland rehabilitation of BnM cutaway (in addition to other measures) was part of the WFD (2022-2027) programme of measures. The NRBMP 2022-2027 takes account of the fact that BnM was in the process of phasing out the extraction of peat for energy production, that it set a target to rehabilitate 9,000 ha of cutaway bogs (covering 25 peatlands) by 2021 (in 2018) and will look to implement best-available mitigation measures to further reduce water quality impacts caused by peat extraction while the phasing-out process is taking place. This NRBMP 2022-2027 rehabilitation target was superseded by the acceleration of the BnM de-carbonisation programme and the Scheme (PCAS).

The development of site rehabilitation plans and the delivery of peatland rehabilitation by BnM was expected to have a positive impact on water quality and will help the NRBMP 2022-2027 deliver its objectives in relation to the Water Framework Directive and is one of the five key principal actions.

The NRBMP 2022-2027 describes how the number of waterbodies impacted by peat, industry and forestry have decreased by 10, 10 and 5 waterbodies, respectively since the second cycle. Impacts on water quality and river habitat arising from peat and peat extraction and associated drainage include the release of ammonium and fine-grained suspended sediments, and physical alteration of aquatic habitats. Drainage of peatlands also results in changes to the hydromorphological condition of rivers.

The NRBMP 2022-2027 outlines how maintaining and restoring Irish bogs will lead to a decrease in waterborne carbon leaching to levels comparable with intact bogs as well as reducing losses of peat silt and ammonia. Vegetation on the surface of the peat can also slow the flow of water over the land surface. Based on the EPA's most recent reports, peat extraction and drainage is impacting on 106 water bodies across the country, with peat the single pressure on 28 of these water bodies. However, compared to the data in the second-cycle plan, the number of water bodies impacted by peat has decreased.

The cessation of industrial peat extraction by BnM in 2021 was expected to have a significant positive impact on water quality of receiving water courses by reducing the impact of peat extraction as a key pressure on particular water courses. This is now being supported by the results and conclusions of the draft NRBMP 2022-2027.

6 4th National Biodiversity Action Plan 2023-2030

Ireland's 4th National Biodiversity Action Plan (NBAP) sets the national biodiversity agenda for the period 2023-2030 and aims to deliver the transformative changes required to the ways in which we value and protect nature. The 4th NBAP has been developed with the support, advice and input of the interdepartmental Biodiversity Working Group and the independent Biodiversity Forum. Ireland's 2nd National Biodiversity Conference was held to gather insights and recommendations for the development of the NBAP and a public consultation process was held to provide further opportunities to engage with the Plan.

The 4th NBAP strives for a "whole of government, whole of society" approach to the governance and conservation of biodiversity. The aim is to ensure that every citizen, community, business, local authority, semi-state and state agency has an awareness of biodiversity and its importance, and of the implications of its loss, while also understanding how they can act to address the biodiversity emergency as part of a renewed national effort to "act for nature".

The delivery of rehabilitation is expected to significantly contribute in the future to actions and targets of the 4th National Biodiversity Action Plan 2023-2030, particularly in relation to peatland restoration, nature restoration and creation of new habitats such as wetlands and woodlands.

7 EU Nature Restoration Law

The EU Nature Restoration Law is a key element of the EU Biodiversity Strategy, which sets binding targets to restore degraded ecosystems, in particular those with the most potential to capture and store carbon and to prevent and reduce the impact of natural disasters. The regulation combines an overarching restoration objective for the long-term recovery of nature in the EU's land and sea areas with binding restoration targets for specific habitats and species. These measures should cover at least 20% of the EU's land and sea areas by 2030, and ultimately all ecosystems in need of restoration by 2050.

This regulation has now been adapted and it is expected that all Member States will be required to produce a National Restoration Plan within two years of adoption. This will be led by the National Parks and Wildlife Service

and will comprise a broad and deep public participation process, informed by robust ecological and socio-economic impact assessments. BnM are working with NPWS to identify bog restoration and other re-wetted cutaway sites that can contribute towards Irelands targets for the Nature Restoration Law.

8 National conservation designations

BnM operates in a wider landscape that also includes a network of European and National nature conservation sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs), National Heritage Areas (NHAs, pNHAs) and National Nature Reserves). BnM will take account of this network of conservation objectives and their conservation objectives when developing these rehabilitation plans. It is expected that peatland rehabilitation will, in general, benefit the conservation objectives of this network of nature conservation sites.

9 National Raised Bog Special Area of Conservation Management Plan 2017-2022.

The National Raised Bog Special Area of Conservation Management Plan 2017-2022 sets out a roadmap for the long-term management, restoration and conservation of protected raised bogs in Ireland. The Plan strikes an appropriate balance between the need to conserve and restore Ireland's raised bog network as part of Ireland's commitments towards the EU Habitats Directive, and the needs of stakeholders and gives recognition to the important role that communities have to play in the conservation and restoration of raised bogs. The National Raised Bog Special Areas of Conservation (SACs) Management Plan 2017-2022 is part of the measures being implemented in response to the on-going infringement action against Ireland in relation to the implementation of the EU Habitats Directive, with regard to the regulation of turf cutting on the Special Areas of Conservation (SACs). The then Minister for Arts, Heritage and the Gaeltacht, also published a **Review of Raised Bog Natural Heritage Area Network** in 2014.

BnM has also responded to the needs of the National Raised Bog Special Area of Conservation Management Plan (NRBMP) and provided several sites to the government for the relocation of turf-cutters from SACs. This is part of a suite of ongoing bog conservation measures in the NRBMP to manage turf-cutting in protected sites. BnM and the National Parks and Wildlife Service continues to engage regarding the ongoing relocation of turf-cutters from protected raised bog sites.

10 All-Ireland Pollinator Plan 2021-2025

The All-Ireland Pollinator Plan 2021-2025 outlines key objectives and actions to protect and support pollinating insects and the habitats they rely on. A BnM specific action in this plan includes the adoption of pollinator-friendly management within the BnM network of sites. One action to help achieve this objective is habitat rehabilitation and restoration, where possible, of pollinator-friendly habitats, including peatland habitats.

11 Land-use planning policies

As BnM operates in many counties across Ireland, it is important to note the respective development plans in these counties. Many of the existing development plans recognise the potential that exists in the after-use of cutover/cutaway peatlands. BnM seeks to work with all of the relevant local authorities to ensure that the most appropriate after-uses are reflected in local planning policy. The following areas of consistent importance are of

both direct and indirect relevance to BnM: heritage, tourism, biodiversity/conservation, landscape, renewable energy, and economy/enterprise.

12 National Archaeology Code of Practice

BnM operated under an agreed Code of Practice (COP) regarding archaeology with the Department of Arts, Heritage and the Gaeltacht and the National Museum of Ireland which provided a framework to enable the Company to progress peat extraction whilst carrying out archaeological mitigation. (https://www.archaeology.ie/sites/default/files/media/publications/cop-bord-na-mona-en.pdf).

Under the Code, BnM, the Minister and Director worked together to ensure that appropriate archaeological survey and mitigation was carried out in advance of peat extraction.

As peat extraction ceased in 2019, the remaining elements of the COP that are still applicable include:

- BnM must ensure that any newly discovered monuments on BnM lands are reported in a timely manner to the National Monuments Service of the Department of Arts, Heritage and the Gaeltacht.
- BnM must ensure that any archaeological objects discovered on BnM lands are reported immediately to the Duty Officer of the National Museum of Ireland.
- BnM will adhere to the Archaeology Code of Practice relating to management of any archaeological finds that may arise during cutaway peatland rehabilitation and decommissioning.

13 Bord na Móna Biodiversity Action Plan 2016-2021

Rehabilitation of industrial peatlands is a key objective of the Bord na Móna Biodiversity Action Plan 2016-2021. This action plan outlines the main objectives and actions around biodiversity on BnM lands. The Bord na Móna Biodiversity Action Plan also outlines key International and European policy in relation to biodiversity. This includes the **United Nations Convention on Biodiversity 2011-2020 (CBD)** and **European Biodiversity Strategy to 2020**. Further details of these policies and BnM s responses can be found in the Bord na Móna Biodiversity Action Plan (Bord na Móna, 2016). Both policy documents highlight targets such as reducing pressure on biodiversity, promoting sustainability, habitat restoration and benefits of ecosystem services.

One example of a key CBD target is:

- *"Restore at least 15% of degraded areas through conservation and restoration activities."*

The EUs headline target for progress by 2020 is to:

- *"halt the loss of biodiversity and the degradation of ecosystems in the EU by 2020, restore them as far as feasible, while stepping up the EU contribution to averting global biodiversity loss."*

This rehabilitation plan is aligned to the CBD target and the EU Biodiversity Strategy target and will help Ireland meet its commitment to these international Biodiversity polices.

14 BnM commitments

BnM made the commitment in 2009 not to develop any new peatland sites for industrial peat production. The company has continued to work with different stakeholders.

In line with BnM's accelerated decarbonisation programme, the company made a further commitment to a significantly larger rehabilitation target. This was reflected in our plans to rehabilitate a further 20,000 hectares of cutaway and cutover bog to wetland and woodland mosaics by 2025. In addition, we planned to restore a further 1,000 hectares of raised bog habitat by 2025. These initial targets have been achieved.

The company announced the cessation of industrial peat production in 2021 and that it would rehabilitate a target of 33,000 ha between 2021-2026. Rehabilitation measures will continue to be carried out with the focus on re-wetting and rehabilitation of cutover and cutaway areas in line with national policies (such as the National Peatland Strategy, the National Biodiversity Action Plan, The Nature Restoration Law, the Climate Action Plan, the Water Framework Directive, etc.) and rehabilitation guidelines set down by the Environmental Protection Agency. BnM has now transitioned to a Climate Solutions company with a key commercial and development focus being the delivery of renewable energy to support Ireland's Climate Action Plan. In general, BnM will seek to balance and optimise commercial, social, and environmental value of its bogs, and develop integrated land-uses, while taking account of the need for sustainability and their biodiversity value.

These commitments outline the importance of peatland rehabilitation to BnM. The company will continue to demonstrate environmental responsibility and continue to deliver on these commitments in relation to peatland rehabilitation and in relation to the future management of these lands to maximise their benefits, particularly their ecosystem service benefits, along with the sustainable development of a portion of the land bank for other uses, such as renewable energy.

APPENDIX VI: DECOMMISSIONING

1. Condition 10 Decommissioning

Under condition 10.1, BnM must decommission relevant infrastructure and other materials that supported peat extraction, that may result in environmental pollution.

10.1.1 Decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.

To date across all of BnM's peatlands that have been rehabilitated, this has entailed removal of rail infrastructure, plant, equipment, materials, and waste.

In relation to this bog, this was primarily rail to be lifted and any associated polybrane materials, production plant and equipment, any waste materials including stockpile covering, stored at production centres.

During the decommissioning of this bog, these materials were either brought to a central roadside location to be removal via a licensed waste provider or brought centrally to the nearest main works site, either Littleton or Templetuohy for removal as waste, to be either recycled or deposited to landfill.

Records, EWC codes, waste treatment operations, weights, descriptions and final destinations of these wastes are reported each year in the Annual Environmental Report (AER) and the Environmental Performance Report (EPR) and are available at the EPA's Licensing & Enforcement Access Portal (LEAP).

Rail lifting is ongoing in Longford Pass in 2026 and is expected to be completed this year, as is the removal of some residual pumping infrastructure.

In relation to this bog, the list and tasks would be as follows:

Item	Description	Longford Pass Decommissioning Plan
1	Clean-up of remaining or unconsolidated waste or materials located in Bogs, Yards, Buildings and Offices	Clean-up of Bog
2	Cleaning Silt Ponds	Cleaning Silt Ponds
3	Decommissioning Peat Stockpiles	Peat Stockpile Management
4	Decommissioning or Removal of Buildings and Compounds	Decommissioning or Removal of Buildings and Compounds
5	Decommissioning Fuel Tanks and associated facilities	Where relevant
6	Decommissioning and Removal of Bog Pump Sites	Where relevant
7	Decommissioning or Removal of Septic Tanks	Where relevant

In addition, condition 7 of the licence requires these now defined waste items to be disposed of or recovered as follows:

7.1 Disposal or recovery of waste shall take place only as specified in *Schedule 2(i) Hazardous Wastes for Disposal/Recovery* and *Schedule 2(ii) Other Wastes for Disposal/Recovery* of this licence and in accordance with the appropriate National and European legislation and protocols. No other waste shall be disposed of/recovered either on-site or off-site without prior notice to, and prior written agreement of, the Agency.

7.2 Waste sent off-site for recovery or disposal shall only be conveyed to a waste contractor, as agreed by the Agency, and only transported from the site of the activity to the site of recovery/disposal in a manner which will not adversely affect the environment.

7.3 A full record, which shall be open to inspection by authorized persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall as a minimum contain details of the following:

7.3.1 The names of the agent and transporter of the waste.

7.3.2 The name of the persons responsible for the ultimate disposal/recovery of the

waste.

7.3.3 The ultimate destination of the waste.

7.3.4 Written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site.

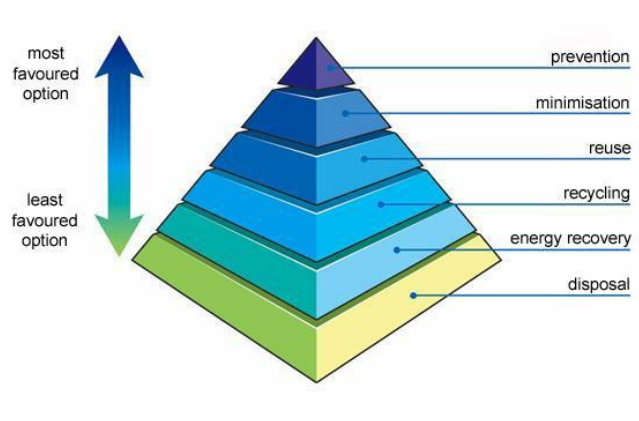
7.3.5 The tonnages and EWC Code for the waste materials listed in *Schedule 2(i) Hazardous Wastes for Disposal/Recovery* and *Schedule 2(ii) Other Wastes for Disposal/Recovery* sent off-site for disposal/recovery.

7.3.6 Details of any rejected consignments.

A copy of this Waste Management record shall be submitted to the Agency as part of the AER for the site.

As required by the licence, these waste items will be removed for recycling or disposal, using external contractors with the required waste collection permits, approved under 7.2, with waste records maintained as required under 7.3.

Where possible, BnM will utilize the appropriate waste hierarchy to identify waste that can reused or recycled ahead of disposal.



The validation of the success of condition 10.1 is carried out through an Independent Closure Audit (ICA), followed by and EPA Exit Audit (EA) and the eventual partial or full surrender of the licence.

2. Enhanced Decommissioning.

The remaining infrastructure does not constitute a risk to the environment and would not be a requirement of condition 10 of the licence. The removal of these are deemed as enhanced measures. These may enhance the future after use of the bog for amenity value, security against access for illegal and unsocial activities and general State and community benefit. In relation to this bog, this would include the infrastructure defined below:

Item	Enhanced Decommissioning Type	Longford Pass Decommissioning Plan
1	Removal of Railway Lines	Removal of Railway Lines
2	Decommissioning Bridges and Underpasses	Where Applicable
3	Decommissioning Railway Level Crossing	Where Applicable
4	Restricting Access (bogs and silt ponds)	Restricting Access to Bog
5	Removal of High Voltage Power Lines	Where Applicable

APPENDIX VII: GLOSSARY

Cutaway Bog: A BnM site generally becomes cutaway when it is economically unviable to continue industrial peat extraction or when the majority of peat has been removed.

Deep peat cutover bog. Deep peat cutover bog is defined as former raised bogs that have been in industrial peat production, where production has ceased but the residual peat depth is typically in excess of 2m. *Sphagnum* mosses are key species of raised bogs and the majority of the peat mass is formed from these mosses. *Sphagnum* species and other raised bog species are a key part of raised bog habitat function and prefer more acidic, nutrient poor, water-logged conditions. Typical raised bog *Sphagnum* mosses and other bog species do not thrive with the more typical alkaline water chemistry of cutaway bog but do grow well in these more acidic conditions where peat has been re-wetted. There is potential to re-develop *Sphagnum*-rich plant communities in these conditions if the peat can be re-wetted. This brings the opportunity of re-developing *Sphagnum*-rich vegetation communities that are considered Carbon sinks or peat-forming habitats and restoring the carbon sequestration function of these sites.

Dry cutaway bog: Cutaway bog is categorised as dry cutaway where it is not practical or feasible to re-wet these areas completely. It is inevitable that some areas of cutaway will remain relatively dry due to the heterogenous topography of the cutaway, as well as requirements for continued drainage on site for identified after-uses, or off site in relation to neighbouring lands or other infrastructure. Ridges and mounds of glacial deposits can become exposed during peat extraction and form a heterogenous topographical mosaic separated by basins. Dry cutaway may have very thin or no residual peat where ridges and mounds have been exposed. The exposed sub-soils are a mix of glacial gravels, muds and tills that can be quite free-draining. Dry cutaway may also have deeper residual peat, but in a location (i.e. at the margin) where the peat cannot be re-wetted due to boundary constraints. Dry cutaway may also develop in situations where there a relatively steep slope that inhibits re-wetting. The majority of dry cutaway will develop towards grassland, heath, scrub and dry woodland habitats.

Enhanced decommissioning: This is defined as decommissioning carried out under the Scheme, which is proposed to be externally funded.

Enhanced rehabilitation: This is defined as rehabilitation carried out under Scheme, which is proposed to be externally funded. It is proposed by Government that BnM be obligated to carry out enhanced decommissioning, rehabilitation and restoration on peatlands. This Scheme will significantly go beyond what is required to meet rehabilitation and decommissioning obligations under existing EPA IPC licence conditions. Interventions and activities supported by the Scheme will ensure that environmental stabilisation is achieved (meaning IPC obligations are met), and importantly, significant additional benefits, particularly relating to climate action and other ecosystem services, will also be delivered. However, only the costs associated with the additional, enhanced and accelerated measures, i.e., those interventions which go beyond the existing decommissioning and rehabilitation requirements arising from Condition 10 will be eligible for support under the Scheme.

Environmental stabilisation: The key objective of peatland rehabilitation is environmental stabilisation. This means developing habitats and vegetation back onto the bare peat, slowing water movement across the bog, minimising effects to downstream waterbodies and meeting the conditions of the IPC Licence. This is achieved by a combination of re-wetting, where possible, and natural colonisation of the former cutaway, with or without intervention**.** Habitats will develop that reflect the underlying environmental conditions. Other after-use development may also serve to act as environmental stabilisation.

Marginal land. Marginal land is defined as land around the margin of the industrial peat production area. This margin generally contains a range of habitats including scrub, birch woodland, cutover bog and raised bog remnants. It has a variety of land-uses including turf-cutting (private turbary). The Scheme will consider potential rehabilitation and restoration actions (e.g. drain blocking) within marginal land zones, where appropriate.

Rehabilitation: Rehabilitation is defined in general by BnM as environmental stabilisation of the former cutaway. This is generally achieved via re-wetting, where possible, and natural colonisation of the former cutaway, with or without intervention. It is not possible to restore raised bog habitats on BnM cutaway in general in the short-term. In general, most of the peat mass has been removed from many BnM cutaway sites and the environmental characteristics of these areas have therefore changed radically (peat depths, hydrology, water chemistry, substrate type, nutrient status. This means there will therefore be different habitat outcomes (wetlands, fen, heathland, grassland and Birch woodland). Other after-use development may also serve to act as rehabilitation.

Restoration: Ecological restoration is defined as the process of re-establishing to the extent possible the structure, function and integrity of indigenous ecosystems and the sustaining habitats they provide" (SER, 2004). Defined in this way, restoration encompasses the repair of ecosystems (Whisenant, 1999) and the **improvement of ecological conditions in damaged wildlands** through the **reinstatement of ecological processes**. In general, BnM cutaway peatlands cannot be restored back to raised bog in a reasonable timeframe as their environmental conditions has changed so radically (with the removal of the acrotelm – the living layer and much of the peat mass). However, they can be returned to a **trajectory** towards a naturally functioning peatland system (Renou-Wilson, 2012). **Raised bog restoration** is an objective of some BnM sites where there is residual natural raised bog vegetation and where the majority of the peat is still intact.

Standard rehabilitation: This is defined as rehabilitation that is designed to meet the conditions of the EPA IPC Licence. The key objective of rehabilitation is environmental stabilisation. This is achieved by a combination of re-wetting, where possible, and natural colonisation of the former cutaway, with or without intervention**.** Other after-use development may also serve to act as rehabilitation.

Standard decommissioning: This is defined as decommissioning that is designed to meet the conditions of the EPA IPC Licence. This is defined as to render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.

Wetland cutaway bog. Wetland cutaway bog is defined as former raised bogs that have been in industrial peat production, where production has ceased and the majority of peat has been cutaway, and where this cutaway has the potential to be re-wetted. A significant number of BnM sites have pumped drainage and these sites are likely to develop a mosaic of wetland habitats when pumping in reduced or stopped. The water chemistry of wetland cutaway frequently is strongly influenced by the more alkaline sub-soils that have been exposed during peat production. This means that pioneer vegetation is more typical of fen and wetland, rather than raised bog. Wetland cutaway will have a broad range of hydrological conditions depending on the local topography. In some cases, these wetlands may form deep water (> 0.5 m) whilst other areas may have the water table at or just below the surface of the ground.

APPENDIX VIII: EXTRACTIVE WASTE MANAGEMENT PLAN

(Minimisation, treatment, recovery and disposal)

Objective:
The objective of this generic plan is to comply with the requirements of regulation 5 of the Waste Management (Management of Waste from Extractive Industries) Regulations, and to prevent or reduce waste production and its harmfulness.

Scope:
This plan covers IPPC Licence's Ref P0499-01, Littleton Group of Bogs located in Co. Tipperary.

1.0 Extractive Waste:
Waste classified as extractive waste from peat extraction operations arise from three operations associated with this activity.

1.1 Silt Pond excavations and maintenance.
All peat extraction activities in the Littleton bog group are serviced by silt lagoons/ponds. During the excavation of these silt ponds, pre IPPC Licensing in 1999 and since licensing, the excavated material is stored adjacent to the silt pond, where it either remains in situ ores levelled out. As required by condition 6.6, these silt lagoons are cleaned twice per annum or more often if inspections dictate. These silt cleanings are also deposited on the same location, adjacent to the silt pond, where they may be levelled periodically to allow room for subsequent cleanings. These mounds of silt pond excavation material and cleanings are generally no higher that 2-3 metres.

1.2 Power Station screenings:
Lough Ree Power Station screens the peat from the bogs prior to processing. This screening removes oversized peat, stones and bogs timbers. Schedule 3 (ii) of the IPPC licence permits disposal of these peat screenings back to the bog, where it is levelled and graded into the surrounding peat landscape. These locations have been agreed with the Agency as per condition 7.4 of the IPPC Licence, and as per the attached locations.

1.3 Bog Timbers:
During peat extraction operations, bog timbers often arise in the bog surface and are required to be cleared. These timbers consist of bog pine, oak and some yew. Some of these timbers, such as the oak and yew are removed for use in the wood craft industry, with the remaining bog pine stockpiled in locations at the opposite end of each bog, where it generally becomes a habitat for flora and fauna. These piles of timber are generally no higher than 1-2 metres.

2.0 P0499-01 IPPC Licence Extractive Waste Conditions

2.1 Condition 7.5 Extractive Waste Management
The licensee shall draw up a Waste Management Plan (to be known as an Extractive Waste Management Plan) for the minimisation, treatment, recovery and disposal of extractive waste. This Plan shall meet the requirements of regulation 5 of the Waste Management (Management of Waste from the Extractive Industries) Regulations,2009. The Plan shall be submitted for agreement by the Agency by the 31' December 2012. The Plan shall be reviewed at least once every five years thereafter in a manner agreeable to the Agency and amended in the event of substantial changes to the operation of a waste facility or to the waste deposited. Any amendments shall be notified to the Agency.
All extractive waste shall be managed in accordance with the Extractive Waste Management Plan. A report on the implementation of the Extractive Waste Management Plan shall be provided in the AER.

2.2 Condition 7.6 Waste Facility

(i) No new waste facility may be developed or an existing waste facility modified unless agreed by the Agency.
(ii) The licensee shall ensure that all existing waste facilities are managed and maintained to ensure their physical stability and to prevent pollution or contamination of soil, air, surface water or groundwater.
(iii) The licensee shall ensure that all new waste facilities are constructed, managed and maintained to ensure their physical stability and to prevent pollution or contamination of soil, air, surface water or groundwater.
(iv) Operational measures shall be continuously employed to prevent damage to waste facilities from personnel, plant or equipment.
(v) The licensee shall establish and maintain a system for regular monitoring and inspection of waste facilities.
(vi) All records of monitoring and inspection of waste facilities, as required under the licence, shall be maintained on-site in order to ensure the appropriate handover of information in the event of a change of operator or relevant personnel.

2.3 Condition 7.7 Excavation Voids

7.7.1 Unless otherwise agreed by the Agency, only extractive waste shall be placed in excavation voids.
7.7.2 When placing extractive waste into excavation voids for rehabilitation and construction purposes, the licensee shall, in accordance with regulation 10 of the Waste Management (Management of Waste from the Extractive Industries) Regulations, 2009, and the Extractive Waste Management Plan:

- Secure the stability of the waste
- Put in place measures to prevent pollution of soil, surface water and ground water.
- Carry out monitoring of the extractive waste and excavation void.

Condition 7.5. Extractive Waste Management Plan. 5 (1)

3.0 Minimisation.

3.1 Silt pond excavation material and cleanings.

IPPC Licence conditions require all production areas to be serviced by an appropriately designed silt pond based on storage volume and retention time. Condition 6.6 requires all ponds to be cleaned bi-annually and more often if inspections dictate, so the only opportunity for minimisation of same is through Standard Operating Procedures. These are required under condition 2.2.2 (i) regarding minimisation of suspended solids, and are in-place to minimise the generation of silt, which in-turn will minimise the generation of silt pond waste.

3.2 Power Station Screenings.

These screenings cannot be minimised as they are a consequence of peat production, stones, timbers and oversize peat materials are naturally occurring on the bog, and are required to be removed prior to processing.

3.3 Bog Timbers.

Bog timbers are also naturally occurring materials within a bog and are required to be removed prior for production. The volume of these bog timbers varies from bog to bog and as such their minimisation is not controllable or quantifiable.

4.0 Treatment

4.1 Silt pond excavation material and cleanings.

The silt pond excavation material and silt cleanings do not require any treatment for its end use which will be either backfilling these silt pond voids as per condition 7.7.1 above as part of the Bog Rehabilitation Plan, or reincorporated into the surrounding peatlands.

4.2 Power Station Screenings.

The factory screenings are permitted to be returned to the bog as they were naturally occurring materials from the bog, and as such do not require any treatment to serve this purpose.

4.3 Bog Timbers
As per 1.3 above, these timbers are stockpiled at two locations in each bog, as per the attached list of sites and become habitats for various flora and fauna.

5.0 Recovery
5.1 Silt pond excavation material and cleanings.
Condition 2.2.2 (vi) requires the reuse of silt pond waste to be examined. This was undertaken in 2006, the outcome of which was that this waste peat silt material, as a fuel, was contaminated with sub-soils, rendering it unsuitable for combustion. In addition, volumes are small compared to overall peat production volumes.

5.2 Power Station Screenings.
Given the nature of these screenings as outlined in 1.2 above, there is no further use identified and they are permitted to be disposed of back to the bog.

5.3 Bog Timbers
Investigations into processing these materials into smaller fractions for potential heating purposes did not yield any viable results. In addition, these older stockpiles are now classified as habitats and as such would not be considered for reuse as a fuel.

6.0 Disposal
6.1 Silt pond excavation material and cleanings.
Schedule 3 (ii) permits the disposal of silt pond cleanings (Lagoon Sediments) to the bog and these locations, adjacent to the silt pond site, are presented in the attached spreadsheet, with associated grid coordinates.

6.2 Power Station Screenings.
Schedule 3 (ii) permits the disposal of screenings (Peat Screenings) to the bog at designated locations agreed under Condition 7.4, and these locations, are presented in the attached spreadsheet, with associated grid coordinates.

6.3 Bog Timbers
These naturally occurring bog timbers are stockpiled at locations in each bog, grid coordinates attached.

7.0 Extractive Waste Management Plan

5 (2a)(i)
The vast majority of peat extraction bogs were all designed and drained for production prior to the 1960's and as such the production fields layout cannot' be altered. Under our Cleaner Reduction Procedures, various design changes have been implemented to the production machines and process to reduce lost peat which eventually is captured in the silt ponds and requires removal as waste peat silt. This along with training and ongoing research and development will continuously reduce waste peat and subsequently waste silt pond cleanings. Bog timbers are present naturally in various volumes and quantities in different bogs and as peat production involves stripping peat in layers, the exposure, generation and removal of these timbers is unavoidable. Work has been undertaken recently into project looking at grinding of these bog timbers in situ using a timber miller, and if this project becomes viable it will contribute to the reduction of bog timbers.

5 (2a)(ii)
Given the nature and expanse of peat bogs, the stockpiling and storage of these waste materials do not present a visual, storage or stability problem. As required under Condition 10 of the IPPC Licence, the silt pond excavations and screenings will be utilised to backfill the silt pond voids once the bogs have finished and stabilised in accordance with out Bog Rehabilitation Plan. Storage of these wastes in the interim, open to the elements does

not present a change on the nature of these wastes that will threaten the environment or prevent their reuse during the bog rehabilitation process.

5 (2a)(iii)
Under Condition 10 of the IPPC Licence, all silt ponds will be decommissioned once the bog surface has stabilised, in agreement with the Agency. This will involve the removal of weirs and flow controls, returning the silt pond back to its original drain or removing the silt pond from the drainage system. Both of these activities will involve placing the silt pond extraction and cleaning material back into the excavation void.

5 (2a)(iv)
The peat bogs do not contain any topsoil, so this is not required.

5 (2a)(v)
Peat mineral resources do not undergo any treatment.

5 (2b)
These three extractive waste are all being reused and recovered back to their original extraction points and have not undergone any physical, chemical, or biological change.

5 (2c)(i, ii & iii)
These three extractive wastes, stored on the bog for reuse or recovery during the bog rehabilitation phase, do not require any management or monitoring during the operation of these bogs. Silt pond excavations and cleanings are stored adjacent to the silt pond and quickly revegetated and stabilise, the screenings are graded back into the bog at the agreed locations upon disposal and the bog timbers do not prevent any water or airborne danger to the environment.

5 (3)
The three extractive wastes arising from peat extraction operations at this site are classified wastes from mineral non-metalliferous excavation, with an EWC code of 0101 02. The materials are not classified as hazardous under Directive 91/689/EEC20, and do not contain substances or preparations classified as dangerous under Directives 67/548/EEC5 or 1999/45/EC6 above a certain threshold.
The peat excavations and cleanings are stored in locations and in a manner that they could not collapse, and are remote in their nature. The stockpiles are located adjacent to silt ponds that are cleaned regularly and as such these stockpiles are managed and levelled to facilitate further cleanings.
Therefore the material stored at these waste facilities would not be considered to be a Category A waste facility.

Classification in accordance Annex II.

Waste Material	Description	Classification	Chemical Process treatment	Deposition description	Transport System
Silt Pond Excavations and cleanings	Peat and mineral soils associated with peatlands. Stored for reuse during bog rehabilitation, with no displacement of overburden	01 01 02	None	Excavated from silt ponds by excavator and deposited adjacent to the silt pond.	Excavator
Peat Screenings	Stones, timbers and oversized peat particles, reincorporated into low	01 01 02	None	Removed by screen at the factory and	Tractor and trailer.

Waste Material	Description	Classification	Chemical Process treatment	Deposition description	Transport System
	areas, agreed with the Agency, and stabilized under normal natural bog conditions			transported by tractor and trailer to the designated and agreed locations	
Bog Timbers	Pine, Oak and Yew species, stored at locations in each bog. Not subject to any stability issues due to exposure to atmospheric/meteorological conditions.	01 01 02	None	Removed from the bog surface by excavator and transported by tractor and trailer to the agreed locations	Tractor and Trailer

Description of operations.
Silt pond excavations arise from the requirement to have silt ponds treating all peat extraction sites. Silt pond cleanings arise from the removal of peat silt from silt ponds as required under IPPC Licence. Bog timbers arise from preparation of the bogs surface for peat production. Estimated quantities of materials are below:

Closure plan. (Bog Rehabilitation Plan).
Condition 10.1 – 10.3 of the IPPC Licence requires the following:

- 10.1 Following termination of use or involvement of all or part of the site in the licensed activity, the licensee shall:
- 10.1.1 Decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.
- 10.1.2 Implement the agreed cutaway bog rehabilitation plan (refer Condition 10.2).

10.2 Cutaway Bog Rehabilitation Plan:

- 10.2.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of the cutaway boglands within the licensed area. This plan shall be submitted to the Agency for agreement within eighteen months of the date of grant of this licence.
- 10.2.2 The plan shall be reviewed every two years and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the written agreement of the Agency.

10.3 The Rehabilitation Plan shall include as a minimum, the following:

- 10.3.1 A scope statement for the plan; to include outcome of consultations with relevant Agencies, Authorities and affected parties (to be identified by the licensee).
- 10.3.2 The criteria which define the successful rehabilitation of the activity or part thereof, which ensures minimum impact to the environment.
- 10.3.3 A programme to achieve the stated criteria.
- 10.3.4 Where relevant, a test programme to demonstrate the successful implementation of the rehabilitation plan.
- 10.3.5 A programme for aftercare and maintenance.

10.4 A final validation report to include a certificate of completion for the Rehabilitation Plan, for all or part of the site as necessary, shall be submitted to the Agency within six months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment. This plan including maps and ecological classifications are available on file at the Allen Clonsast IPPC Licence Coordinators office.
The location in relation to the silt pond excavations and cleanings are adjacent to the silt ponds, which are considered under the Shannon River Basin Management Plan in accordance with the requirements of Directive 2000/60/EC.
Screenings and bog timbers are all naturally occurring elements of peatland and there placement back to the bog in smaller concentrated designated waste facilities does not constitute a risk to the prevention of water compliance.
The lands under where these materials are deposited are peatlands and are un-effected by the placing of this material.

Review.
This plan will be reviewed every five years, the first review to take place in September 2017. This review will entail an inspection of these waste facilities to ensure their placing, management, maintenance and stability comply with the requirements of the Extractive Waste Management requirements and condition 7.5, 7.6 and 7.7 of the Littleton IPPC Licence P0499-01.

APPENDIX IX: MITIGATION MEASURES FOR THE APPLICATION OF FERTILISER

- Any fertiliser used will be Rock Phosphate and will not be applied in the following conditions:
    1. The land is waterlogged;
    2. The land is flooded, or it is likely to flood;
    3. The land is frozen, or covered with snow;
    4. Heavy rain is forecast within 48 hours (forecasts will be checked from Met Éireann).
    5. The ground slopes steeply and there is a risk of water pollution, when factors such as surface run-off pathways, the presence of land drains, the absence of hedgerows to mitigate surface flow, soil condition and ground cover are taken into account.
- No fertiliser will be spread on land within 2 metres of a surface watercourse.
- Buffer zones in respect of waterbodies, as specified on https://www.epa.ie/resources/faqs/environment--you/faq-listing/ will be adhered with at all times with regard to fertiliser application. Reproduced as follows:

Water body / Feature	Buffer zone
Any water supply source providing 100m^3 or more of water per day, or serving 500 or more people	200 metres (or as little as 30 metres where a local authority allows)
Any water supply source providing 10m^3 or more of water per day, or serving 50 or more people	100 metres (or as little as 30 metres where a local authority allows)
Any other water supply for human consumption	25 metres (or as little as 30 metres where a local authority allows)
Lake shoreline	20 metres
Exposed cavernous or karstified limestone features (such as swallow holes or collapse features)	15 metres
Any surface watercourse where the slope towards the watercourse exceeds 10%	10 metres
Any other surface waters	5 metres*

APPENDIX X: CONSULTATION SUMMARIES

Table APX -1 Consultees contacted.

Bog Name	Contact Organisation	Contact Name	Date of Issue	Format	Date Response Received	Response Format
Consultation undertaken in 2017-2018						
Baunmore	Private individual A		27/11/2017	Letter		
Littleton Bog Group	Irish Peatland Conservation Council	Several staff members		letter	14/02/2018	
Ballysorrell, Templetouhy, Baunmore	National Parks and Wildlife Service	Several staff members	6/02/2018	Site meeting	8/3/2018	
Lanespark	Private individual B		11/04/2018	Site Visit	11/04/2018	
Ballysorrell, Carrickhill Baunmore	NUIG	Several staff members	23/04/2018	Site Visit	23/04/2018	
Littleton Bog Group	Private individual C		25/04/2018	Phone	25/04/2018	
Derryvilla	Slieve Ardagh Rural Development Group	Several members	1/06/2018	Meeting	1/6/2018	
Littleton Bog Group	National Parks and Wildlife Service	Regional staff	24/05/2018	Email	1/06/2018	
Littleton Bog Group	General community meeting – Loch Doire Bhile, site visit to Baunmore		12/06/2018	Site Visit/meeting	12/06/2018	
Littleton Bog Group	National Parks and Wildlife Service	Regional staff	14/06/2018	Site visit	14/06/2018	
Littleton Bog Group	Tipperary County Council	Heritage Officer	23/06/2018	Phone	23/06/2018	
Derryvilla	Private Individual D		27/06/2018	Meeting	27/06/2018	
Littleton Bog Group	Birdwatch Ireland	Several staff members	1/08/2018	Email	3/08/2018	
Littleton Bog Group	Irish Peatland Conservation Council	Several staff members	1/08/2018	Letter	15/08/2018	

Bog Name	Contact Organisation	Contact Name	Date of Issue	Format	Date Response Received	Response Format
Littleton Bog Group	Kilkenny County Council	Heritage Officer	1/08/2018	Email	3/08/2018	
Littleton Bog Group	National Parks and Wildlife Service	Several staff members	1/08/2018	Letter	9/10/2018	
Littleton Bog Group	Irish Peatland Conservation Council	Several staff members	30/08/2018	Meeting	30/08/2018	
Littleton	Forest Service	Several staff members	14/08/2018	Email	14/08/2018	
Baunmore & Littleton	Birdwatch Ireland – Tipperary Branch	Several staff members	1/10/2018	Site visit	1/10/2018	
Littleton Bog Group	Tipperary County Council	Several staff members	5/11/2018	Email	19/11/2018	
Littleton Bog Group	Tipperary Heritage Forum	Several staff members	15/02/2019	Presentation	15/02/2019	
Knockahaw	Private Individual E		1/02/2019	Site Visit	1/02/2019	
Littleton Bog Group	Environmental Protection Agency, National Parks and Wildlife Service, Irish Peatland Conservation Council	Several staff members	26/02/2019	Presentation meeting	26/02/2019	
Baunmore	Irish Wildlife Trust	Several staff members	12/05/2019	Site Visit/Walk	12/05/2019	
Lanespark Derryvilla	National Parks and Wildlife Service and Slieve Ardagh Rural Development Group – Loch Doire Bhile	Several staff members	22/05/2019	Meeting	22/05/2019	
Longfordpass	Private Individual F		5/07/2019	Site visit	5/07/2019	
Ballysorrell	Heritage Week Walk - Ballysorrell	Several staff members	17/08/2019	Site Visit/Wak	17/08/2019	
Baunmore Carrickhill	Limerick Institute of Technology (LIT)	Several staff members	13/09/2019	Site visit	13/09/2019	

APX -2 Response summary from Consultees contacted

Organisation	Summary of Response by Stakeholder	BnM Response
NPWS 8/3/2018	Ballysorrell All walked over the bog and viewed the bog restoration works. MCC outlined work carried out so far and work planned for the future. Planned work is > 75% complete. NPWS staff very complementary of the bog restoration work (drain-blocking with peat dams) carried out so far. All agreed that the bog had significant potential for bog restoration, and future nature conservation. Signs that the bog is already re-wetting in places due to drain-blocking. Review and discussion of NPWS degraded raised bog model outputs for Ballysorrell. Model predicted that 9 ha would have potential for development into active raised bog in the future. General view was that this was probably an under-estimate and that the model likely to be affected by the intensive BnM drainage network. Discussion of potential measures to further increase re-wetting of the bog including berms across high bog at southern section. Bruckana All visited the Bruckana Windfarm. Viewed a cutaway bog area within the windfarm complex where there has been significant natural colonisation for at least 20 years and some targeted hydrological management. Discussion of the former history of Templetuohy Bog as a sod turf production bog. Sod turf cutaway tends to have deeper remnant peat, which in turn can develop Sphagnum-rich vegetation, where conditions suit. Attendees viewed some wet cutaway where there has been some Sphagnum colonisation. Discussion of environmental conditions that led to the development of this specific vegetation type. Discussion of potential to re-wet similar cutaway, with similar environmental conditions and deeper peat, to encourage development of Sphagnum-rich peat-forming vegetation. Discussion of different constraints and opportunities for this type of re-wetting. This Sphagnum-rich peat-forming vegetation only has potential to develop in certain environmental conditions in association with deeper peat. NPWS staff suggested that intensive bunding would have potential to increase the overall re-wetted area. There was general discussion of potential larger project opportunities, in association with planned BnM rehabilitation or future BnM afteruse development. These larger projects could potentially focus on GHG emission reduction, creation of peat-forming habitats, biodiversity enhancement, other ecosystem services enhancement/restoration. Baunmore All visited Baunmore cutaway. Baunmore is a typical milled peat cutaway with pumped drainage and with shallower remnant peat more typical of milled cutaway in the Littleton Bog Group, in contrast to Bruckana. All walked part of the bog where some recent rehabilitation trials have been carried out. MMC pointed out the recent field drain blocking using a bull-dozer that has been carried out so far. The target here was to block drains, re-establish surface drainage and re-wet peat. This work has already successfully held back surface water in places. The cambered fields and variable topography mean that a proportion of the peat fields remain dry. The expected habitat development is a mosaic of poor fen wetland communities, Reed swamp and scrub/wet woodland. MMC explained how blocking the field drains is Phase 1 of the planned rehab trial and that Phase 2 will involve blocking outfalls and cutting new overflow drains to further manipulate overall water levels. The overall strategy is to maximise the area of re-wetted peat with water levels close to the peat surface and emergent wetland communities. NPWS staff also suggested that more intensive bunding would have potential to increase the overall re-wetted area and help manage water levels. All then examined some cutaway that is colonising naturally with pioneer vegetation. This cutaway is much more alkaline compared to Bruckana with indicators such as the presence of Black Bog-rush.	

Organisation	Summary of Response by Stakeholder	BnM Response
Tipperary Cunty Council	The draft plan is an overview of the rehabilitation within the Littleton bog group this comprises of 12 bog areas. The plan is developed under Condition 10 of IPC Licence Ref. P0499-01. (An incorrect licence ref. is given in the plan.) Any consideration for future after uses for the bog areas will be subject to the planning regulatory framework and the Environment section will be obliged to comment at this time on a more detailed proposal. The rehabilitation plan should include best practice measures for the restoration of an optimal range of biodiversity and ecosystems. The aftercare management activities on the level, quantity and quality of water both on site and in the surrounding landscape should avoid any unnecessary deterioration in the quality and quantity of ground and surface waters. After use, peatland water levels and flow regimes should be restored to as close to the natural reference conditions as possible. Any works carried out must be detailed and all stakeholders consulted.	
Irish Peatland Conservation Council	The IPCC welcome the zonation of Ballysorrell Bog for biodiversity and the decision not to develop it for peat resources (Page 3). Ballysorrell Bog is quite southerly in its location and its rehabilitation and zonation for biodiversity will help to extend the range of raised bog habitat in Ireland, which according to "The Status of EU Protected Habitats and Species in Ireland | 2013" (NPWS, 2013) is "BAD". We have a few questions and points to make on the draft rehabilitation plan with the aim to improving its content. It is good to see that BnM will be restoring the hydrology of the high bog through drain blocking as mentioned on Page 4 and that you also intend to carry out a trial rehab programme of a selected area for training purposes. Could you please elaborate on this? What training/trials do you intend to conduct and is it only inhouse training for BnM staff? The rehabilitation process may be a good time to test the Canadian method of Sphagnum transfer as there would be time to prepare the site prior to drain blocking. Please give this suggestion consideration as you indicated the peat present as light red brown Sphagnum peat (Page 9). There is Sphagnum on site that could be harvested and used as a donor inoculum for a Sphagnum trial. Page 5 gives information on the short and long-term time-frames of the plan. Could you give more details on the methods that will be utilised to monitor the hydrology i.e. will piezometers be used to measure water levels and will they be measured before drain blocking? This could ensure that any hydrological successes will be shown. In addition, how frequently will the ecotope mapping be conducted? Page 3 details the time-line for the development of Ballysorrell ("Ballysorrell was originally developed....."). Could this historical timeline be re-written as it is difficult to follow. For instance, when did the private sodpeat cutting around the bog cease? When did the milled peat production cease? Could you please specify how Ballysorrell Bog will help to achieve the national conservation target for active raised bog and supporting habitat in Ireland? Are there plans to formally designate this site in the future? Thank you for giving us this opportunity to make some comments on this welcome initiative by Bord na Mona.	
NPWS 9/10/2018	The Department, particularly, welcomes the restoration measures proposed for Ballysorrell Bog and Knockahaw Bog which will result in the development of active raised bog habitat and acknowledge that this will significantly aid Ireland in meeting its commitments under the EU Habitats Directive. Whilst it is appreciated that "the rehabilitation measures will be adapted to the various baseline conditions" (Part 1, pg.20) the Department recommends that BnM consider more fully the potential for forward-planning during production phases of its operation so that the topography of the commercial fields could be engineered so as to best facilitate rewetting of the sites. Such an approach would better conform to Principle 17 (afteruse of cutaway peatlands) of the National Peatlands Strategy (2015). The Department recommends that the ongoing research into the interaction between rehabilitation measures and carbon emissions is prioritized so as to better inform future rehabilitation plans. In the absence of the assimilation of such research outputs into rehabilitation planning it is nonetheless recommended that serious consideration is giving to reprofiling works within the Littleton Bog Group. In relevant sites this could greatly improve the baseline conditions for rewetting and would be justified on the basis that rewetted cutaway has lower carbon emissions that dry, bare cutaway. The foregoing is in line with Principle 19 (contribution of peatland rehabilitation and restoration to climate change mitigation and adaption) of the National Peatlands Strategy. There is some difficulty interpreting the maps due to their complexity and the size of the legend. Maps showing specific restoration actions would be useful, possibly in the form of an	

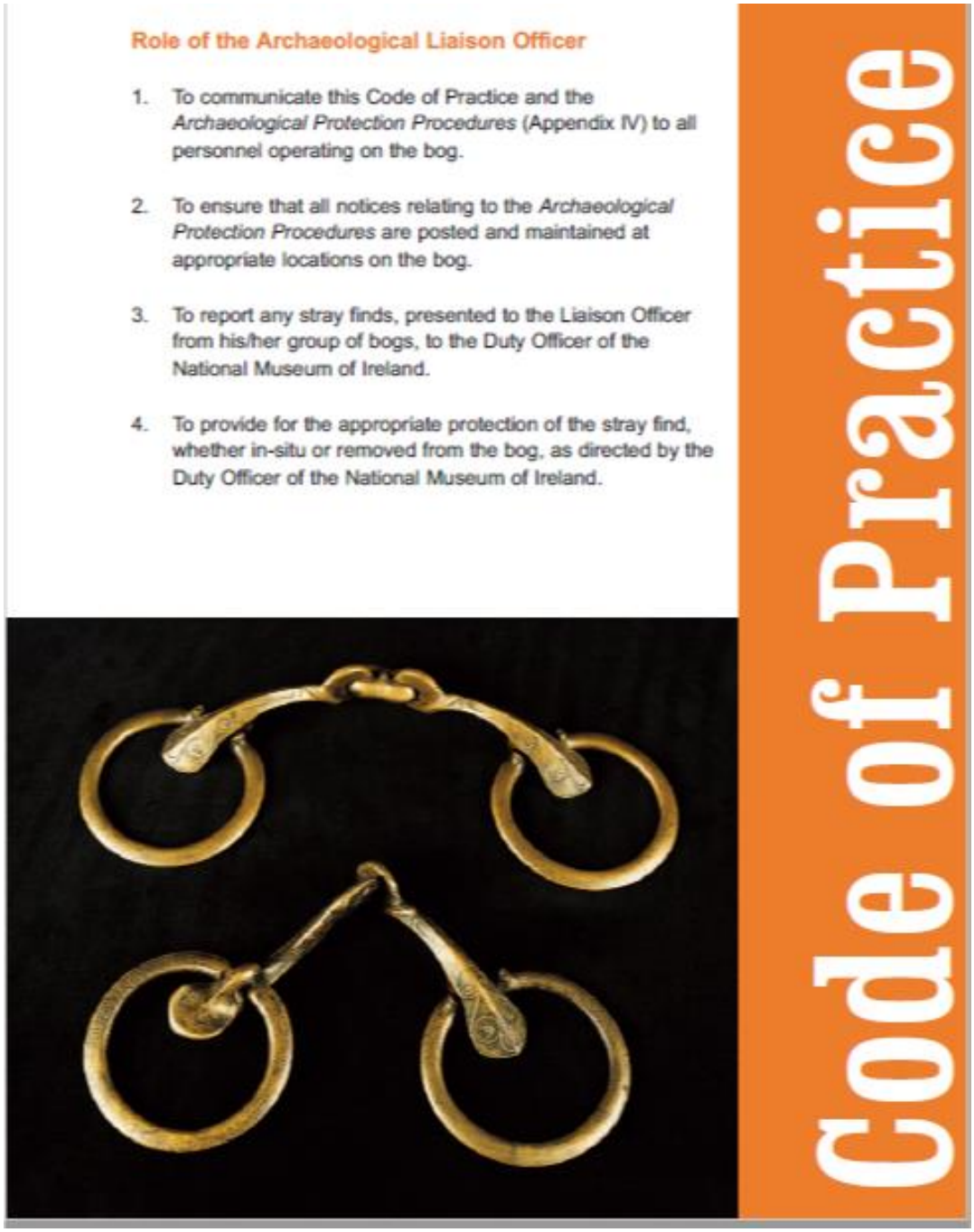
Organisation	Summary of Response by Stakeholder	BnM Response
	overview grid at a scale 1:35,000 with more detailed mapping as per grid squares. Eco-hydrological modelling based on LiDAR/DTM would be essential to ascertain the potential to achieve wet habitats with the potential to turn into carbon sinks. ….. 2 The Department is keen to continue engagement with BnM as regards investigating more engineered restoration techniques likely to provide results in line with the principles of the National Peatlands Strategy. The NPWS of the Department would welcome an opportunity to meet with you to allow for the Plan to be presented by your Ecology Team and to further explore the options of external funding such as EU LIFE funding, as discussed in previous meetings.	
IPCC 15/08/2018	Could you please clarify the correct area for the group of 12 sites included: is it 5050ha (Page 11, Section 4.2) or is it 4824ha (Page 11, Table 1). If it is the latter could you clarify what the other 226ha constitutes please. IPCC's principal interest in this plan lies in the future of existing acid peat bog remnants, the potential of the cutaway areas to provide biodiversity value and priority habitats for nature conservation, climate change mitigation and the extent to which the plan meets requirements of the National Peatlands Strategy 2015. The area of peatland included in the Littleton Bog Group is significant in the county of Tipperary as it represents one third of the original area of raised bog that occurred in the whole County particularly concentrated in South Tipperary (Hammond 1979 Peatland Map of Ireland) the southern distribution range for raised bogs described in the Status of EU Protected Habitats and Species. In your plan on Table 5 only two bog restoration sites (Ballysorrell and Knockahaw) are proposed covering an area of 567ha. Can you explain the method used in choosing these areas for bog restoration and were any other sites considered within the group? IPCC maintain that two sites is far too little considering the area of the land in the Littleton Group and the lack of any sites of conservation value in this area of former raised bog distribution. We note that Killeens Bog contains acidic peat and that it appears to be earmarked for horticultural peat (sod moss judging from the satellite photograph) should this be required. On Page 16 in conclusion 5 the plan states that this bog could be restored if horticultural peat extraction is stopped. IPCC strongly recommend the immediate cessation of this activity on this site and its inclusion in the restoration sites plan. We have reasoned with BnM on numerous occasions about the continued national production of horticultural peat as we do not agree that this use represents responsible management as defined in principle P24 in the National Peatlands Strategy. We understand that Sod Moss is regarded in economic terms as a "lost leader" product which negates any economic argument for keeping this site in production. Here in Littleton where BnM have exploited over 5000ha of Tipperary's natural peatland resources, all peat production should cease and every effort should be made to restore suitable acid peat resources to living bog where they exist. In this regard on Page 15 (Section 4.3.1.1 [ii]) two further sites with acid peat are mentioned - Carrickhill (substantial raised bog cutover east and west of the cutaway) & Inch (raised bog cutover to the south west of the cutaway) - why are these sites not being included in the bog restoration sites line-up? In the IPCC Sites Database we have a site named Longford Pass - Littleton Bog which is a remnant raised bog that we surveyed with a former BnM employee Sean Canney and which we subsequently used for educational purposes with local schools with the agreement of BnM. We would like to see this site included in the bog sites restoration list. (Grid ref. = S 23023 59319). IPCC are very unclear about your aims for the non-designated sites with considerable wildlife interest described on Page 21 of the plan. We estimate that there are 10 sites mentioned that are noteworthy for birds, crustaceans and invertebrates. In addition a further 3 rehabilitation sites are included in the BnM Biodiversity Plan. On the one hand BnM makes use of the fact that cutaway bogs are rich in biodiversity as part of the "Naturally Driven" image you like to portray but we can see no substantial commitment to undertake targeted management actions in relation to enhancing and maintaining these species on the sites. For example on Page 19 you state that without additional funding targeted conservation works for breeding birds will not be a feature of this plan. This is wrong and is at odds with Principle 15 in the National Peatlands Strategy 2015. In relation to climate	

Organisation	Summary of Response by Stakeholder	BnM Response
	change this rehabilitation plan needs to ensure that all of the cutaway bogs within the Littleton Group are rewetted to prevent carbon leakage. In our experience through visits to Mount Lucas, Ballycon and Lullymore cutaway bogs there are substantial areas within these rehabilitated sites that are dry and emitting carbon. Why does BnM not recontour sites with un-even topography to ensure that the majority of the bare peat is rewetted? Surely at the peat production stage more effort could be made to extract the peat so that flat substrate remains. Can you indicate within the plan the percentage of peat that will be rewetted and be carbon neutral? This is an important consideration in line with national climate change policy. IPCC find that the plan is overstating the company's intention to cease peat production for electricity by 2030 as their contribution to climate change policy	
Private Individual C	Phone call to discuss potential to develop greenway amenity across the Littleton Bog Group.	
Private Individual D	Meeting to discuss boundary issues and potential impact of rehabilitation on adjoining land	
Private Individual F	Meeting to discuss rare orchids at Longfordpass railway cutting	
PCAS consultation undertaken in 2025		
Uisce Éireann (formerly Irish Water)	In their response, Uisce Éireann stated that they are 'supportive of the key objective of achieving environmental stabilisation of the bog and stabilising/improving key emissions to water. Uisce Éireann understand that restored peatlands are generally beneficial for drinking water sources downstream by improving water quality and by creating water retention and slowing the flow from the site. We are therefore in support of the Cutaway Bog Decommissioning and Rehabilitation Plan and believe that it could help to achieve to improvements the quality of drinking water sources downstream in terms of suspended sediment, colour, ammonia and dissolved organic carbon. Erenagh Bog is located within the drinking water abstraction catchment for five public water supplies. The closest abstraction point is located approximately 32 km downstream of the site, where the Athlone Public Water Supply abstracts from the River Shannon. 'Uisce Éireann has undertaken a review of the plan and Killeen Bog is not located within any drinking water abstraction catchments directly nor is Killeen Bog directly associated with any surface water abstraction catchments downstream. However, the zone of contribution (ZOC) for the Horse & Jockey Water Supply is located approximately 200m to east of Killeen Bog, with the abstraction borehole at Curraheen being located a further 1.5km east of the Killeen Bog'. Uisce Éireann provided suggestions and recommendations around water quality monitoring and the management of silt ponds during and post rehabilitation.	BnM acknowledged the response and responded to the queries raised. Consultation is ongoing.
Iarnród Éireann/Irish Rail	The location is approximately 10km from the nearest Iarnród Éireann railway line in Thurles, so Iarnród Éireann have no comments to make about the proposed work.	BnM acknowledges the response.
Minister of State with responsibility for Nature, Heritage	Acknowledge receipt of consultation.	BnM acknowledges the response.

Organisation	Summary of Response by Stakeholder	BnM Response
and Biodiversity - Christopher O'Sullivan TD.		
Tipperary County Council	In their submission, Tipperary County Council highlighted that the rehabilitation plan should 'ensure that future options for amenity or tourism uses of the lands are not discounted, having regard to the Council's aspirations to develop eco-tourism projects throughout the county'. Further, it was highlighted that archaeological impacts associated with rehabilitation of Killeen bog, given the rich archaeological heritage of the lands, should be assessed. Recognition of the Littleton Labyrinth projects is welcomed by Tipperary County Council. The rehabilitation of the bog should have regard to future access and way-leaves for access and services of the adjacent Lisheen Mines National Bioeconomy Campus. Tipperary County Council provided information on the relevant policies and objectives within the Tipperary County Council's Climate Action Plan 2024-2029 that aligned with peatland restoration. Other information focused on the Tipperary Decarbonising Zone, and how peatland restoration would benefit such decarbonisation. Other information was provided on the council's policies on Land-use, Land-use Change and Forestry (LULUCF). It notes that the 'management of agricultural ecosystems, such as grasslands and peatlands' are emitters of CO2 and 'the management of agricultural ecosystems, such as grasslands and peatlands 'an important area for climate mitigation measures'. 'For example, alternative land management measures such as raising the water table in existing pastures and peatlands, new crop types, forestry etc could make this sector a net remover of GHGs'. The submission notes that 'BnM is to be commended for its decarbonisation programme aimed at reducing the carbon emissions from its activities. This programme supports the National policy position and objective of achieving a transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050'. The submission requests: • 'stakeholder collaboration to deliver concerted efforts towards carbon and GHG emissions reductions within the DZ, which can lead the way for wider application across Tipperary'. • 'BnaM are requested to considered if there are opportunities for collaboration with stakeholders, including Tipperary County Council, as part of the delivery of their PCAS programme'. • 'The Mid-Tipperary Decarbonising Zone is within the JTF area and thus there are opportunities to engage local communities, including those previously employed in the peat harvesting industry, in areas related to training and upskilling and sustainable local job creation'. • 'BnaM are requested to consider the referring of the Mid-Tipperary DZ in their relevant publications and projects. In particular to include details on the Mid-Tipperary Decarbonising Zone in the relevant Rehabilitation Plans and associated Map Books'. • 'The strategic location of the national Bioeconomy Campus (Irish Bioeconomy Foundation) at Lisheen should be noted and it is requested that BnaM consider the vision for the National Bioeconomy campus as part of their overall plans in the Mid-Tipperary DZ areas'. 'BnaM are requested to consider, given the particular role of the national DZ programme in emissions reduction, if there is an opportunity to monitor the changes in carbon emissions from a current baseline within the Killeen bog and report on reduced the carbon emissions in support of the national objective of achieving a transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. Thus, the rehabilitation plans can explicitly state how emissions will be monitored and reported. Such reporting will also support Tipperary County Council objectives for supporting moves towards low-carbon communities within the Decarbonising Zone'.	BnM acknowledged the response. Consultation is ongoing.

Organisation	Summary of Response by Stakeholder	BnM Response
An Taisce	In their submission, An Taisce welcomed 'any efforts made to rehabilitate and eventually restore Ireland's network of heavily degraded bog lands. This is crucial in the context of the intertwined biodiversity and climate emergencies, and the crucial carbon sequestration function of healthy bogland alongside other ecosystem services'. Expressed that peatlands should not be subject to future development 'which could have negative ecological impacts in terms of hydrological regime, critical wildlife habitat, carbon sequestration function and other ecosystem services' An Taisce 'highlight an example of a rare species returning to a naturally regenerating bog on BnM lands, namely the Crane, which was absent as a successfully breeding species in Ireland for hundreds of years.2 This demonstrates the positive and regenerative cascading effects across an ecosystem when it is devoid of intensive industrial activity and allowed to regenerate and eventually flourish. We submit that the subject rehabilitation should be considered with these benefits in mind, and that resumption of any type of industrial activity should be excluded within boglands with the highest restoration potential or in those which have already been rehabilitated/restored'. Queries if Coillte conifer plantation forestry could be included in the rehabilitation plan. For Bord na Mona to prevent small-scale illegal turf cutting within the subject site. A request for continuous ecological monitoring to be carried out at the site to ascertain its full ecological value and potential. An Taisce 'welcome the commitment to bunding as a measure throughout the peatland restoration proposal, which is recognised by stakeholders such as the NPWS and IPCC as effective for rewetting purposes'. Concerns were raised 'about the effects of drought and wildfire risk, as well as excess rainfall events and subsequent flooding effects'.	BnM acknowledged the response. Consultation is ongoing.

APPENDIX XI: ARCHAEOLOGY



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Code of Practice

5. To arrange for the delivery or collection of the stray find, as directed by the Duty Officer of the National Museum of Ireland.

6. To complete the Report of Discovery of Archaeological Object(s) in Bogs (Appendix V), as directed by the Duty Officer of the National Museum of Ireland.

7. To maintain a file of all stray finds and associated documentation and provide copies to the Project Archaeologist.

8. To provide assistance, where required, to the Department during archaeological surveys.

9. To provide assistance, where required, to Bord na Móna's Consultant Archaeologists, during investigation and mitigation of monuments.

10. To report to the Bord na Móna members on the Archaeology Management Liaison Committee any planned developments or new activities on cutaway peatland areas within his/her group of bogs.



1. Purpose

The purpose of this procedure is to describe the arrangements within Bord na Móna (BnM) for the identification, protection and reporting of archaeological material, including stray finds and known archaeological features.

All objects, sites or monuments, no matter how fragmentary, are important elements of our national heritage. The protection of archaeological resources is a legal requirement and forms part of Bord na Móna's environmental and cultural heritage responsibilities.

This procedure also sets out operational controls to ensure that archaeological features and their associated buffer zones are protected during rehabilitation activities.

---

2. Procedure

2.1 Archaeological Awareness

1. Verify whether any known archaeological monuments or constraints exist within the proposed work area prior to commencing works. These can be identified using the BnM GIS system, including the relevant PCAS layers and associated field maps.
2. All archaeological locations and their associated buffer zones shall be clearly marked on the bog in advance of any rehabilitation activities, irrespective of whether works are planned within those areas. The Survey Team will endeavour to mark all zones prior to commencement of rehabilitation works on a given bog; however, this is subject to the availability of survey resources. Where features are located in areas that are unsafe to access (e.g. water-covered areas), physical marking is not required.
3. These markings must be installed prior to machinery entering the field where all rehabilitation measures are taking place.
4. Archaeological features located within fields will be marked by the Survey Team using a visible red "X" to clearly alert operators to the presence of an archaeological constraint. These features are typically accompanied by a 20 m buffer zone, which may restrict access to up to three adjacent fields.
5. Operators must not drive over or across these markers, including when moving between work areas. Operators must navigate around the marked locations and their associated buffer zones.
6. If operators are observed driving over archaeological markers in order to move to the next work area, this must be reported to the Site Supervisor or **Archaeological Liaison Officer** immediately so corrective action can be taken.
7. Archaeological areas and their associated buffer zones must not be used for machine travel, idle travel, turning, or equipment positioning.

2.2 Stray Finds Procedure

1 Be vigilant at all times. Objects or traces of structures may be found:

- on field surfaces
- in drain faces
- on bog margins
- caught within the mechanics of machinery.

2 If a n object is discovered:

- Leave it in place if it is safe to do so.
- Note its position.
- Immediately contact the **Archaeological Liaison Officer**, who will assess the situation and contact the Duty Officer of the National Museum of Ireland where required.

3 Resist the temptation to investigate the find spot further, as this may disturb fragile archaeological deposits.

4 If the object has already been dislodged or is in imminent danger:

- Remove it carefully.
- Mark the find location.
- Report it immediately to the **Archaeological Liaison Officer**.

5 Objects made of **wood, leather or textile**, particularly those removed from peat, must be kept in conditions similar to those in which they were found. This may include:

- packing the object in peat, or
- placing waterlogged items in a clean basin of water and sealing the container.

6 Do not attempt to clean or remove peat from the object.

7 If **timbers, gravel, stones or other materials that may form part of a man-made structure** are discovered:

- mark the location
- report immediately to the **Archaeological Liaison Officer**
- do not expose the structure further.

8 Report anything that appears **unnatural or unusual in the bog**. The **Archaeological Liaison Officer** will determine whether the find requires referral to the relevant authorities.

---

3. Important Note

Our archaeological heritage is a finite and non-renewable resource. Once a site is destroyed, its information is lost forever. Protecting archaeological remains allows us to better understand our past, our landscape and the people who lived here before us.

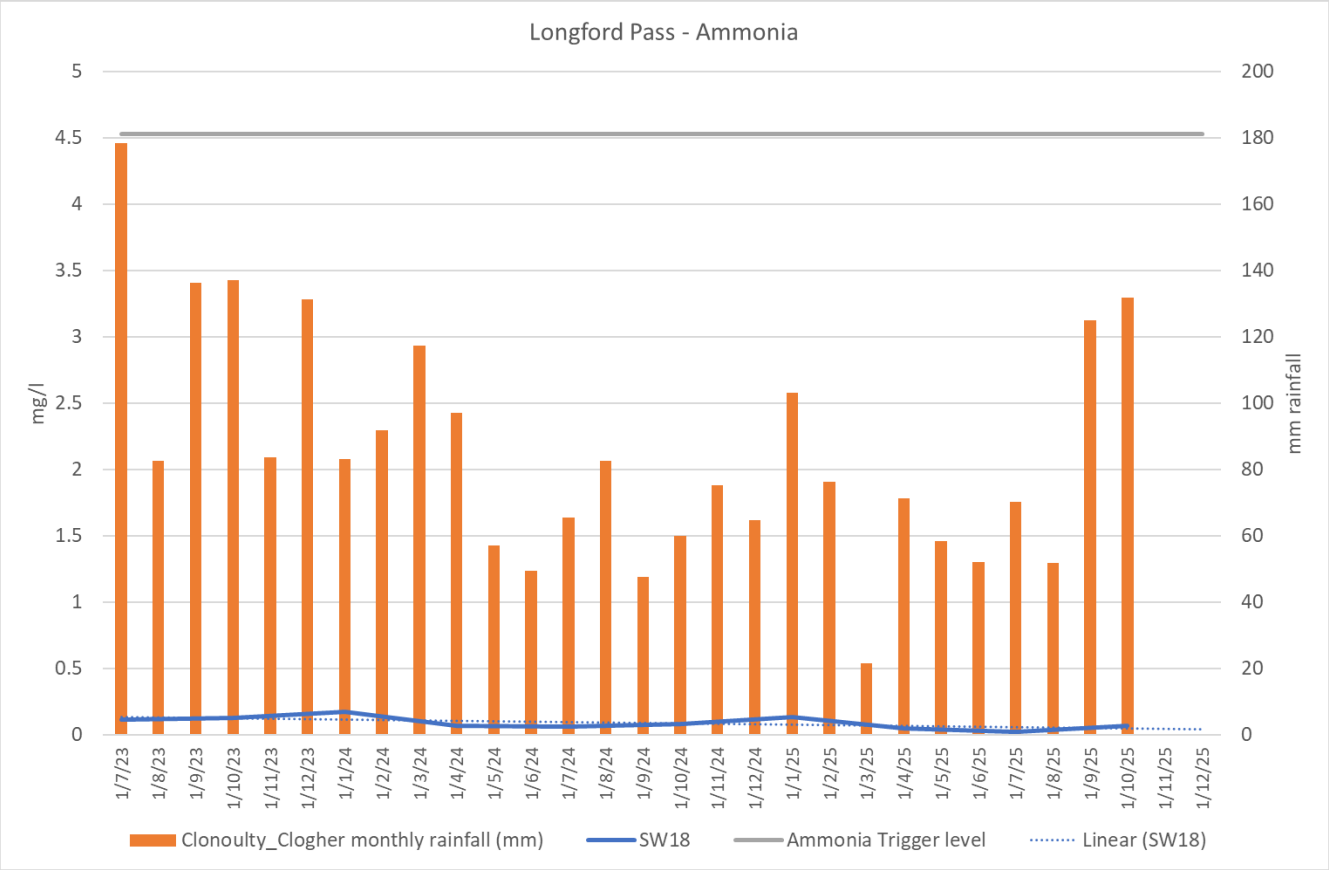
All Bord na Móna staff and contractors must therefore ensure that archaeological features, buffer zones and potential stray finds are treated with care and protected at all times during operations.

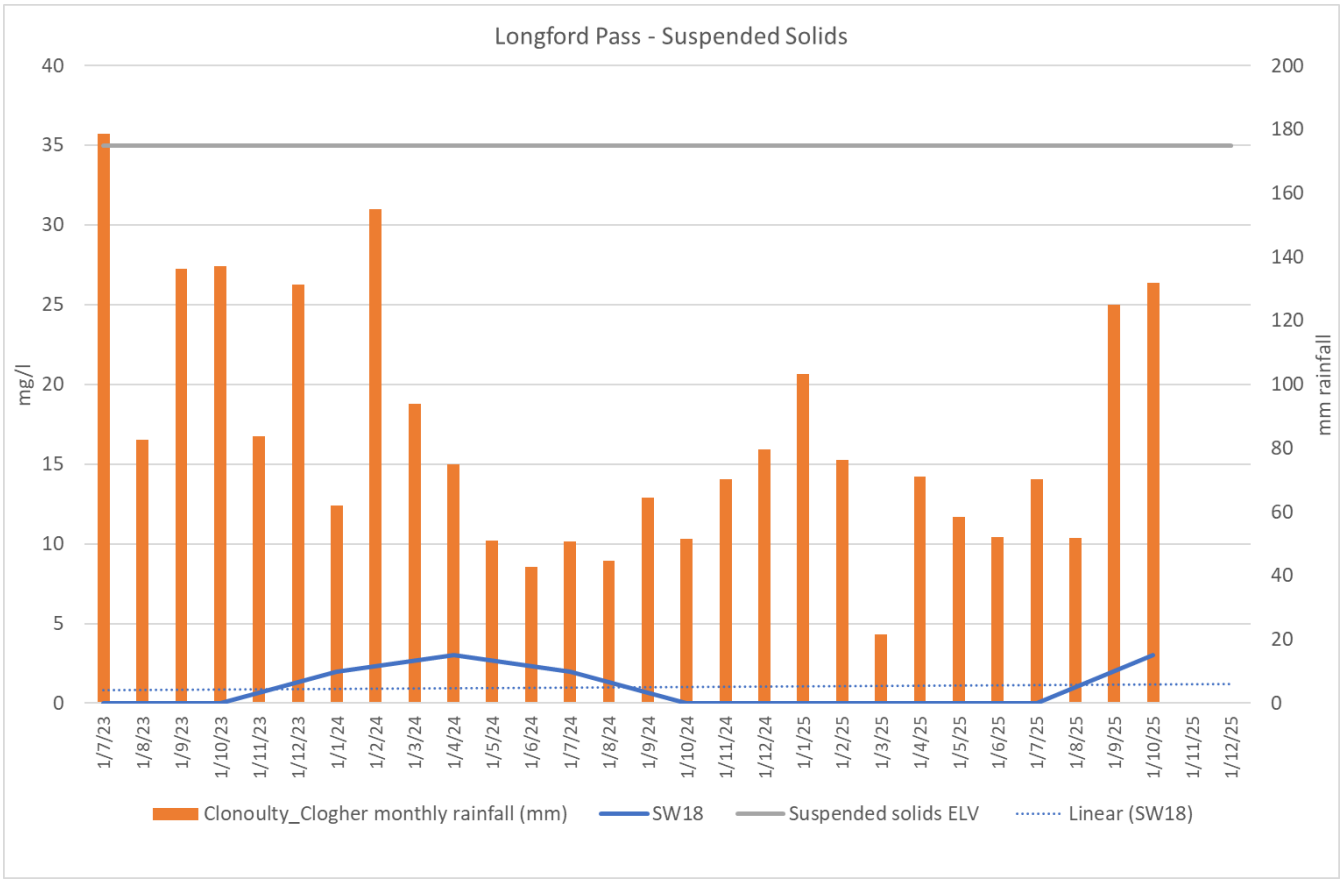
Your Archaeological Liaison Officer is Enda McDonagh

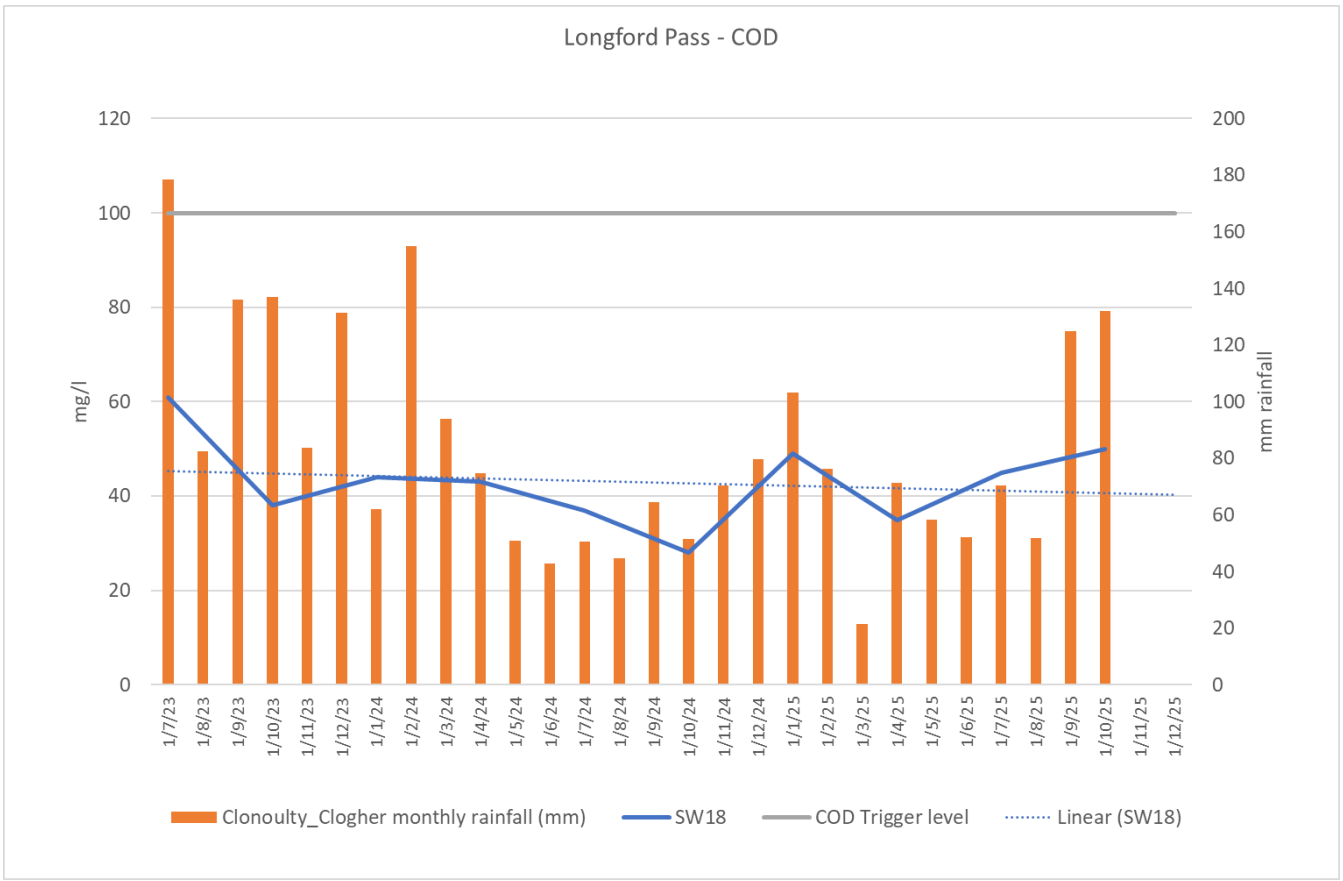
Revision Index			
Revision	**Date**	**Description of change**	**Approved**
1	13/19/2020	First release	EMcD
1	24/11/2025	Change to logo and header	SG
2	10/03/2026	Addition of Archaeological Awareness and change of SOP Title	EMcD

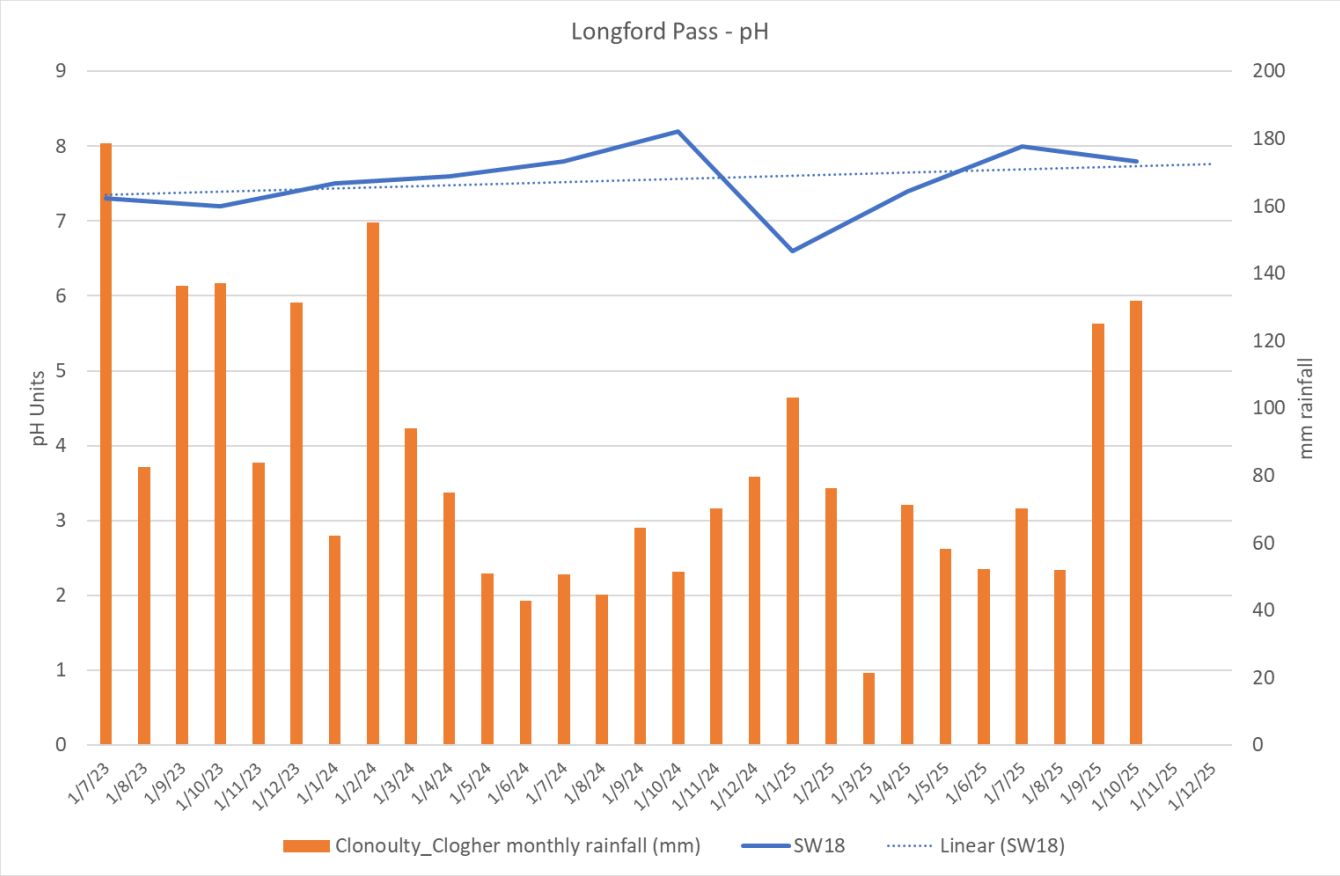
APPENDIX XII: WATER QUALITY MONITORING RESULTS FOR LONGFORD PASS BOG

Water quality monitoring indicates that suspended solids are well below the emission limit value and would have reached expected background levels having stabilised over the period. Ammonia and COD concentrations are well below the associated trigger levels and are remaining fairly level and consistent. The following graphs provide the water quality monitoring results for Longford Pass Bog from 2023 to 2025.




Longford Pass - Suspended Solids
mg/l
mm rainfall
Clonoulty_Clogher monthly rainfall (mm)
SW18
Suspended solids ELV
Linear (SW18)


Longford Pass - COD
mg/l
mm rainfall
Clonoulty_Clogher monthly rainfall (mm)
SW18
COD Trigger level
Linear (SW18)


Longford Pass - pH
pH Units
mm rainfall
0
1
2
3
4
5
6
7
8
9
0
20
40
60
80
100
120
140
160
180
200
1/7/23
1/8/23
1/9/23
1/10/23
1/11/23
1/12/23
1/1/24
1/2/24
1/3/24
1/4/24
1/5/24
1/6/24
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1/12/24
1/1/25
1/2/25
1/3/25
1/4/25
1/5/25
1/6/25
1/7/25
1/8/25
1/9/25
1/10/25
1/11/25
1/12/25
Clonoulty_Clogher monthly rainfall (mm)
SW18
Linear (SW18)

FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

APPENDIX 9

Cutaway Bog Decommissioning and Rehabilitation Plan for Lanespark Bog and Derryvella Bog

Ballybeg/Lanespark/Derryvella Bog

Cutaway Bog Decommissioning and Rehabilitation Plan

2025

This document seeks to address the requirements of Condition 10.2 of IPC Licence Ref. P0-499-01:

> "*The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of the cutaway boglands within the licensed area.*"

This licence condition requires Bord na Móna (now called BnM) agree with the EPA the measures that will provide for rehabilitation, i.e., stabilisation of Ballybeg/Lanespark/Derryvella Bog upon cessation of peat production and complements the licence requirement to decommission the site.

***Rehabilitation** generally comprises site stabilisation with natural colonisation with or without targeted management.*

Industrial peat production has now fully ceased at Ballybeg/Lanespark/Derryvella Bog.

In addition, to preparing this document to comply with Condition 10 of IPC Licence Ref. PO-499-01, due regard was also given to the Peatlands Climate Action Scheme (PCAS) announced by the Minster. This Scheme will see the Minister support, via the Climate Action Fund and Ireland's National Recovery and Resilience Plan*, Bord na Móna in developing a package of measures, 'the Scheme', for enhanced decommissioning, rehabilitation and restoration of cutaway peatlands referred to as, the Peatlands Climate Action Scheme'. However, only the additional costs associated with the additional and enhanced rehabilitation, i.e., measures which go beyond the existing standard mandatory decommissioning and rehabilitation requirements arising from Condition 10 will be eligible for support. The additional costs of the Scheme will be supported by Government, administered by the Department of Environment, Climate and Communications (DECC), while the National Parks and Wildlife Service (NPWS) will act as the Scheme regulator.*

While this document outlines the enhanced rehabilitation measures planned for Ballybeg/Lanespark/Derryvella Bog, activities which goes beyond that required by Condition 10 in the Licence, rehabilitation necessary to comply with the 'standard' requirement of Condition 10 (in the absence of the Scheme) is also included, to estimate costs. The inclusion of the 'standard' rehabilitation together with the enhanced rehabilitation in this document allows the Scheme Regulator to distinguish and objectively determine the specific activities (and their associated costs) eligible for support under the Scheme.

Bord na Móna have defined the key rehabilitation outcome at Ballybeg/Lanespark/Derryvella Bog as environmental stabilisation, re-wetting and setting the bog on a trajectory towards development of naturally functioning peatland and wetland habitats.

Bord na Móna are planning to develop a potential renewable energy project at Lanespark Bog as part of the proposed Littleton Wind Farm. This project is currently in the pre-planning stages and is expected to be submitted for planning permission in 2026.

Any consideration of any other future after-uses for Ballybeg/Lanespark/Derryvella Bog will be conducted in adherence to the relevant planning guidelines and consultation with relevant authorities and will be considered within the framework of this rehabilitation plan.

Document Control Sheet	
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Document File Path:	Decomm and Rehab Programme - Rehab and Decomm Docs\ 06D Rehab Plans FY26\ Ballybeg/Lanespark/Derryvella Bog
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This document comprises:	DCS	TOC	Text (Body)	References	Maps	No. of Appendices
	1	2	39	4	0	14

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Name(s):	EOB	JOS	MMC
Date:	13/01/2025	15/04/2025	29/04/2025

Rev. 1	Author(s):	Checked By:	Approved By:
Name(s):			DMN
Date:			17/09/2025
Rev. 1.1	**Author(s):**	**Checked By:**	**Approved By:**
Name(s):			
Date:			

Note: This finalised version of the Rehabilitation Plan has been updated to take account that several planning actions listed in Section 8.1 have been completed and have been incorporated into the plan. This includes an Appropriate Assessment of the rehabilitation plan. See Killeen Bog Decommissioning and Rehabilitation Plan – Addendum 1 for more details.

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NON-TECHNICAL SUMMARY

- Bord na Móna (now known as BnM) is updating its rehabilitation plan for Ballybeg/Lanespark/Derryvella Bog located in Co. Tipperary.
- Ballybeg/Lanespark/Derryvella Bog is a series of three bogs that are closely linked. Ballybeg Bog is located 1.4 km northwest of Derryvella Bog. Lanespark Bog is located between the two bogs.
- Lanespark Bog has been mapped as a constraint on rehabilitation maps, as the bog is included in the proposed Littleton Wind Farm footprint. Only Ballybeg Bog and Derryvella Bog are considered for Phase 2 measures within this rehabilitation plan.
- Industrial peat harvesting has now finished at Ballybeg/Lanespark/Derryvella Bogs.
- Ballybeg/Lanespark/Derryvella Bogs were in industrial peat production from the 1970s until 2017.
- In 2017, Bord na Móna announced the closure of the Littleton Briquette factory and the cessation of industrial peat production in a number of cutaway bogs within the Littleton Bog Group, including Ballybeg/Lanespark/Derryvella Bogs.
- Bord na Móna are obliged to carry out peatland rehabilitation via an IPC Licence issued by the Environmental Protection Agency. In addition, the Government has agreed to support peatland rehabilitation via the establishment of the Peatland Climate Action Scheme (PCAS). This is funded via the Government and by Bord na Móna.
- Peatland rehabilitation (Phase 1 rehabilitation) was carried out at Ballybeg/Lanespark/Derryvella Bog in 2018-2021 with extensive drain-blocking and hydrological management.
- The bog has been re-wetted. Pioneer cutaway vegetation is beginning to develop across these bogs and pioneer habitats and vegetation are establishing.
- Bord na Móna are proposing to carry out additional rehabilitation in Ballybeg Bog and Derryvella Bog in 2025 (Phase 2).
- The key objective of peatland rehabilitation is environmental stabilisation. This means developing habitats and vegetation back onto the bare peat (putting a “skin” back onto the peat), and minimising effects to downstream waterbodies. Ballybeg/Lanespark/Derryvella Bog were drained in the past to allow peat production. Better results for water quality improvements, climate action, the reduction of carbon emissions and biodiversity are achieved when the remaining peat is re-wetted.
- Measures proposed for the bog include optimisation of water levels within existing waterbodies and drain blocking. Some fertiliser will be spread on headlands and other areas (a small part of the overall area) to encourage vegetation growth.
- In general, soggy ground conditions are preferred whereby the remaining peat is wet and plants that prefer wetter conditions, like Bog Cotton, will thrive.
- Areas with deeper residual peat have the capacity to regrow *Sphagnum* moss again, where there are suitable hydrological conditions. *Sphagnum* is a key species for restoring naturally functioning raised bog conditions.
- Many BnM bogs cannot be restored back to raised bog in the short-term, as so much peat has been removed and the environmental conditions have been modified. However other peatland habitats with Heather, Bog Cotton, Rushes, Purple Moor-grass, Bog-mosses and scattered trees will develop, and in time a naturalised peatland can be restored.
- The development of a range of habitats in Ballybeg/Lanespark/Derryvella Bog will support biodiversity including plants, insects, birds and mammals. This includes some species that are rare and protected in the wider landscape. It will increase the national area of native woodland. Many wetland habitats in the

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wider landscape have been reclaimed for agriculture and other uses, and peatland rehabilitation is an opportunity to create new peatland and wetland habitats.

- Most of the bog comprises of shallow peat depths. Some deeper peat remains in Derryvella Bog.
- The environmental conditions of Ballybeg/Lanespark/Derryvella Bog mean that wetland habitats (reedbeds, fen, wet woodland, open water) will develop across the majority of the site in mosaic with some embryonic bog habitats in areas with deeper residual peat, and Birch woodland in the drier areas.
- Ballybeg/Lanespark/Derryvella Bog has a gravity drainage regime.
- Rehabilitation measures will be planned by a team consisting of expert ecologists, hydrologists and engineers. It is a guiding principle of BnM rehabilitation planning that no actions or activities will be undertaken that would negatively impact on adjacent land. No boundary drains will be blocked. Water will still leave the bog via the existing outlets.
- It will take some time for vegetation and habitats to fully develop at the most recently peat harvested areas of the bog, and a wetland/peatland ecosystem to developed. However, it is expected that most of these areas will be developing pioneer vegetation after 5-10 years.
- This is a peatland rehabilitation plan. This plan does not consider future after-use or development. BnM continually reviews its land-bank to consider future commercial or industrial developments. Any other proposed development will be planned in adherence to relevant planning guidelines and will consider the rehabilitation and the condition of the bog.
- This is a peatland rehabilitation plan. BnM are planning to develop a potential renewable energy project at Lanespark Bog as part of the proposed Littleton Wind Farm. The Wind Farm project is currently in the pre-planning stage and is expected to be submitted for planning permission in 2026. Lanespark has already been rehabilitated during 2018-2021. Any other proposed development will be planned in adherence to relevant planning guidelines and will consider the rehabilitation and the condition of the site.
- Peatland rehabilitation of this bog will bring a range of benefits to the local community via improvements to the local landscape and is also important for supporting national policies and strategies in relation to reduction of carbon emissions from these peatlands, supporting biodiversity and improvements to water quality.
- Ballybeg/Lanespark/Derryvella partially overlaps the Tipperary Decarbonising Zone. A Decarbonising Zone (DZ) is a spatial area, identified by each local authority in Ireland, in which a range of climate change mitigation measures are identified, whilst enhancing and embracing adaptation and biodiversity measures to contribute to reaching wider national climate action targets. DZs are a demonstration and testbed of what is possible for decarbonisation and climate action at a local and community level. Through a feedback loop of experimentation and evaluation, the DZ enables a flexible, incremental and community-driven approach to ensure that its objectives are delivered. No constraint is required in respect of this spatial overlap.

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1. INTRODUCTION

Bord na Móna (now known as BnM) operates under IPC Licence issued and administered by the EPA to extract peat within the Littleton Bog Group (Ref. P0-499-01) (see Appendix II for details of the bog areas within this Group). As part of Condition 10.2 of this license, a rehabilitation plan must be prepared for permanent rehabilitation of the boglands within the licensed area. Ballybeg/Lanespark/Derryvella Bog is located in Co. Tipperary, 1 km south-east of Littleton Village and approximately 7 km southeast of Thurles.

This document seeks to address the requirements of Condition 10.2 of IPC Licence Ref. P0-499-01:

> "*The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of the cutaway boglands within the licensed area.*"

It also seeks to outline measures to optimise climate action and other ecosystem services benefits, mainly through hydrological management.

This plan is a specific rehabilitation plan for the bog and outlines:

- Description of site management and status.
- Main issues and approaches to rehabilitation.
- Consultation to date with interested parties.
- Interaction with other policy and legislative frameworks (Appendix VI).
- The planned rehabilitation goals and outcomes.
- The scope of the rehabilitation plan.
- Criteria which define the successful rehabilitation and key targets to validate rehabilitation.
- Proposed rehabilitation actions.
- Proposed timeframe to implement these measures.
- Budget and Costings.
- Associated aftercare, maintenance, and monitoring.

Note: This plan should be read in conjunction with the accompanying Map book.

Ballybeg/Lanespark/Derryvella Bog is part of the Littleton Bog Group and supplied the Littleton Brickette Factory. Bord na Móna made the decision to close this brickette factory in 2017 and to rehabilitate the Littleton Bog group.

It is proposed by Government that Bord na Móna carry out a Peatlands Enhanced Decommissioning, Rehabilitation and Restoration Scheme on its peatlands. Note this proposal is also known colloquially as the 'Peatlands Climate Action Scheme' (PCAS). The additional costs of the Scheme will be supported by Government through Ireland's National Recovery and Resilience Plan administered by the Department of Environment, Climate and Communications (DECC), while the National Parks and Wildlife Service (NPWS) acts as the Scheme regulator. This Scheme will significantly go beyond what is required to meet rehabilitation and decommissioning obligations (Appendix VII & IX) under existing EPA IPC licence conditions. Improvements supported by the Scheme will ensure that environmental stabilisation is achieved (meaning IPC obligations are met), and importantly, significant additional benefits, particularly relating to climate action and other ecosystem services, will also be delivered. The Scheme commenced in 2021.

Ballybeg/Lanespark/Derryvella Bog was rehabilitated by Bord na Móna between 2018-2021 (Phase 1 rehabilitation). This updated rehabilitation plan supersedes the previous rehabilitation plan prepared in 2018.

Ballybeg Bog and Derryvella Bog are proposed to be part of this Scheme (PCAS), and this updated rehabilitation plan outlines the approach to be taken. Additional peatland rehabilitation (Phase 2 Rehabilitation) has been

proposed for Ballybeg and Derryvella Bogs, with the objective of improving hydrological conditions across these bogs and targeting bare peat areas to speed up the trajectory of natural vegetation colonisation. Measures will include:

- More intensive management of water levels through pump management/adaption, drain-blocking and bunding.
- Re-profiling that will deliver suitable conditions for development of wetlands, fens and bog habitats.
- Targeted fertiliser applications.

These measures are collectively designed to optimise hydrological conditions (ideally and where possible water-levels <10 cm) for climate action benefits and to accelerate the trajectory of the site towards a naturally functioning ecosystem, and eventually a reduced carbon source/carbon sink again. In some areas of dry cutaway this trajectory will be significantly longer, and it is not feasible in the short-term to re-wet some areas. These areas will develop other habitats. The key to optimising climate action benefits is the restoration of suitable hydrological conditions and more intensive intervention means that the extent of suitable hydrological conditions can be optimised.

Only the costs associated with the additional, enhanced, and accelerated rehabilitation, i.e. those measures which go beyond the existing decommissioning and rehabilitation requirements arising from Condition 10, will be eligible for support under the Scheme. Bord na Móna announced the complete cessation of industrial peat production across its estate in January 2021.

It is expected that the Scheme (PCAS) will have benefits accruing from biodiversity provision, water quality and storage attenuation as well as increased carbon storage, reduced carbon emissions and acceleration towards carbon sequestration. The Scheme will also facilitate monitoring of carbon fluxes (Greenhouse Gases and fluvial carbon) in selected areas (in addition to other established Research programmes), to monitor changes in where the interventions will accelerate the trajectory towards a naturally functioning peatland ecosystem.

1.1 Constraints and Limitations

This document covers the area of Ballybeg/Lanespark/Derryvella Bog, shown in drawing number *BNM-DR-26-07-RP-01*.

Lanespark Bog is not being proposed for Phase 2 rehabilitation as part of this plan. Phase 1 rehabilitation across Lanespark has been completed between 2018-2021. Bord na Móna and SSE are currently developing a renewable energy project called Littleton Wind Farm, which will overlap Lanespark Bog, Littleton Bog and a small part of Longfordpass (Bord na Móna Wind Farm | Littleton Wind Farm). This renewable energy project is in pre-planning.

Several amenity developments have been developed at Ballybeg/Lanespark/Derryvella Bog. Part of the cutaway at Derryvella Bog was developed as Lough Doire Bhile amenity area (between 1999-2001) and is now leased to the Slieve Ardagh Rural Development Community Group. Glacial substrates were dug out to create a lake basin and the surrounding area was re-profiled. The Loch Dhoire Bhile loop, a 2.4 km walking trail, has also been developed in this area in recent years. Lough Doire Bhile Wildlife Reserve and amenity area are mapped as constraints on the rehabilitation plan.

The Littleton Labyrinth is an amenity project that was developed in partnership with Tipperary County Council. Initially a feasibility study was carried out that looked at developing greenway amenity, and associated facilities across the Littleton Bogs, and potential links to existing infrastructure and local villages/towns. Tipperary County Council and Bord na Móna developed an amenity walking/cycling track along the headland/former rail line

corridors along the northwestern margins of Derryvella Bog, linking to the Loch Doire Bhile amenity area, as part of the Littleton Labyrinth Greenway in 2024. The proposed rehabilitation measures will not overlap with these features and there is no constraint to rehabilitation.

Bord na Móna are planning the development of an additional amenity trail, along the eastern and southern headlands of Derryvella Bog and the eastern and northern headlands of Ballybeg, as part of the Midlands Network Trail, designed to link to the Littleton Labyrinth greenway. The amenity development will consist of shared cycle and walkways, associated signage and fencing. The planned amenity route has been mapped as a constraint on rehabilitation maps. This project has been submitted for planning permission (February 2025).

Ballybeg Bog is proposed to be included in the Coillte/BnM Midlands Native Woodland Project (Midlands Native Woodland - Coillte). The main objective of this proposed project is to develop and enhance native woodland in areas of cutaway that would remain naturally dry, developing woodland habitat that would naturally complement wetland and peatland habitats already developing across these sites. An area of 11.2 ha is proposed for planting at this Bog. This proposed project is currently being considered for consent by the Forest Service. Areas proposed to be included in Native Woodland Project have also been mapped as constrained land in the rehabilitation plan.

An area of Coillte forestry occurs at the western extent of Derryvella Bog. This area has been excluded from the rehabilitation plan. The southern extent of Derryvella Bog is proposed to be used as a Bushcraft Site and has been identified as constrained land. Local Roads, agricultural land and areas under grazing license occur around the margins and have been mapped as constraints on the rehabilitation plan. There are no known rights of way, or turbary areas, at either bog.

2. METHODOLOGY

This rehabilitation plan was developed with a combination of desktop and field surveys, consultations with internal and external stakeholders and cognisance of the Scheme (PCAS). The development of this rehabilitation plan considered recently published guidance issued by the EPA, *'Guidance on the Process of Preparing and Implementing a Bog Rehabilitation Plan' (EPA, 2020)*.

The ecological information and site information collected during the Bord na Móna ecological baseline survey, additional confirmatory site visits (covering the period 2011 to 2025 inclusive) and monitoring and desktop analysis forms the basis for the development of the rehabilitation plan for the bog, along with:

- Experience of 40 years of research on the after-use development and rehabilitation of the Bord na Móna cutaway bogs (Clarke, 2010; Bord na Móna, 2016);
- Significant international engagement during this period with other counties in relation to best practice regarding peatland rehabilitation and after-use through the International Peat Society and the Society for Ecological Restoration (Joosten & Clarke, 2002; Clarke & Rieley, 2010; Gann *et al*., 2019);
- Consultation and engagement with internal and external stakeholders;
- GIS Mapping;
- BNM drainage surveys;
- Bog topography and LIDAR data;
- Previous research studies on site;
- Hydrological modelling; and
- The development of a Methodology Paper outlining the Scheme (PCAS). This rehabilitation includes enhanced measures defined in the Methodology Paper which are designed to exceed the standard

stabilisation requirements as defined by the IPC Licence and to enhance the ecosystem services of Ballybeg/Lanespark/Derryvella Bog, in particular, optimising climate action benefits.

2.1 Desk Study

The desk study involved collecting all relevant environmental and ecological data for the study area. The development of the rehabilitation plan also takes account of research, experience and engagement with other peatland restoration and rehabilitation projects and peatland research including Irish, UK, European and International best practice guidance (full citations are in the References Section):

- Anderson *et al*. (2017). An overview of the progress and challenges of peatland restoration in Western Europe.
- Barry, T.A. *et al*. (1973). A survey of cutover peats and underlying mineral soils. Soil Survey Bulletin No. 30. Dublin, Bord na Móna and An Foras Taluntais.
- Bonn *et al*. (2017). Peatland restoration and ecosystem services- science, policy and practice.
- Carroll *et al*. (2009). *Sphagnum* in the Peak District. Current Status and Potential for Restoration. Moors for the Future Report No 16.
- Clark & Rieley (2010). Strategy for responsible peatland management.
- Eades *et al*. (2003). The Wetland Restoration Manual.
- Farrell & Doyle (2003). Rehabilitation of Industrial Cutaway Atlantic Blanket Bog, NW Mayo, Ireland.
- Gann *et al*. (2019). International Principles and Standards for the practice of Ecological Restoration.
- Joosten & Clarke (2002). Wise Use of mires and peatlands – Background and Principles including a framework for Decision-making.
- Lindsay (2010). Peatbogs and Carbon: a Critical Synthesis to Inform Policy Development in Oceanic Peat Bog Conservation and Restoration in the Context of Climate Change.
- Mackin *et al*. (2017). Best practice in raised bog restoration in Ireland. Irish Wildlife Manuals, No. 99. National Parks and Wildlife Service,
- McBride *et al*. (2011). The Fen Management Handbook (2011), Scottish Natural Heritage.
- McDonagh (1996). Drain blocking by machines on Raised Bogs. Unpublished report for National Parks and Wildlife Service.
- NPWS (2017a). National Raised Bog Special Areas of Conservation management plan. Department of Arts, Heritage and the Gaeltacht.
- Pschenyckyj et al., (2021), Optimising Water Quality Returns from Peatland Management while Delivering Co-Benefits for Climate and Biodiversity. An Fóram Uisce.
- Regan*, et. al.* (2020). Ecohydrology, Greenhouse Gas Dynamics and Restoration Guidelines for Degraded Raised Bogs. EPA Research Report. Prepared for the Environmental Protection Agency by Trinity College Dublin.
- Renou-Wilson *et al*. (2011). BOGLAND - Sustainable Management of Peatlands in Ireland. STRIVE Report No 75 prepared for the Environmental Protection Agency.
- Schouten (2002). Conservation and Restoration of Raised Bogs: Geological, Hydrological and Ecological Studies. Dúchas - The Heritage Service of the Department of the Environment and Local Government, Ireland.
- Thom (2019). Conserving Bogs – Management Handbook.

- Wheeler & Shaw (1995). Restoration of Damaged Peatlands – with Particular Reference to Lowland Raised Bogs Affected by Peat Extraction.

Additional on-line resources were also incorporated into the desk study, including:

- Littleton Integrated Pollution Control Licence.
- Littleton Annual Environmental Reports.
- Review of the National Biodiversity Data Centre (NBDC) webmapper;
- Inland Fisheries Ireland (IFI) Reports.
- Environmental Protection Agency database (www.epa.ie).
- EPA Guidance on Requests for Alterations to a Licensed Industrial or Waste Activity.
- Birdwatch Ireland online data (including I-WeBS and CBS datasets; www.birdwatchireland.ie).
- Geological Survey of Ireland - National Draft Bedrock Aquifer map.
- Geological Survey of Ireland - Groundwater Database (www.gsi.ie).
- Historic Environment Viewer at https://webgis.archaeology.ie/historicenvironment/
- National Parks & Wildlife Services Public Map Viewer (www.npws.ie).
- Water Framework Directive catchments.ie/maps/ Map Viewer (www.catchments.ie).
- OPW Indicative Flood Maps (www.floodmaps.ie).
- CFRAM Preliminary Flood Risk Assessment (PFRA) maps (www.cfram.ie).
- River Basin Management Plan for Ireland 2022-2027.
- Bord na Móna Annual Report 2024.
- Spatial data in respect of Article 17 reporting, available online at https://www.npws.ie/maps-and-data/habitat-and-species-data/article-17.

2.2 Consultation

A number of stakeholders have been identified during the course of Bord na Móna's rehabilitation and Biodiversity Action Plan activities and are contacted during the rehabilitation planning process for their views. See Section 4.

2.3 Field Surveys

Bord na Móna carried out a baseline ecological survey of all of its properties in 2012-2018 and developed habitat maps. As part of this exercise, Ballybeg/Lanespark/Derryvella Bog was surveyed in 2012. Habitat maps were updated in 2017. A survey also took place in January 2025 (at Ballybeg Bog and Derryvella bog only) in advance of the updating this rehabilitation plan. Habitat maps have been updated, where required. This rehabilitation plan is informed by the original baseline survey as well as subsequent confirmatory site walk-over surveys and visits, and updates to baseline data.

Habitat mapping followed best practice guidance from Smith *et al.* (2011). Map outputs including all habitat maps and target notes were produced using GIS software application packages (ArcGIS). General marginal habitats and other habitats that had not been modified significantly by industrial peat extraction were classified using Fossitt *et al*. (2000). Plant nomenclature for vascular plants follows Stace (2019), while moss and liverwort nomenclature follow identification keys published by the British Bryological Society (2010). A more detailed Bord na Móna classification system was previously developed for classifying pioneer cutaway habitats as Fossitt categories were deemed not to be detailed enough for cutaway bog (much of cutaway bog could be classified as Cutover Bog -

PB4). Much of the pioneer cutaway vegetation is still at an early stage of its development and cannot be assigned to Fossitt (2000) Level 3 categories yet.

A detailed ecological survey report for Ballybeg/Lanespark/Derryvella Bog is contained in Appendix III.

3. SITE DESCRIPTION

Ballybeg/Lanespark/Derryvella Bog is located in Co. Tipperary, 1 km south-east of Littleton Village and approximately 7 km southeast of Thurles. Ballybeg/Lanespark/Derryvella Bog is a series of three bogs that are closely linked. Ballybeg Bog is located 1.4 km northwest of Derryvella Bog. Lanespark Bog is located between the two bogs. Lanespark Bog has been mapped as a constraint on rehabilitation maps, as the bog is included in the proposed Littleton Wind Farm footprint. Only Ballybeg Bog and Derryvella Bog are considered for Phase 2 measures within this rehabilitation plan.

Ballybeg/Lanespark/Derryvella Bog is in the Littleton Bog group (Ref. P0499-01). Lanespark (the central bog) is the location of the former Lanespark Briquette factory. The total area of Ballybeg/Lanespark/Derryvella Bog is 473.3 ha (125.7 ha is within the rehabilitation footprint; 348.7 ha has been mapped as constrained land).

The majority of the former production area of Ballybeg Bog and Derryvella Bog are dominated by bare peat that is beginning to develop pioneer vegetation. In areas that have been cutaway for a longer period, the bog is developing pioneer vegetation, scrub, wetlands and emerging Birch/Willow woodland. The surrounding landscape is dominated by a mosaic of farmland, largely consisting of improved grassland, conifer plantations and other bogs, many owned and managed by Bord na Móna.

Bord na Móna ceased industrial peat extraction in 2017 and implemented a rehabilitation plan across Ballybeg/Lanespark/Derryvella Bog between 2018-2021 (Phase 1 rehabilitation), consisting of drain blocking and hydrological management. Large areas of the bog have been successfully rewet with water retained at, and above the surface of the bog as a result of drain-blocking and reduced drainage.

The North Glengoole Stream (EPA Code: 16N28) flows along the eastern boundary of the Derryvella section of the bog, originating from the northeast before flowing towards the northwest, along the southern boundary of Derryvella. It flows through Lanespark Bog, ultimately discharging into the Black (Two Mile Borris) Stream (EPA Code: 16B01). The Black Stream then continues northwest between Ballybeg and Littleton Bog before flowing north to join the River Drish (EPA Code: 16D02). The Breegagh Stream (EPA Code: 16B03) flows along the southern boundary of Lanespark in a northwest direction, flowing approximately 500m south of the southern boundary of Ballybeg, where it joins the River Drish. An unnamed stream flows southwest from its source beyond the southern boundary of the Ballybeg section of bog to join the Breegagh Stream. Both Derryvella and Ballybeg are gravity drained bogs.

Bord na Móna propose to carry additional rehabilitation (Phase 2) in Ballybeg and Derryvilla Bog in 2025. See Drawing number *BNM-DR-26-07-RP-01: Bog Site Location*, included in the accompanying Mapbook[1], which illustrates the location of Ballybeg/Lanespark/Derryvella Bog in context to the surrounding area.

3.1 Status and Situation

3.1.1 Site history

Ballybeg/Lanespark/Derryvella Bog was used to supply fuel peat to the Littleton Briquette Factory, Thurles, Co. Tipperary. Ballybeg/Lanespark/Derryvella Bog was in industrial peat production from 1970's to 2017. In 2017,

[1] Cutaway Bog Decommissioning and Rehabilitation Plan – Ballybeg/Lanespark/Derryvella Bog Map Book

Bord na Móna announced the closure of the Littleton Briquette factory and the cessation of industrial peat production in a number of cutaway bogs within the Littleton Bog Group, including Ballybeg/Lanespark/Derryvella.

Previous Phase 1 Peatland rehabilitation was carried out between 2018-2021 with measures including drain-blocking, berms and hydrological management (Phase 1 rehabilitation). See Figure *BNM-DR-26-07-30: Previous Rehabilitation* in the accompanying mapbook.

3.1.2 Current land-use

Ballybeg Bog and Derryvella Bog have some remaining peat stockpiles. The peat stock on the bog will be subject to decommissioning as part of the rehabilitation measures. This process is described fully in Appendix XIV.

Part of the cutaway at Derryvella Bog was developed as Lough Doire Bhile amenity area (between 1999-2001) and is now leased to the Slieve Ardagh Rural Development Community Group. Glacial substrates were dug out to create a lake basin and the surrounding area was re-profiled. The Loch Dhoire Bhile loop, a 2.4 km walking trail, has also been developed in this area in recent years. Lough Doire Bhile Wildlife Reserve and amenity area are mapped as constraints on the rehabilitation plan.

Tipperary County Council and Bord na Móna have developed an amenity walking/cycling track along the headland/former rail line corridors along the northwestern margins of Derryvella Bog, linking to the Loch Doire Bhile amenity area, as part of the Littleton Labyrinth Greenway in 2024. The proposed rehabilitation measures will not overlap with these features and there is no constraint to rehabilitation.

Bord na Móna are planning the development of an amenity trail, along the eastern and southern headlands of Derryvella Bog and the eastern and northern headlands of Ballybeg, as part of the Midlands Network Trail, designed to link to the Littleton Labyrinth greenway. The amenity development will consist of shared cycle and walkways, associated signage and fencing. The planned amenity route has been mapped as a constraint on rehabilitation maps. This project has been submitted for planning permission (February 2025).

Bord na Móna are planning to develop a potential renewable energy project at Lanespark Bog as part of the proposed Littleton Wind Farm, which will overlap Lanespark Bog, Littleton Bog and a small part of Longfordpass (Bord na Móna Wind Farm | Littleton Wind Farm). This renewable energy project is in pre-planning.

Ballybeg Bog is proposed to be included in the Coillte/BnM Midlands Native Woodland Project (Midlands Native Woodland - Coillte). The main objective of this proposed project is to develop and enhance native woodland in areas of cutaway that would remain naturally dry, developing woodland habitat that would naturally complement wetland and peatland habitats already developing across these sites. An area of 11.2 ha is proposed for planting at this Bog. This proposed project is currently being considered for consent by the Forest Service. Areas proposed to be included in Native Woodland Project have also been mapped as constrained land in the rehabilitation plan.

There are no known rights of way, or turbary areas, at either Ballybeg Bog or Derryvella Bog. Some areas of agricultural land occur along the margins and have been mapped as constrained land on rehabilitation mapping.

The southern extent of Derryvella Bog is proposed to be used as a Bushcraft Site and has been identified as constrained land.

Ballybeg/Lanespark/Derryvella partially overlaps the Tipperary Decarbonising Zone. A Decarbonising Zone (DZ) is a spatial area, identified by each local authority in Ireland, in which a range of climate change mitigation measures are identified, whilst enhancing and embracing adaptation and biodiversity measures to contribute to reaching wider national climate action targets. DZs are a demonstration and testbed of what is possible for decarbonisation

and climate action at a local and community level. Through a feedback loop of experimentation and evaluation, the DZ enables a flexible, incremental and community-driven approach to ensure that its objectives are delivered. No constraint is required in respect of this spatial overlap.

3.1.3 Socio-Economic conditions

Bord na Móna has historically been a vital employer for the rural communities in the Irish Midlands. Bord na Móna compiled a report on the role of peat extraction in the midlands historically in which they report that in 1986, by the end of Bord na Móna's Third Development Programme, a total of twenty-three work locations had been established around the country. The company had an average employment of approximately 4,688 in the mid 1980's, with a peak employment of 6,100 during the production season, which placed it among the country's largest commercial employers. The importance of such levels of employment were largely due to its regional concentration in the Midlands and the lack of alternative employment opportunities in these areas at the time.

According to the Energy Crop Socio-Economic Study undertaken by Fitzpatrick Associates in 2011, there were an estimated 1,443 jobs supported by the peat-to-power industry in Ireland at the time, some 81% of which were located in the catchment areas of the three peat-fired generating stations (Lough Ree, West Offaly, and Edenderry Power Stations). These constituted jobs in the plants and in peat extraction, jobs indirectly supported in upstream supply industries and jobs induced through the trickle-down effects of the wages and salaries of those supported directly or indirectly. These job numbers have now declined with the cessation of peat extraction.

In respect of Ballybeg/Lanespark/Derryvella Bog, jobs included in the above study would have included those to facilitate extraction of peat at this bog and associated processing and transfer to Littleton Briquette Factory.

As the primary employer in many Midland counties, Bord na Móna played a central role in building communities through several initiatives, including development and construction of local housing complexes, education bursaries, support of local sporting clubs, the provision of community gain funds, charity programmes and the provision and building of amenity areas.

In 2017, Bord na Móna announced the closure of the Littleton Briquette factory and the cessation of industrial peat production in a number of cutaway bogs within the Littleton Bog Group, including Ballybeg/Lanespark/Derryvella Bog. Employment numbers have now declined following the cessation of peat extraction at this bog. It is anticipated that the scheme (PCAS) will provide some employment for a team of workers at this site for a period of time (> 1 year).

There are approximately 1400 people working in Bord na Móna at present, with approximately 135 roles directly involved in PCAS.

3.2 Geology and Peat Depths

3.2.1 Sub-soil geology

GSI bedrock geology data indicates that Ballybeg/Lanespark/Derryvella Bog is underlain by several bedrock units. The Ballybeg section of the site is primarily underlain by the Aghmacart Formation, which consists of dark shaly micrite and peloidal limestone to the west of the site. A narrow strip of the Crosspatrick Formation, characterised by pale-grey cherty crinoidal limestone, runs in a northwest-southeast alignment through the centre of the site. To the east, the area is underlain by Waulsortian Limestone, which is divided by a boundary of dolomitization into dolomitised massive fine-grained limestone to the west and a more significant proportion of massive unbedded lime-mudstone to the east.

The embedded lime-mudstone unit also extends beneath the western boundary of the Derryvella section of the site, where Lough Derryvella is located. East of this lake, a southwest-northeast aligned fault separates this from a very narrow deposit of the Crosspatrick Formation, similar to that found beneath Ballybeg. Most of the Derryvella section is underlain by the Aghmacart Formation and a very narrow segment in the southeast corner of Derryvella is underlain by the Durrow Formation, containing shaly fossiliferous and oolitic limestone.

There is an anticlinal axis structural fault that extends southwest-northeast through the Waulsortian limestone unit between the Ballybeg and Derryvella sections of the bog.

Quaternary sediment data maps Ballybeg/Lanespark/Derryvella Bog as cut over raised peat, yet surrounded by inorganic deposits, which are predominantly till derived from limestone along with some localised pockets of gravels from limestones further south and small pockets of alluvium in the wider surroundings.

3.2.2 *Peat type and depths*

Peat depths have been mapped across the bog using GPR and are provided in figure *BNM-DR-26-07-RP-04: Peat depths*.

In general peat is relatively deep across much of Ballybeg/Lanespark/Derryvella Bog. On the Ballybeg section of the bog, most of the bog has typical peat depths of 1.5m – 4m, with shallow deposits close to the southern and eastern margins (<1m). On the Derryvella section of the bog peat is generally 1.5m -4m, with shallower deposits close to the southern margin.

3.3 Key Biodiversity Features of Interest

3.3.1 Current habitats

This section describes the habitats within the PCAS rehabilitation extent at Ballybeg/Lanespark/Derryvella Bog, which includes Ballybeg Bog and Derryvella Bog only.

The majority of the former production area of Ballybeg Bog and Derryvella Bog are dominated by bare peat that is beginning to develop pioneer vegetation and areas of open water. Ballybeg Bog and Derryvella Bog were subject to Phase 1 rehabilitation, between 2018-2021 (consisting of drain blocking and berms). Large areas of these bogs have been made wetter with water retained at and above the surface of the bog as a result of berms and reduced drainage.

In areas that have been cutaway for a longer period, particularly the western lobe of Derryvella, the bog is developing pioneer vegetation, scrub, wetlands and emerging Birch/Willow woodland.

The most common vegetation communities/habitats[2] present in the former production areas within the PCAS rehabilitation extent include:

- Bare peat (0-50% cover) (BP) (Plate 3-1 – Plate 3-3).

[2] Codes refer BnM classification of pioneer habitats of production bog

- Birch scrub including open *Betula/Salix*-dominated community (B) (Birch/Willow) (oBir) and closed *Betula/Salix*-scrub community (C) (Birch/Willow) (cBir) (generally in mosaic with other cutaway habitats) (Plate 3-1; Plate 3-8; Plate 3-9; Plate 3-11).
- Pioneer dry *Calluna vulgaris*-dominated community (Heather) (dHeath) (generally in mosaic with Birch scrub, *Molinia caerulea*-dominated community (dry) (Purple Moorgrass) (gMol) and *Ulex europaeus*-dominated community (Gorse) scrub (eGor)).
- Pioneer open habitats with pioneer *Campylopus*-dominated community (pCamp), pioneer *Juncus effusus*-dominated community (Soft Rush) (pJeff), pioneer *Eriophorum angustifolium*-dominated community (Bog Cotton) (pEang), Pioneer *Juncus bulbosus*-dominated community (Bulbous Rush) (pJbulb), pioneer *Carex viridula*/brown moss community (rich fen) (pVir), *Molinia caerulea*-dominated community (dry) (Purple Moorgrass) (gMol), open *Betula/Salix*-dominated community (B) (Birch/Willow) (oBir) (Plate 3-5; Plate 3-10).
- Pioneer open habitats and scrub with *Molinia caerulea*-dominated community (dry) (Purple Moorgrass) (gMol) and Pioneer *Juncus effusus*-dominated community (Soft Rush) (pJeff) in mosaic with open *Betula/Salix*-dominated community (B) (Birch/Willow) (oBir) and *Ulex europaeus*-dominated community (Gorse)(eGor).
- Wetlands with open water (OW), pioneer *Phragmites australis*-dominated community (Common Reed) (pPhrag), Pioneer *Typha latifolia*-dominated community (Reedmace) (pTyp) and Pioneer *Carex rostrata*-dominated community (Bottle Sedge) (pRos) (Plate 3-3; Plate 3-6; Plate 3-10).
- Pioneer poor fen dominated by *Juncus effusus*-dominated community (Soft Rush) (pJeff) and Pioneer *Eriophorum angustifolium*-dominated community (Bog Cotton) (pEang) (Plate 3-7).
- Woodland with Closed *Betula*/*Salix*-scrub community (C) (Birch/Willow) (cBir), Dense *Pteridium aquilinum* (Bracken) (dPter), *Molinia caerulea*-dominated community (dry) (Purple Moorgrass) (gMol) and dry *Calluna vulgaris*-dominated community (Heather) (dHeath) (Plate 3-9).
- Grassland dominated with *Molinia caerulea*-dominated community (dry) (Purple Moorgrass) and *Dactylis-Arrhenatherum* community (gDact-Arr) (around margins and in Derryvella western lobe).

The most common habitats[3] found around the margins include:

- Scrub (WS1)
- Birch woodland (WN7)
- Conifer plantation (WD4)
- Improved grassland (GA1)
- Raised bog (PB1)
- Treeline (WS2)

See Drawing number *BNM-DR-26-07-RP-17: Current Habitat Map*, included in the accompanying Mapbook, which illustrates the habitats at Ballybeg Bog and Derryvella Bog (including the Loch Doire Bhile amenity area). The

[3] Codes refer to Heritage Council habitat classification, Fossitt 2000

mapping excludes Lanespark bog as it was not included in recent habitat surveys. See below for photographic plates of habitats (taken in 2024 and 2025).

Photos of Habitats at Ballybeg/Lanespark/Derryvilla Bog (2024/2025)



Plate 3-1 Aerial of Ballybeg Bog, looking west. The bog is a mix of bare peat, wetlands and pioneer open habitats, with Birch woodland (BirWD) and Birch scrub (oBIR, cBir) along the margins.



Plate 3-2 Bare peat (0-50% cover) (BP) on a high field at Ballybeg Bog.



Plate 3-3 Open water (OW) and poineer open habitats in Ballybeg Bog.

Photos of Habitats at Ballybeg/Lanespark/Derryvilla Bog (2024/2025)



Plate 3-4 Pioneer heather dominated vegetation in Ballybeg Bog.



Plate 3-5 Pioneer open habitats in Ballybeg Bog.



Plate 3-6 Wetlands with Reedbeds in Ballybeg Bog.



Plate 3-7 Pioneer poor fen in Ballybeg Bog.



Plate 3-8 Birch Woodland (BirWD) in Ballybeg Bog.



Plate 3-9 Aerial showing mosaic of woodland and scrub, along margins of Ballybeg Bog.

Photos of Habitats at Ballybeg/Lanespark/Derryvilla Bog (2024/2025)



Plate 3-10 Derryvella Bog, eastern lobe (view looking north), showing wetlands, open water and pioneer open habitats that have developed following Phase 1 rehabilitation.



Plate 3-11 Derryvella Bog, eastern lobe, southern extent (view looking south) with dry heather dominated vegetation, bracken, gorse. This area has not been subject to any previous rehab.

3.3.2 Species of conservation interest

A number of species of conservation concern utilise the habitats available at Ballybeg/Lanespark/Derryvella Bog. The following is a summary of the records of these species available within both Bord na Móna and NBDC records.

- Mammal species have been recorded on or in close proximity to the bog including Badger (*Meles meles*), Red Fox (*Vulpes vulpes)*, European Otter (*Lutra lutra*), Irish Hare (*Lepus timidus subsp. hibernicus*), Pine Marten (*Martes martes*) and Eurasian Badger (*Meles meles*).
- Marsh Fritillary (*Euphydryas aurinia*) have been recorded at the Lough Doire Bhile, Derryvella and Ballybeg, including larval webs and butterflies in flight. Marsh Fritillary is a species of significant conservation interest (Annex II species – EU Habitats Directive).
- White-clawed Crayfish (*Austropotamobius pallipes*) are present in Loch Doire Bhile. White-clawed Crayfish is also listed on Annex II of the EU Habitats Directive.
- Black-headed Gulls (*Larus ridibundus*) have been recorded on Ballybeg Bog (in an area with extensive water cover) in 2024. Both juveniles (year 1 and 2) and an adult displaying potential breeding behaviour were recorded. A larger number of Black-headed gulls (11 birds in one flock) were recorded in Derryvella Bog in 2024, utilising the more developed wetland areas. Black-headed gull is a BOCCI[4] Amber listed bird species.
- Whooper Swans (*Cygnus cygnus*) (7 adults) were also recorded in Derryvella Bog. Whooper Swan is listed on Annex I of the EU Birds Directive and is a BOCCI Amber listed bird species.
- A pair of Peregrine Falcons (*Falco peregrinus*) (Ballybeg Bog) and a Hen Harrier (*Circus cyaneus*) (Derryvella Bog) were also recorded in 2024. Peregrine Falcon is listed on Annex I of the EU Birds Directive. Hen Harrier is a BOCCI Amber listed bird species.
- Records of other bird species of conservation interest associated with Ballybeg/Lanespark/Derryvella Bog available from BNM and NBDC records include BOCCI red listed species Eurasian Curlew (*Numenius arquata*), Common Kestrel (*Falco tinnunculus*), Snipe (*Gallinago gallinago*) and Meadow pipit (*Anthus pratensis),* and amber listed species Lesser Black-backed Gulls (*Larus fuscus*), Swallow *(Hirundo rustica)* and Skylark *(Alauda arvensis).*
- BOCCI amber listed species Teal (*Anas crecca*), Mallard (*Anas platyrhynchos*), Pintail (*Anas acuta*), and BOCCI red listed species Golden Plover (*Pluvialis apricaria*) and Lapwing (*Vanellus vanellus*) have previously recorded at the lake and wetlands of Lough Doire Bhile.

Peatland rehabilitation may result in positive quality effects on the relative abundance or proportion of species of conservation concern utilising bogs post rehabilitation. This may include Red or Amber listed species of breeding waders along with wintering species including Swans and other wildfowl.[5]

3.3.3 Invasive species

There is one Bord na Móna record for American Mink (*Mustela vison*), a high impact invasive species recorded from the bog. American Mink is also recorded on the NBDC data base in the area surrounding the bog.

A broad range of common garden escapes are occasionally present around the margins of Bord na Móna bogs, and although spatial overlap with the PCAS is expected to be limited, these are, where necessary, to be treated in line with best practice during PCAS activities.

[4] https://birdwatchireland.ie/app/uploads/2021/04/BOCCI4-leaflet-2-1.pdf

[5] https://www.bnmpcas.ie/wp-content/uploads/sites/18/2023/08/Annual-Monitoring-Report_Final-Rev-A_Redacted.pdf

3.4 Statutory Nature Conservation Designations

There are two European Sites within a 15km radius of Ballybeg/Lanespark/Derryvella Bog, including:

- River Barrow and River Nore SAC - Site code: 002162 - Distance: 10.6 km
- Lower River Suir SAC - Site code: 002137 - Distance: 10.km

No NHA's (Natural Heritage Areas) occur within 15km of Ballybeg/Lanespark/Derryvella Bog. However, several pNHA's (Proposed Natural Heritage Areas) occur:

- Laffansbridge pNHA – site code: 000965 – Distance: 5km
- Killough Hill pNHA – site code: 000959 – Distance: 9.4km
- Cabragh Wetlands pNHA – site code: 001934 – Distance: 10.5km
- Kilcooly Abbey Lake pNHA – site code: 000958 – Distance: 10.9km
- Power's Wood pNHA – site code: 000969 – Distance: 13.7km

3.4.1 Other Nature Conservation Designations

The Ramsar Convention entered into force in Ireland on 15th March 1985. Ireland currently has 45 sites/wetlands designated as Wetlands of International Importance (Ramsar Sites). These cover a surface area of 66,994ha.

There are no Ramsar sites in close proximity to Ballybeg/Lanespark/Derryvella Bog.

3.5 Hydrology and Hydrogeology

Ballybeg/Lanespark/Derryvella Bog forms part of the Suir Catchment (ID: 16) as defined by the EPA under the Water Framework Directive (WFD). It is situated within the Suir_SC_040 sub-catchment, which drains to the River Suir. The bog contains several drainage pathways and discharge locations, with most of the bog discharging to streams via silt ponds, which eventually flow into the River Suir. Ballybeg/Lanespark/Derryvella Bog has a gravity-based drainage system.

Hydrological modelling (*BNM-DR-26-07-RP-09: Depression analysis*) indicates that large parts of the bog are in natural basins with significant potential for re-wetting. It is likely that a portion of the basins in target areas will re-wet with deeper water, creating a mosaic of wetland habitats, when drains are blocked.

Regional hydrological data suggest that Ballybeg/Lanespark/Derryvella Bog receives an average precipitation of 941mm/yr (1981-2010), with an estimated annual effective rainfall rate of 512mm/yr based on GSI data. The GSI also estimate an annual average recharge rate of 17-18mm/year for Ballybeg/Lanespark/Derryvella Bog. In areas underlain by lacustrine clay, this is anticipated to be a reasonable estimate of recharge rate. However, in areas underlain by more permeable glacial material this is likely to be an underestimate, particularly where there are elevated mounds of glacial till combined with shallow peat deposits.

A higher recharge rate is expected in areas where shallow peat underlain by glacial till, which would lead to increased losses of water to depth. In these areas an estimated recharge rate of 50-100mm/yr would be considered a reasonable estimate, with a higher recharge rate expected where peat is shallow (<1m).

GSI bedrock geology data indicates that Ballybeg/Lanespark/Derryvella Bog is underlain by several bedrock units. The Ballybeg section of the site is primarily underlain by the Aghmacart Formation, which consists of dark shaly micrite and peloidal limestone to the west of the site. A narrow strip of the Crosspatrick Formation, characterised by pale-grey cherty crinoidal limestone, runs in a northwest-southeast alignment through the centre of the site.

To the east, the area is underlain by Waulsortian limestone, which is divided by a boundary of dolomitization into dolomitised massive fine-grained limestone to the west and a more significant proportion of massive unbedded lime-mudstone to the east.

The embedded lime-mudstone unit also extends beneath the western boundary of the Derryvella section of the site, where Lough Derryvella is located. East of this lake, a southwest-northeast aligned fault separates this from a very narrow deposit of the Crosspatrick Formation, similar to that found beneath Ballybeg. Most of the Derryvella section is underlain by the Aghmacart Formation and a very narrow segment in the southeast corner of Derryvella is underlain by the Durrow Formation, containing shaly fossiliferous and oolitic limestone.

There is an anticlinal axis structural fault that extends southwest-northeast through the Waulsortian limestone unit between the Ballybeg and Derryvella sections of the bog. The Aghmacart and Durrow Formations are classified as locally important aquifers (LI) as the bedrock units are considered to be moderately important only in local zones. The Crosspatrick Formation is locally important (Lm) as the bedrock is generally moderately productive. In contrast, the Waulsortian Limestone unit is described as a regionally important aquifer (Rk) as it is karstified.

A number of wells and springs have been drilled in Ballybeg and around Derryvella. Two wells were drilled close to Ballybeg in 1972 and 1974, reaching depths of 24.4 and 29.3m, respectively. These wells detected bedrock at depths of 3.6 and 3.3m below ground level, with reported yields of 98.2 m^3/day (moderate) and 41.5 m^3/day (moderate). Additionally, two wells were excavated near Derryvella in 1964 and 1971, with depths of 10.9 and 26.8m, respectively. The 1964 well reported bedrock at a depth of 4.8m below ground level, with yields of 152.7m^3/day (high) and 21.8m^3/day (low) for the two wells. (Note: the reported yields do not indicate the actual rate of abstraction. A license is required under the Water Environment (Abstractions and Associated Impoundments) Regulations 2024 for any abstraction that exceeds 25m^3/day. Locations for private abstraction licenses are not provided by the EPA, therefore it is not possible to determine whether any of these abstractions are licensed to exceed 25m^3/day.

An aquifer is an underground body of water-bearing rock or unconsolidated materials (gravel or sand) from which groundwater can be extracted in useful amounts. GSIs Aquifer classes are divided into three main groups based on their resource potential and further subdivided based on the type of openings through which groundwater flows. There are nine aquifer categories in total. Locally important aquifers are capable of supplying locally important abstractions (e.g. smaller public water supplies, group schemes), or good yields (100-400 m3/d). This data gives an indication of sub-surface deposits (bedrock and unconsolidated materials) in terms of their groundwater resource potential and dominant groundwater flow type.

Regionally important aquifers are those in which the network of fractures, fissures and joints, through which groundwater flows, is well connected and widely dispersed, resulting in a relatively even distribution of highly permeable zones. There is good aquifer storage and groundwater flow paths can be up to several kilometres in length. There is likely to be substantial groundwater discharge to surface waters (‘baseflow’) and large (>2,000 m3/d), dependable springs may be associated with these aquifers.

Groundwater vulnerability is classified as moderate across almost all of Ballybeg/Lanespark/Derryvella Bog, with the exception being the southeastern area of Ballybeg. This area is mapped as high due to the presence of rock or karst near the ground surface in a small, localised area approx. 250m south of the Ballybeg boundary. Subsoil permeability across the bog is mapped as being moderate by the GSI with an estimated recharge rate of 21-22mm/year across the bog.

Groundwater vulnerability for the area surrounding Ballybeg/Lanespark/Derryvella Bog ranges from moderate to extreme vulnerability in places. Groundwater Vulnerability is a term used to represent the intrinsic geological and hydrogeological characteristics that determine the ease with which groundwater may be contaminated by human activities. Groundwater vulnerability maps are based on the type and thicknesses of subsoils (sands, gravels, glacial tills (or boulder clays), peat, lake and alluvial silts and clays), and the presence of karst features. Groundwater is most at risk where the subsoils are absent or thin and, in areas of karstic limestone, where surface streams sink underground at swallow holes. These data indicate there is generally low risk of any groundwater contamination occurring at this site. Groundwater Vulnerability is typically used to indicate the susceptibility to groundwater pollution.

3.6 Emissions to surface-water and watercourses

The bog has 7 treated surface water outlets (SW10, SW11, SW12, SW13, SW14, SW15, and SW16) from previously active peat extraction catchment, all of which discharge to the Breagagh River (IE_SE_16B030200 Breagagh (Tipperary)_010)), the Black River (IE_SE_16B010100 Black (Twomileborris)_010)) and the North Glengoole River (IE_SE_16N280780 North Glengoole_010). The Breagagh River and the North Glengoole River are classed as Poor water quality status, with the Black River being classed as Moderate water quality status (Ecological Status or Potential SW 2016-2021) – Water Framework Directive.

The locations of silt ponds and associated surface water emission points, and those being monitored and sampled as part of the PCAS scheme are detailed on the attached water quality map (*BNM-DR-26-07-13: General Drainage Map*).

There is a robust monitoring program to track and verify any changes in baseline water quality conditions pre and post decommissioning and rehabilitation so that the success or otherwise can be tracked and verified for the National Parks & Wildlife Service, Environmental Protection Agency, and Local Authority Water Program, amongst a range of stakeholders.

Peat extraction is identified as a pressure in the third cycle of the River Basin Management Plan (Water Action Plan for Ireland). The main emission limit value (ELV) associated with these bogs is 35mg/l suspended solids, with trigger levels for ammonia of 3.6 mg/l and COD 100mg/l.

An analysis of the results over a number of years of the IPC licence environmental monitoring of some of the discharges from these bogs indicates that results were under the Emission Limit Value for Suspended Solids 99% of this period, with a similar level of compliance for COD and under the trigger level for Ammonia. Ammonia averaged 1.07mg/l and ranged from 0.006 to 19.5mg/l mg/l with Suspended Solids ranging from <2 to 50 mg/l and averaging 0.006 to 19.5mg/l

Table 3-1 Decommissioning and Rehabilitation Programme Water Quality Monitoring.

Bog	SW	Monitoring	SS	Colour	COD	pH	TS	TP	Ammonia
Lanespark	SW 15	Q1 06	26	178	101	7.4	50	0.05	3.32
Lanespark	SW 15	Q2 06	5	251	83	7.4	224	0.05	3.9
Lanespark	SW 15	Q3 06	5	67	37	7.9	314	0.05	3.06
Lanespark	SW 15	Q4 06	36	160	99	7.5	216	0.32	0.63
Lanespark	SW 15	Q1 07	50	220	104	7	142	0.1	1.52
Lanespark	SW 15	Q2 07	7	92	85	7.8	284	0.05	3.33
Lanespark	SW 15	Q3 07	18	333	114	7.2	232	0.05	2.27
Lanespark	SW 15	Q4 07	4	159	66	7.5	184	0.05	1.62
Lanespark	SW 15	Q1 08	40	130	110	7.5	192	0.06	1.21
Lanespark	SW 15	Q2 08	23	74	74	7.9	332	0.07	3.14
Lanespark	SW 15	Q3 08	34	384	130	7.3	163	0.04	1.91
Lanespark	SW 15	Q4 08	4	218	68	7.6	178	0.07	0.74
Lanespark	SW 15	Q1 09	4	223	60	6.7	111	0.04	0.56
Lanespark	SW 15	Q2 09	4	159	59	7.5	211	0.04	1.95
Lanespark	SW 15	Q3 09	7	326	111	7.5	170	0.04	1.7
Lanespark	SW 15	Q4 09	6	109	34	7.4	406	0.05	1.2
Lanespark	SW 15	Q1 10	5	157	43	7.4	240	0.05	3.36
Lanespark	SW 15	Q2 10	30	71	34	7.8	496	0.05	3.7
Lanespark	SW 15	Q3 10	7	89	42	7.6	294	0.05	2.61
Lanespark	SW 15	Q4 10	5	164	50	7.4	204	0.05	2.96
Lanespark	SW 15	Q1 11	5	285	65	7.2	164	0.05	2.1
Lanespark	SW 15	Q2 11	10	109	65	7.6	212	0.05	3.48
Lanespark	SW 15	Q3 11	5	27	10	8	768	0.11	0.64
Lanespark	SW 15	Q4 11	25	192	97	7.1	132	0.07	0.84
Lanespark	SW 15	Q1 12	21	193	34	7.5	214	<.05	2.68
Lanespark	SW 15	Q2 12	5	82	50	7.8	258	<.05	2.32
Lanespark	SW 15	Q3 12	7	331	67	6.9	134	<.05	1.2
Lanespark	SW 15	Q4 12	26	267	118	6.7	174	<.05	1
Ballybeg	SW 11	Q3 13	5	57	40	7.7	391	0.07	0.18
Lanespark	SW 10	Q3 13	5	177	91	7.6	272	0.05	0.07
Ballybeg	SW 12	Q3 14	<5	150	65	7.5	364	<0.05	0.04
Lanespark	SW 14	Q3 14	6	35	<10	7.8	452	<0.05	0.02
Lanespark	SW 15	Q3 14	<5	81	18	7.6	290	<0.05	4.5
Ballybeg	SW 11	Q1 15	<5	122	37	7.8	296	0.07	0.64
Lanespark	SW 10	Q1 15	<5	142	47	7.4	286	<0.05	1.9
Lanespark	SW 16	Q1 15	<5	85	30	7.8	352	<0.05	4.1
Ballybeg	SW 11	Q3 17	5	226	75	7.4	232	0.05	0.78
Ballybeg	SW 12	Q3 17	5	133	73	7.5	382	0.26	0.18
Ballybeg	SW 13	Q3 17	5	136	71	7.5	372	0.4	0.78
Lanespark	SW 10	Q3 17	6	75	25	7.7	302	0.05	0.02
Lanespark	SW 14	Q3 17	37	137	115	7.6	388	0.2	0.57
Ballybeg	SW 12	Q1 18	5	136	53	7.4	272	0.11	0.21
Ballybeg	SW 13	Q1 18	5	147	53	7.3	316	0.09	0.31
Lanespark	SW 15	Q1 18	5	107	36	7.3	178	0.05	0.35

Bog	SW	Monitoring	SS	Colour	COD	pH	TS	TP	Ammonia
Lanespark	SW 16	Q1 18	5	131	38	7.2	182	0.05	0.36
Ballybeg	SW 11	Q3 20	<2	239	57	7.1	175	<0.05	0.457
Ballybeg	SW 12	Q3 20	<2	237	55	7.6	184	<0.05	0.414
Ballybeg	SW 13	Q3 20	5	242	58	7.8	196	<0.01	0.403
Lanespark	SW 14	Q3 20	3	245	55	7.7	200	<0.01	0.127
Lanespark	SW 15	Q3 20	2	234	54	7.8	176	<0.01	0.471
Lanespark	SW 16	Q3 20	2	237	59	7.8	175	<0.01	0.447
Ballybeg	SW 11	Q4 20	6	250	79	7.5	270	0.07	0.204
Ballybeg	SW 12	Q4 20	3	290	68	7.2	251	<0.05	0.151
Ballybeg	SW 13	Q4 20	5	295	70	7.3	255	<0.01	0.196
Lanespark	SW 14	Q4 20	2	173	75	7.6	304	<0.01	0.395
Lanespark	SW 15	Q4 20	3	176	76	7.6	315	<0.01	0.316
Lanespark	SW 16	Q4 20	4	248	78	7.5	253	<0.01	0.151
Ballybeg	SW 11	Q1 21	<2	233	74	7.8	295	<0.05	0.269
Ballybeg	SW 12	Q1 21	<2	232	71	7.8	288	<0.05	0.272
Ballybeg	SW 13	Q1 21	<2	219	75	7.4	352	<0.01	0.308
Lanespark	SW 14	Q1 21	4	235	74	7.8	281	<0.01	0.293
Lanespark	SW 15	Q1 21	<2	219	72	7.3	331	<0.01	0.302
Lanespark	SW 16	Q1 21	<2	221	76	7.3	287	<0.01	0.31
Ballybeg	SW 11	Q3 21	6	106	13	7	388	<0.05	0
Ballybeg	SW 12	Q3 21	6	114	21	8	306	<0.05	0
Ballybeg	SW 13	Q3 21	8	106	15	7	372	<0.05	0
Lanespark	SW 14	Q3 21	8	120	16	7	275	<0.05	2
Lanespark	SW 15	Q3 21	<2	112	19	7	363	<0.05	0
Lanespark	SW 16	Q3 21	8	116	15	7	343	0	2
Ballybeg	SW 11	Q1 22	4	177	65	7	393	0	0
Ballybeg	SW 12	Q1 22	2	183	59	7	243	<0.05	0
Ballybeg	SW 13	Q1 22	<2	130	58	8	420	<0.05	0
Lanespark	SW 14	Q1 22	<2	179	57	7	390	0	0
Lanespark	SW 15	Q1 22	6	177	60	7	381	0	0
Lanespark	SW 16	Q1 22	3	190	58	7	260	<0.05	0
Ballybeg	SW 11	Q3 23	2	357	84	7	87	<0.05	0.135
Ballybeg	SW 12	Q3 23	6	329	81	7.5	454	0.26	0.258
Ballybeg	SW 13	Q3 23	10	396	77	7.3	310	<0.05	0.557
Lanespark	SW 14	Q3 23	15	340	80	7.2	569	0.07	0.379
Lanespark	SW 15	Q3 23	<2	119	39	7.7	468	<0.05	0.026
Lanespark	SW 16	Q3 23	4	306	81	7.2	341	<0.05	1.31
Ballybeg	SW 11	Q4 23	<2	309	75	7.1	224	<0.05	0.076
Ballybeg	SW 12	Q4 23	2	322	75	7.4	371	0.12	0.052
Ballybeg	SW 13	Q4 23	3	441	98	7.1	378	<0.05	0.198
Lanespark	SW 15	Q4 23	<2	439	126	6.9	268	<0.05	0.338
Lanespark	SW 16	Q4 23	<2	496	114	7.1	219	0.06	0.688
Ballybeg	SW 11	Q1 24	3	231	56	7.2	217	<0.05	0.169
Ballybeg	SW 12	Q1 24	4	194	42	7.4	335	0.08	0.03
Ballybeg	SW 13	Q1 24	4	356	76	7	245	<0.05	0.214

Bog	SW	Monitoring	SS	Colour	COD	pH	TS	TP	Ammonia
Lanespark	SW 14	Q1 24	<2	269	66	7.2	419	<0.05	0.283
Lanespark	SW 15	Q1 24	<2	145	43	7.5	202	<0.05	0.055
Lanespark	SW 16	Q1 24	18	76	14	7.9	416	0.07	0.045
Ballybeg	SW 11	Q2 24	<2	256	90	7.3	202	<0.05	0.102
Ballybeg	SW 12	Q2 24	<2	256	92	7.1	325	0.1	0.023
Ballybeg	SW 13	Q2 24	<2	442	116	7.1	207	<0.05	0.088
Lanespark	SW 14	Q2 24	2	350	76	7.2	217	<0.05	0.162
Lanespark	SW 15	Q2 24	<2	335	74	7.5	139	<0.05	0.697
Lanespark	SW 16	Q2 24	<2	141	40	7.7	270	<0.05	0.012
Lanespark	SW 14	Q3 24	13	174	41	6.9	839	<0.05	2.59
Lanespark	SW 15	Q3 24	3	165	37	7.4	327	<0.05	19.5
Lanespark	SW 16	Q3 24	3	54.9	10	7.8	388	<0.05	0.029
Ballybeg	SW 11	Q4 24	<2	234	74	7.2	257	<0.05	0.111
Ballybeg	SW 12	Q4 24	4	133	49	7.6	292	0.05	0.043
Ballybeg	SW 13	Q4 24	3	167	51	7.5	335	<0.05	0.595
Lanespark	SW 14	Q4 24	3	300	87	7.6	345	0.05	0.006
Lanespark	SW 15	Q4 24	<2	210	62	7.4	246	<0.05	1.55
Lanespark	SW 16	Q4 24	2	56.6	28	7.8	367	<0.05	0.028

Rehabilitation of cutaway peatland is closely linked with control of emissions. One of the criteria for successful rehabilitation is stabilisation through re-vegetation, which will stabilise all substrates and in turn remove the need for further silt control measures. This site is already vegetated in some areas. Re-wetted peat also aids the primary objective of stabilizing peat, as when peat is re-wetted it is not vulnerable to wind erosion. Re-wetted peat and the development of wet peatland habitats can also act as sinks for silt and mobile peat, and increases additional retention time for solids, and the peatland vegetation can quickly stabilise this material within blocked drains on site (by acting like constructed wetlands).

Water quality of water discharges from restored peatlands normally improves as a result of bog restoration measures and the restoration of natural peatland processes (Bonn *et al*., 20017). Bog restoration is also expected to improve water attenuation of the site as the drains are blocked, slowing water movement and water release from the site. Restored peatlands help slow the release of water and aid the natural regulation of floods downstream (Minayeva *et al*., 2017). The draft National River Basin Management Plan (NRBMP) 2022-2027 (DHPCLG, 2022) is the key national plan for Ireland to achieve the objectives of the Water Framework Directive (WFD). The NRBMP outlines how key actions such as the Bord na Móna peatland rehabilitation is expected to have a positive impact on water quality and help the NRBMP deliver its objectives in relation to the WFD.

Water will still discharge from designated emission points when rehabilitation at Ballybeg/Lanespark/Derryvella Bog has been completed. This discharge will have improving water quality and there will be increased wetland attenuation, meaning slower release of water. This is expected to have a positive impact on status of downstream water bodies. While water quality improvements assist in meeting water frameworks directive ambitions and targets, they can also improve drinking water sources in applicable catchments with drained peatlands and the potential for associated reduction in treatment requirements at drinking water treatment facilities.

Decommissioning and Rehabilitation Programme Water Quality Monitoring.

The licence obligation of quarterly sampling regime on a selected number of ponds to be sampled over a 3-year cycle would not be sufficient to be able to appropriately track the changing water chemistry that will occur as part of this enhanced rehabilitation programme, so this sampling regime will occur monthly.

To assist in monitoring surface water quality from this bog, it was agreed to increase the existing licence monitoring requirements of the IPC Licence, to sampling for the same parameters every month.

This new sampling programme commenced in July 2023 and is enabling a baseline to be established, with sampling to progress during the scheduled works, and for a period of up to 2 years post rehabilitation. Depending on the period required to confirm that the main two parameters, suspended solids, and ammonia as remaining compliant with the licence emission and trigger limit values and there is an improving trajectory in these two parameters i.e., reduction in concentration, the monitoring programme and intensity will be periodically reviewed and amended.

Initial quarterly results are included in Appendix XIII. These results cover the period from July 2023 to December 2024 and are from some of the surface water outlets from the sections of bog to be rehabilitated in 2025. Peat extraction ceased in these bogs in 2017 and as expected some of the key water quality parameters that can impact water quality from peat extraction activities, remain on a relatively static trajectory, with suspended solids indicating a level trend from all outlets during the period, all well below any limits of concern. During this same period there was a slight downward trend in Ammonia for emission points, with all other parameters fluctuating slightly, most likely influenced by normal weather patterns, including rainfall.

Monthly Ammonia concentrations from emission points from July 2023 to December 2024 averaged 0.4550mg/l and ranged from 0.006 to 2.59mg/l. Results for Suspended Solids for the same period ranged from <2 to 18 mg/l and averaged 6.31mg/l.

In the preparation of this monitoring programme, Bord na Mona have been providing the Local Authority Water Programme (LAWPRO) with details of the surface water emissions points associated with this bog. LAWPRO have in turn provided details of their monitoring programme and these are included in the Water Quality Map.

This is necessary to ensure that there is alignment with the WFD monitoring programme and that where possible, the monitoring programme will enable any improvements in water quality or establishing trends to be quantified against any available WFD monitoring data. It will also enable the periodic sharing of data which will inform the monitoring reports, success criteria and enable LAWPRO under the Water Framework Directive to track any changes in pressures and be aware of changes in water chemistry.

Monitoring results will be maintained, trended every six months and reported on each year and as required, as part of the requirement to report on Condition 10.1 of the IPC Licence on Bog Rehabilitation in the Annual Environmental Report, and will be provided to LAWPRO and the EPA as required to inform progress and national monitoring requirements under the WFD.

These results will also be available in April each year as a requirement of the Annual Environmental Report at www.epa.ie.

The parameters to include as per condition 6.2 of the IPC Licence include monthly monitoring for pH, Suspended Solids, Total Solids, Total Phosphorus, Total Ammonia, Colour & COD. In addition, DOC has been included as a parameter to try and identify any changes in carbon in the surface water, and where required by LAWPRO, to assist in investigating other changes in water chemistry, the series of parameters can be reviewed and amended.

Success criteria:

The key water quality success criteria associated with this enhanced rehabilitation are as follows:

- That there is a stabilizing/improving concentration of suspended solids and ammonia in discharges from Bord na Móna sites, associated with the measures undertaken to stabilize the peat surface by the blocking of the internal drainage system and the maximized rewetting of the peat surface.
- Receiving water bodies have been classified under the River Basin Management Plan and this classification includes waters that are At Risk from peatlands and peat extraction. The success criteria will be that any At Risk classification will see improvements in the associated pressures from this peatland or if remaining At Risk, that there is an improving trajectory in the pressure from this peatland.

As the monthly monitoring program at Ballybeg/Lanespark/Derryvella Bog continues in 2025 and during the rehabilitation works planned for 2025 further trending will be produced to verify any ongoing trends.

3.7 Fugitive Emissions to air

None.

The bog is no longer in industrial peat production. Rehabilitation of the cutaway peatland will seek to re-wet the dry peat where possible and re-vegetate all areas (whether wet or dry). Collectively, ceasing industrial peat production, re-wetting and re-vegetating will minimise any risk of emission to air from dust.

3.8 Carbon emissions

Irish peatlands are a huge carbon store, containing more than 75% of the national soil organic carbon (Renou-Wilson *et al.* 2012). Peatland drainage and extraction transforms a natural peatland which acts as a modest carbon sink (taking in 0.1 to 1.1 t of carbon as CO2-C /ha/yr) into a cutaway ecosystem which is a large source of carbon dioxide (releasing 1.3 to 2.2 t of carbon as CO2-C /ha/yr) based on Tier 1 Emission factors (Evans *et al*. 2017). Renou-Wilson *et al.* (2018) reported losses of between 0.81 – 1.51 CO2-C /ha/yr from drained peatlands located in Ireland.

Re-wetting of dry peatlands will increase methane emissions (Gunther *et al*. 2020) as a consequence of the anoxic conditions within the peat body that provide a suitable environment for the microbial breakdown of plant litter and root exudates. Tanneberger *et al.* (2021) describes how peatland management has to choose between CO2 emissions from drained peatlands or increased methane (CH4) emissions from rewetted industrial peatlands. However, when radiative effects and atmospheric lifetimes of both GHG gases are considered and modelled, postponing rewetting increases the long-term warming effect of continued CO2 emissions (Gunther *et al*. 2020). This means the increase in methane due to rewetting of dry peatlands is still negated by the CO2 emissions reductions. Further, Wilson *et al.* (2022) confirmed the benefit of rapid rewetting to achieve strong carbon reductions and potentially altering the warming dynamics from warming to cooling depending upon the climate scenario.

It is expected that Ballybeg/Lanespark/Derryvella Bog will become a reduced carbon source following rehabilitation. The potential of any cutaway site to develop as a carbon sink in the longer-term depends on the success of the rehabilitation measures, the extent of development of *Sphagnum*-rich or other peat-forming habitats, the balance of carbon fluxes from different cutaway habitats and future climatic conditions. Much of this bog is expected to develop wetland habitats on shallow peat with open water, reed swamp and fen habitats

with alkaline emission factors and a smaller proportion will develop as regenerating wet deep peat vegetation on deep peat areas. Birch woodland and heather dominated vegetation is expected to develop on the drier mounds and along peripheral headlands.

3.9 Current ecological rating

(Following NRA (2009) Evaluation Criteria)

The majority of the former production areas at Ballybeg Bog and Derryvella Bog are deemed to be of **Local Importance (lower value)** due to the dominance of bare peat. Pioneer and semi-natural habitats such as raised bog, scrub and pioneer fen are rated higher and are deemed to be of **Local Importance (higher value)**.

4. CONSULTATION

4.1 Consultation to date

Consultation seeks to engage an audience of relevant stakeholders at both a national and local level. National stakeholders have been identified from varied bog restoration and rehabilitation efforts undertaken by Bord na Móna over the past 40 years, with particular emphasis on engagement with stakeholders during their Biodiversity Action Plan programme, since 2010. National Stakeholders includes relevant government departments and agencies, relevant semi-state bodies, NGOs and other environmentally-focused groups with a national remit.

There has been ongoing consultation about the proposed wind farm development, rehabilitation, biodiversity and other general issues at Ballybeg/Lanespark/Derryvella Bog in relation to the proposed Littleton Wind Farm (Bord na Móna Wind Farm | Littleton Wind Farm). Specific consultation relating to the wind farm development is not listed here, although there has been detailed consultation with stakeholders in relation to these issues and overlap with rehabilitation and biodiversity.

There has been ongoing consultation about rehabilitation, biodiversity and other general issues over the years about Littleton bog group, including Ballybeg/Lanespark/Derryvella Bog, with various stakeholders in relation to:

- General consultation with range of stakeholders at annual Bord na Móna Biodiversity Action Plan review days 2010-2018.
- Open consultation with range of stakeholders at annual BAP review days 2010-2018.
- Consultation with the North Tipperary Heritage Forum during the period 2010-2015.
- General consultation at a local community event in Littleton in Dec 2016.
- General consultation with Tipperary County Council and other stakeholders in relation to the Littleton Labyrinth Project Feasibility Study.
- Ongoing engagement with Lisheen Mine.
- Archaeological Liaison Committee (National Museum of Ireland & Dept of Culture Heritage and the Gaeltacht).
- Midlands & East Regional WFD Operational Committee (River Basin Management Plans).
- Ongoing consultation with Coillte – proposed Coillte/BnM Midlands Native Woodland Project.
- Consultation with Tipperary Climate Action Officer and Biodiversity Officer during Baunmore site visit (April 2024).
- Ongoing consultation with Slieve Ardagh Rural Development Group.
- General consultation with Tipperary County Council and other stakeholders in relation to the Midlands Network Trail.
- Ongoing engagement with Slieve Ardagh Rural Recreation regarding Loch Doire Bhile.

There was specific consultation and engagement about rehabilitation of the Littleton Bog group, including Ballybeg/Lanespark/Derryvella Bog, with various stakeholders during the period 2018-2021:

- Lisheen Mine.
- Irish Peatland Conservation Council.
- NPWS (site visits).
- Tipperary County Council (2018).
- Tipperary Heritage Forum.
- Kilkenny County Council.

- Consultation with members of the local community.
- Consultation with local community groups.
- Slieve Ardagh Rural Development.
- National University of Galway.
- Limerick Institute of Technology.
- Irish Wildlife Trust.
- Environmental Protection Agency.
- Birdwatch Ireland.
- Birdwatch Ireland Tipperary Branch.
- Forest Service.
- Coillte.

To inform the original Plan (Phase 1 Rehabilitation), both national and local stakeholders, including neighbours whose land adjoins Ballybeg/Lanespark/Derryvella Bog and local representatives of national bodies (such as Regional National Parks and Wildlife Service staff) and relevant offices in County Councils (such as the Heritage or Environmental Offices) were contacted. Any identified local interest groups were informed of the opportunity to engage with this rehabilitation plan and were invited to submit their comments or observations in relation to the proposed rehabilitation (Phase 1) at Ballybeg/Lanespark/Derryvella Bog or the programme in general (see Appendix XI).

All correspondence was acknowledged and reviewed and evaluated against the rehabilitation measures proposed.

4.2 Issues raised by Consultees

Some issues were raised by consultees during the consultation process for both the current and previous drafts of the rehabilitation plan for Ballybeg/Lanespark/Derryvella Bog and these are summarised below. A number of general submissions in respect of previous PCAS consultation are also referenced where applicable.

4.2.1 Consultation

During the initial commencement of PCAS, a number of consultees including: the Irish Farmers Association (IFA), the Irish Creamery Milk Suppliers Association (ICMSA) and Trinity College Dublin raised concerns regarding the duration and scope of consultation period. Stakeholders suggested that the consultation period should be extended to allow all potential stakeholders to make submissions where required.

4.2.2 Assessments of rehabilitation

Queries on pre-rehabilitation assessments were raised by NPWS and the National Museum of Ireland relating to the finalisation of several bog rehab plans in 2021 in relation to Appropriate Assessment, Environmental Impact Assessment and Strategic Environmental Assessment.

4.2.3 Restoration scope

NPWS welcomed the restoration and rehabilitation measures proposed for the Littleton Bog Group in 2018, particularly where it could result in the development of Annex I active raised bog or would significantly aid Ireland in meeting its commitments under the EU Habitats Directive.

NPWS (pre-PCAS, 2018) suggested that BnM consider more fully the potential for forward-planning during production phases of its operation so that the topography of the commercial fields could be engineered so as to best facilitate rewetting of the sites. Consideration should be given to reprofiling works within the Littleton Bog Group.

NPWS (pre-PCAS, 2018) highlighted the potential for more intensive rehabilitation during initial consultation and the potential for larger project opportunities focusing on GHG emission reduction creation of peat-forming habitats, biodiversity enhancement, other ecosystem services enhancement/restoration. The use of bunding at several sites was discussed.

Birdwatch Ireland (pre-PCAS, 2018) welcomed the proposed restoration/rehabilitation of the Littleton Bog Group and highlighted need to take consideration of bird nesting season when carrying out works, particularly for Lapwing and Curlew.

Tipperary County Council (pre-PCAS, 2018) also suggested that peatland water levels and flow regimes should be restored to as close to the natural reference conditions as possible.

The Irish Peatland Conservation Council (pre-PCAS, 2018) expressed concerns that *Sphagnum* inoculation was not part of the rehabilitation/restoration measures being applied at Ballysorrel Bog.

IPCC (pre-PCAS, 2018) requested clarity around the scope of sites included in the Littleton Rehabilitation Programme and recommended that priority be given to raised bog restoration, where possible. IPCC were concerned about the fact that milled peat extraction was projected to continue at Killeen Bog (in 2018, subsequently ceased in 2021). The IPCC were also unclear about the aims and objectives for sites with biodiversity interest. The IPCC recommended the use of contouring as a methodology to improve re-wetting outcomes.

Restoration/rehabilitation of marginal habitats was raised by the IPCC and Butterfly Conservation Ireland (BCI) relating to the finalisation of several bog rehab plans in 2021 and 2022 as worthy of consideration within the rehabilitation measures to support carbon sequestration and biodiversity objectives.

4.2.4 Monitoring

Further details on monitoring of ecological metrics, and how and where reporting on this monitoring would take place, was raised by the IPCC, University College Dublin and Trinity College researchers in their respective submissions relating to the finalisation of several bog rehab plans in 2021. Uisce Éireann (formerly Irish Water) reiterated the requirement of a strong monitoring program with respect to water quality during and post rehabilitation.

The IPCC (pre-PCAS, 2018) highlighted that monitoring of changes to water-levels as a result of rehabilitation could be improved using piezometers and queries the frequency of ecotope mapping.

NPWS (pre-PCAS, 2018) recommended that ongoing research into the interaction between rehabilitation measures and carbon emissions is prioritized so as to better inform future rehabilitation plans.

NPWS (pre-PCAS, 2018) had some difficulty interpreting maps due to their complexity and the size of the legend.

4.2.5 Flooding, drainage or other impacts on adjacent land.

The Irish Farmers Association (IFA), The Department of Agriculture Food and the Marine, individual local residents and ICMSA queried likely impacts relating to the finalisation of several bog rehabilitation plans in 2021 and 2022. They raised concerns based on the proposed re-wetting in relation to flooding on adjoining lands and, specifically,

with regards to the maintenance of drains. In previous submissions, the IFA also raised the issue of Health and Safety in relation to raising water levels as well as possible impacts on land and property prices.

Several individuals who owed adjacent land to bogs within the Littleton Bog Group expressed concerns about the potential impacts of re-wetting to their land (pre-PCAS, 2018).

4.2.6 Amenity

Several individuals and organisations expressed interest in the development of amenity and greenways through the Littleton Bog Group (pre-PCAS, 2018).

IPCC highlighted a bog area at the north of Littleton Bog that had been used for educational purposes in the past.

Several consultees including various politicians have requested information regarding the development of amenities on BnM bogs since the beginning of consultation by BnM relating to the Peatlands Climate Action Scheme.

4.2.7 Water Quality

A number of consultees have contacted BnM to express their concerns regarding the potential impact of PCAS related activities on water quality within waterbodies that are hydrologically connected to BnM bogs. *Uisce Eireann* have expressed their support for PCAS in general and have also requested information regarding the potential hydrological impacts of PCAS.

Tipperary County Council (Pre-PCAS, 2018) highlighted the need to avoid any unnecessary deterioration in the quality and quantity of ground and surface waters.

4.2.8 Future management

NPWS (pre-PCAS, 2018) highlighted the potential for future nature conservation designations for several bogs in the Littleton Bog Group (Ballysorrell and Knockahaw). Queries about future nature conservation designations were also submitted by IPCC, discussed with IWT and with Birdwatch Ireland Tipperary Branch.

Birdwatch Ireland, Tipperary Branch (Pre-PCAS, 2018) suggested further management of sites for to improve habitat for breeding wetland birds.

The Irish Farmers Association (IFA) (2021-2022) expressed concerns regarding the future ownership of the BnM bogs subject to rehabilitation, in submissions made on earlier PCAS plans. They expressed a desire for contingency planning for potential future ownership of designated bogs so as to ensure no negative impacts arise on adjacent properties from any new ownership.

4.2.9 Other issues

Other issues (raised by IPCC) during the finalisation of several bog rehab plans in 2021, 2022 and in 2023 included after use of the bog and turf cutting on the margins of the bog (outside of the area owned by BnM). The IPCC have also requested information regarding the resilience of rehabilitation measures to climate change induced climatic alterations.

Archaeological end of life survey of all the bogs were requested by National Museum of Ireland and National Monuments Unit during the early stages of PCAS. The National Museum of Ireland also requested that due diligence be taken during works to protect any archaeologically significant findings or areas. They also reiterated the importance of peatlands for the preservation of archaeology and requested they be consulted as part of any EIA undertaken.

A local landowner (pre-PCAS, 2017) with a holding adjacent to a Littleton Bog made some enquires about the return of land originally CPOed by Bord na Móna.

University of Galway (pre-PCAS 2017) were interested in developing an INTEREG Project on peatland sites and were discussing the inclusion of several BnM sites in this proposed project. (This subsequently became the CarePeat INTEREG Project and Cavemount Bog Co. Offaly was included in the project, which is now completed).

Limerick Institute of Technology (LIT) were interested in developing a project on peatlands and paludiculture and were discussing the potential availability of land within the Littleton Bog Group. This proposal ultimately did not develop into a project on BnM lands.

An individual highlighted the presence of several rare Bee Orchid varieties along the BnM railway at Longfordpass.

For a complete summary of submissions received and replies, see Appendix XI.

4.3 Bord na Móna response to issues raised during consultation

4.3.1 Consultation

BnM carried out extensive consultation and engagement with all interested parties during 2018-2021. BnM are carrying out additional consultation as part of the process of updating the Phase 2 rehabilitation plan for Ballybeg/Lanespark/Derryvella. This is ongoing with a dedicated Community Liaison Officer communicating with affected and interested parties. A website has been developed to make information available. This will be continually updated. Some PCAS Bogs have been used as demonstration sites so that interested stakeholders can come to organised visits and observe the measures on the ground.

4.3.2 Assessments of rehabilitation

Appropriate Assessment screening will be undertaken on all the bogs as part of PCAS. This will be undertaken by external consultants for Ballybeg/Lanespark/Derryvella Bog.

Implementation of rehabilitation measures including machine access across the bog will be carried out in conjunction with BnM Ecology Department. Seasonal and other restrictions will be put in place to mitigate against any impacts on biodiversity.

An Archaeological Impact Assessment (AIA) has been undertaken on Ballybeg/Lanespark/Derryvella Bog (Appendix XII). The aim for known archaeology on these bogs is to accomplish preservation in situ and we are taking steps to identify and avoid all known archaeology. BnM aim to achieve this through including all known archaeology in the planning process of rehabilitation works and implementing and exclusion or buffer zone around these features. These measures should sufficiently protect any archaeology in these areas, during any ground works in the final plan. It is anticipated that any archaeology will benefit from the ultimate remit of the rehabilitation, in that water tables will be raised thereby preserving in-situ. There is also an identified procedure for managing reports of stray finds that may arise during rehabilitation. There is continuing consultation and engagement with the National Museum of Ireland and the National Monuments Unit.

4.3.3 Restoration scope

Consultees during the Phase 1 rehabilitation (2018-2021) including NPWS and the IPCC suggested the use of more intensive rehabilitation measures such as contouring and bunding. These ultimately were beyond the scope of the rehabilitation budget allocated to these sites by BnM at the time (2018-2021). The PCAS is an opportunity to

carry out some of these suggested measures (e.g. bunding, recontouring) through the Littleton Bog Group as part of Phase 2 rehabilitation.

As part of PCAS, all restoration/rehabilitation options have been developed to support climate action and biodiversity objectives. Other issues such as existing amenity, social impacts, industrial history, archaeology were not part of the direct scope of PCAS but were considered when developing the rehabilitation plan. After-use of the bog is outside the scope of PCAS. Rehabilitation will lead to the development of a stable diverse re-wetted cutaway landscape that will have added benefits for amenity in the future but will not rule out other after-uses such as amenity.

Sphagnum inoculation is one measure that was initially suggested by IPCC (in 2018) for use at Ballysorrel to support raised bog restoration. This measure was ruled out initially by Bord na Móna due to its relatively high cost, lack of resources and other logistical issues such as lack of suitable local *Sphagnum* donor sites. Since then, BnM has developed the Peatlands and People LIFE Project (Home | Ireland's Climate Action Catalyst | Peatlands & People) and one of the main objectives of this project on BnM land is to inoculate approx. 800 ha of suitable residual deep peat with *Sphagnum* plugs to speed up the trajectory of development of *Sphagnum*-rich embryonic bog vegetation. So far, 250 ha has been inoculated across midlands bogs. The future selection of sites within the Littleton Bog Group for *Sphagnum* inoculation will be dependent on availability of resources for planting. Site visits to Ballysorrell (2021-2023) has also shown that *Sphagnum* present on site is recolonising and spreading quickly in response to the re-wetting in 2018.

4.3.4 Monitoring

As part of the PCAS, a monitoring and verification plan has been developed to support climate action and biodiversity objectives. This will include stratified monitoring of bog condition, habitats and biodiversity at several different scales. It is proposed to monitor the improvement of some biodiversity ecosystem services. The appearance of key species such as *Sphagnum* moss will be monitored during walk-over surveys and general monitoring visits. It is not proposed to carry out any additional monitoring of biodiversity ecosystem services at this site. Biodiversity monitoring for PCAS planned for a stratified approach with different targeted monitoring at different sites based on the site characteristics.

It is the expectation of BnM that rehabilitation measures should positively impact the water quality in receiving water bodies through enhancing the water attenuation across rehabilitated sites. The robust water monitoring programme implemented as part of PCAS will be used to assess water quality leaving rehabilitated sites at designated points.

An overview of the Water Quality Monitoring plan was provided to Uisce Eireann, and confirmation given that water flow and dissolved organic carbon (DOC) is being monitored.

BnM also advised that decommissioning of silt ponds will only be carried out when the EPA are satisfied that adequate stabilisation of the bog has been achieved and silt ponds are no longer required. This decommissioning will be determined by water quality results and EPA approval.

It was also confirmed that rehabilitation of bogs in the same catchment is likely to result in beneficial impacts on water quality in the catchment. This will be captured by the results from EPA monitoring stations in the vicinity of the bogs.

4.3.5 Flooding, drainage or other impacts on adjacent land.

During Phase 1 of the rehabilitation across Littleton Bogs, individual landowners who expressed concerns were met on site. No boundary drains were blocked and, in several instances, (Baunmore and Ballybeg) some internal drainage was modified to allow water draining from external lands to flow through these sites unhindered.

It is the intention of BnM that the re-wetting of the bogs will be carried out in such a manner that does not impact on third party lands. Where it is deemed that blocking of a shared drain would cause any adjoining lands to be adversely affected, this will be avoided, and alterations made to the rehabilitation plan. In general, drains around the margins of the bog will not be blocked.

External consultants have been appointed to carry a hydrological assessment to identify any potential impacts to neighbouring lands and to mitigate against any such impacts. There is no potential for direct impacts on arterial drainage downstream.

It is intended that rehabilitation measures will not significantly alter the existing topographical catchments and that the spine of the drainage networks, those which the upstream catchments drain through, will be retained by BnM.

4.3.6 Amenity

Bord na Móna and Tipperary County Council carried out a feasibility study of the potential for amenity development across the Littleton Bog Group called Littleton Labyrinth in 2018-2020. The first phase of this amenity has been completed and a greenway has been constructed at Killeen Bog to Loch Doire Bhile. A further extension (Phase 2) is proposed at Ballybeg and Derryvella Bog. There is potential for future extensions to this greenway network at Derryville Bog in the future. The proposed rehabilitation measures will not constrain any future greenway development.

Creating amenity developments such as walking tracks is not included within the direct scope of PCAS. However, PCAS rehabilitation will enable and support potential amenity future amenity developments.

4.3.7 Water Quality

PCAS rehabilitation is expected to positively impact the water quality of surrounding water bodies through enhancing water attenuation across rehabilitated sites. The robust water quality monitoring programme implemented as part of PCAS will be used to assess the water quality leaving rehabilitated sites at designated points.

4.3.8 Future management

This rehabilitation plan is not intended to plan out future management of these sites. Known or planned after-use (renewable energy, way-leave, Littleton Labyrinth greenway feasibility) has been incorporated, where possible, in the rehabilitation plan. Peatland rehabilitation is not intended to constrain future land-uses, where they are compatible with this environment.

BnM will continue to manage their land bank into the future. As industrial peat production has now ceased on BnM lands and rehabilitation measures carried out, a regular drainage maintenance programme will not be required or carried out as would have been the case in the past. However, if issues arise with the BnM internal drainage system that affects upstream or downstream landowners, then these issues will be addressed by BnM.

BnM considers issues regarding estate security, fire risk, invasive species and water pollution of utmost importance. BnM intends to maintain security and manage fire risk over the entirety of the estate. In this regard,

PCAS activities, should have no detrimental impact on these issues. Regarding water pollution, BnM is regulated by the EPA and as such adheres to the strict water pollution measures laid out by the same.

The formal designation of sites for conservation is a matter for NPWS. BnM are happy to continue engaging on issues of conservation designations as part of the National Peatland Strategy and other initiatives.

4.3.9 Other issues

The National Museum of Ireland (NMI) and the National Monuments Service (NMS) were included in the stakeholder consultation process. Where available at the time of the submission of the rehabilitation packages to NPWS, the Archaeological Impact Assessment (AIA) is included. Where it is still in preparation, it will subsequently be provided. Both bodies acknowledge the AIA is a desk-based process and associated outputs designed to ensure any known archaeology is identified and protected during the implementation process, and the Project Archaeologist's recommendations regarding buffering and ongoing vigilance and reporting of any stray finds to NMI.

It is the intention of BnM to keep secure the estate and ensure that any anti-social behaviour that occurs within the estate is reported and dealt with by the appropriate authorities.

BnM will consider future opportunities for biodiversity enhancement, subject to availability of resources and funding, where possible.

4.3.10 Concluding statement

No specific issues were raised during consultation that required significant changes to the substance of the rehabilitation plan.

The PCAS has the potential to deliver some of the rehabilitation measures initially suggested by stakeholders but not included within Phase 1 rehabilitation.

Marginal drains will not be blocked to avoid impacts on adjacent lands or lands under the ownership of third parties or turf-banks. This does not change the overall rehabilitation goals and outcomes and can be integrated with the other rehabilitation measures to allow cutaway re-wetting.

BnM intend to continue management of this site into the future and issues such as security and trespass will be addressed on an ongoing basis in association with other stakeholders.

BnM intends to maintain a "No Shooting" policy on Ballybeg/Lanespark/Derryvella Bog.

5. REHABILITATION GOALS AND OUTCOMES

The rehabilitation goals and outcomes outline what Bord na Móna want to achieve by implementing the rehabilitation (Phase 1 and Phase 2). These include:

- Meeting conditions of IPC Licence.
- Stabilisation or reduction in water quality parameters of water discharging from the site (e.g. suspended solids).
- Reducing pressure on receiving waterbodies that have been classified as *At Risk* from peatlands and from peat extraction, via stabilization or improving water-quality from this bog, and therefore, reducing pressures.
- Optimising hydrological conditions and trajectories of natural colonisation and pioneer habitat development for **climate action benefits as part of PCAS**.
- Optimising hydrological conditions for the development of reed swamp and fen on shallow more alkaline peat and other subsoils, or *Sphagnum*-rich regenerating wet deep peat vegetation communities on deep residual peat, where present.
- Supporting current and potential future infrastructure, amenity, and other land-uses. Integrating rehabilitation measures with current amenity infrastructure on site. It is not proposed to carry out any rehabilitation actions to change or negatively affect any proposed infrastructure.
- Supporting potential future native woodland development. It is not proposed to carry out any rehabilitation actions to change or negatively affect the proposed Coillte/BnM Midlands Native Woodland Project.
- The main goal and outcome of this updated plan is the successful rehabilitation (environmental stabilisation) of peatlands used for industrial peat production at the bog in a manner that is acceptable to both external stakeholders and to Bord na Móna and which optimise climate action and other ecosystem service benefits.

The rehabilitation goals and outcomes take account of the following issues.

- Bord na Móna have carried out rehabilitation at Ballybeg/Lanespark/Derryvella Bog between 2018-2021 (Phase 1 rehabilitation). Significant drain-blocking and re-wetting was carried out during this phase.
- It will take some time for stable naturally functioning habitats to fully develop at Ballybeg/Lanespark/Derryvella Bog. This will happen over a longer timeframe than the implementation of this rehabilitation plan.
- Re-wetting residual peat will initially maintain and enhance the carbon storage capacity of the bog. There is scientific consensus that restoration of hydrology in damaged bog can improve carbon storage, water storage and attenuation and help support biodiversity both on the site and in the catchment (See Section 3.8). This will reduce carbon emissions from the site from a larger carbon source to a smaller carbon source.
- It is not expected that the cutover bog in the former milled peat production area has the potential to develop active raised bog (ARB) analogous to the priority EU Habitats Directive Annex I habitat within the foreseeable future (c.50 years). Furthermore, the majority of the bog is shallow peat and only a small proportion of the bog has potential to develop *Sphagnum*-rich habitats in this timeframe. Nevertheless, re-wetting across the entire bog, as part of the Scheme, will improve habitat conditions of the whole bog. Other peatland habitats will develop in a wider mosaic that reflects underlying environmental conditions.

- Rehabilitating former industrial peat production bog will also in the longer-term support other ecosystem services such as such the development of new habitat to support biodiversity and local attenuation of water flows from the bog.
- WFD status in receiving water bodies can be affected by peatlands and peat extraction but is also affected by other sources such as agriculture. In addition, receiving water bodies that are assessed as *At Risk* from peatlands and from peat extraction are likely to have several contributary sources of impacts (private peat extraction and Bord na Móna). Reducing pressures due to former peat extraction activities at Ballybeg/Lanespark/Derryvella Bog will contribute to stabilising or improving water quality status of receiving water bodies in general. Ultimately, improving the WFD status of the receiving water body will depend on reducing pressure from a range of different sources, including peatlands in general (private and Bord na Móna).
- Re-wetting in general will benefit the future preservation of most known and unknown archaeological features. An Archaeological Impact Assessment (AIA) is to be carried out under the PCAS scheme.
- Bord na Móna are planning to develop a potential renewable energy project at Lanespark Bog as part of the proposed Littleton Wind Farm, which will overlap Lanespark Bog, Littleton Bog and a small part of Longfordpass (Bord na Móna Wind Farm | Littleton Wind Farm). This renewable energy project is in pre-planning. No Phase 2 rehabilitation is being considered for Lanespark Bog. The proposed phase 2 rehabilitation at Ballybeg and Derryvella Bogs will have no impact on Lanespark Bog.

6. SCOPE OF REHABILITATION

The principal scope of this rehabilitation plan is to rehabilitate the bog. This is defined by:

- The area of Ballybeg and Derryvella Bog within the PCAS Phase 2rehabilitation footprint.
- EPA IPC Licence - Ref. P0-499-01. As part of Condition 10.2 of this license, a rehabilitation plan must be prepared for permanent rehabilitation of the boglands within the licensed area.
- The Scheme is designed to exceed the stabilisation requirements as defined by the IPC Licence. This scheme is designed to enhance the ecosystem services of Ballybeg and Derryvella Bogs, in particular, optimising climate action benefits. The proposed interventions will mean that environmental stabilization is achieved (meaning IPC obligations are met) and, in addition, significant other ecosystem service benefits particularly for climate action will be accrued.
- The local environmental conditions of Ballybeg and Derryvella Bogs mean that a combination of dry cutaway measures, (Fertiliser treatment), targeted drain-blocking, wetland outfall management and deep peat measures are the most suitable rehabilitation approach for shallow peat areas (Phase 2 rehabilitation).
- Bord na Móna have defined the key goal and outcome of rehabilitation at Ballybeg and Derryvella as environmental stabilisation of the site via optimising climate action benefits, where possible. The re-wetting of residual peat in the cutaway will be optimised, setting the site on a trajectory towards the development of wetlands/Reed Swamp and fen on shallow more alkaline peat and other subsoils, and the development of peat-forming communities on areas of residual deep peat, where possible.
- Rehabilitation of Ballybeg and-Derryvella Bogs will support multiple national strategies of climate action, biodiversity action and other key environmental strategies such was the Water Framework Directive.
- The time frame for the delivery of the planned rehabilitation will be undertaken according to available resources and appropriate constraints.

6.1 Key constraints

- **Bog conditions.** Rehabilitation outcomes of sites are constrained by the environmental characteristics of these particular areas. For example, there is potential for raised bog restoration at some sites where there has not been significant industrial peat extraction, and the peat body is largely intact (deep peat sites that are drained). At other bogs, such as Ballybeg/Lanespark/Derryvella, most of the peat mass has been removed, the environmental characteristics of these areas have therefore changed radically (peat depths, hydrology, water chemistry, substrate type, nutrient status, etc.) and there will therefore be different habitat outcomes (regenerating *sphagnum*-rich deep peat vegetation, wetlands, fen, heathland, grassland and Birch woodland).
- The majority of Ballybeg/Lanespark/Derryvella Bog is cutaway with deep peat reserves and some shallow peat. The areas of residual deeper peat are likely to develop more typical bog vegetation communities in time. Wetland habitats (fen, wetland, reed swamp, wet woodland) and dry cutaway habitats (birch woodland, scrub and heath) are the most likely habitats to develop on shallower peat. The bog has a gravity-based regime.
- **Surrounding landscape and neighbours.** Another key constraint is the interaction between the Bord na Móna sites and the surrounding landscape. Care has to be taken that no active rehabilitation management is carried out that could negatively and knowingly impact on surrounding land. This includes any hydrological management on neighbouring farmland, amenity areas, and Lanespark bog, wich is

proposed for inclusion in the Littleton Wind Farm. It is anticipated that the rehabilitation work will not have any flooding impacts on adjacent land.

- **Archaeology**. The discovery of monuments or archaeological objects during peatland rehabilitation may potentially constrain the rehabilitation measures proposed for a particular area. The rehabilitation will optimise hydrological conditions for the protection of exposed archaeological structures, their retention in situ and preservation into the future. Any newly discovered archaeology may require rehabilitation measures to be reviewed and adapted. An Archaeological Impact Assessment (Appendix XII) will be carried out to mitigate against any impact on archaeology that may be found at Ballybeg/Lanespark/Derryvella Bog. Should any previously unknown archaeological material be uncovered during the rehabilitation works, it will be avoided and reported to the Bord na Móna Archaeological Liaison Officer and the National Museum of Ireland.
- **Public Rights of Way**. Where a public right of way or similar burden exists on Bord na Móna property, consideration will be given to ensuring that these remain intact where possible. In some instances, depending upon previous land uses and management, alternative solutions may be required. These will be explored in consultation with local communities and statutory bodies during the consultation work associated with the decommissioning and rehabilitation work described here.
- **Potential land-use.** Bord na Móna and SSE are currently developing a renewable energy project called Littleton Wind Farm, which will overlap Lanespark Bog, Littleton Bog and a small part of Longfordpass (Bord na Móna Wind Farm | Littleton Wind Farm). This project is in pre-planning. No Phase 2 rehabilitation is being considered for Lanespark Bog.
- **Lough Doire Bhile Amenity Development.** Part of the cutaway at Derryvella Bog (western lobe) was developed as Lough Doire Bhile amenity area (between 1999-2001) and is now leased to the Slieve Ardagh Rural Development community group. The Loch Dhoire Bhile loop, a 2.4 km walking trail, has also been developed in this area in recent years. Lough Doire Bhile Wildlife Reserve and amenity area are mapped as constraints on the rehabilitation plan.
- **Littleton Labyrinth** is an amenity project that was developed in partnership with Tipperary County Council. An amenity walking/cycling track has been along the headland/former rail line corridors along the northwestern margins of Derryvella Bog, linking to the Loch Doire Bhile amenity area, as part of the Littleton Labyrinth Greenway in 2024. This amenity track is constrained from the rehabilitation plan. The proposed rehabilitation measures will not overlap with these features and there is no constraint to rehabilitation.
- **Future Amenity development.** Bord na Móna are planning the development of an additional amenity trail, along the eastern and southern headlands of Derryvella Bog and the eastern and northern headlands of Ballybeg, as part of the Midlands Network Trail, designed to link to the Littleton Labyrinth greenway. The amenity development will consist of shared cycle and walkways, associated signage and fencing. The planned amenity route has been mapped as a constraint on rehabilitation maps. This project has been submitted for planning permission (February 2025).
- **Coillte/BnM Midlands Native Woodland Project.** Ballybeg Bog is proposed to be included in the Coillte/BnM Midlands Native Woodland Project (Midlands Native Woodland - Coillte). The main objective of this proposed project is to develop and enhance native woodland in areas of cutaway that would remain naturally dry, developing woodland habitat that would naturally complement wetland and peatland habitats already developing across these sites. This proposed project is currently being considered for consent by the Forest Service. Areas proposed to be included in Native Woodland Project have also been mapped as constrained land in the rehabilitation plan.

- **Bushcraft Site.** The southern extent of Derryvella Bog is proposed to be used as a Bushcraft Site and has been identified as constrained land.
- **Other constraints.** Coillte forestry, local roads, agricultural land and areas under grazing license occur around the margins and have been mapped as constraints on the rehabilitation plan.

6.2 Key Assumptions

- It is assumed that Bord na Móna will have all resources required to deliver this project.
- It is expected that weather conditions will be within normal limits over the rehabilitation plan timeframe. Long periods of wet weather have the capacity to significantly affect ground conditions and constrain drain blocking and other ground activities.

6.3 Key Exclusions

The scope of this rehabilitation plan does not cover:

- The longer-term development of stable naturally functioning habitats at Ballybeg/Lanespark/Derryvella Bog. The plan covers the short-term rehabilitation **actions** and **an additional monitoring and after-care programme** to monitor the rehabilitation and to respond to any needs.
- This plan is not intended to be an after-use or future land-use plan for Ballybeg/Lanespark/Derryvella Bog.
- The longer-term management of this site, potentially as a nature conservation site, or for amenity, or for other uses in the future.

7. CRITERIA FOR SUCCESSFUL REHABILITATION

This section outlines what criteria will be used to indicate successful rehabilitation and what critical success factors are needed to achieve successful rehabilitation. All criteria used to indicate successful rehabilitation will be measured to validate the achievement of the rehabilitation goals and outcomes and validate the completion of the rehabilitation.

The key objective of this enhanced rehabilitation plan is **environmental stabilisation** and the stabilisation of any emissions from the site that related to the former industrial peat extraction activities.

Rehabilitation is generally defined by Bord na Móna as:

- stabilisation of bare peat areas via targeted active management (e.g. drain-blocking/re-wetting) slowing movement of water across the site and encouraging natural colonisation; and
- mitigation of key emissions (e.g. potential run-off of suspended solids).

In addition, Bord na Móna wish to optimise climate action and other ecosystem service benefits via enhanced rehabilitation measures.

7.1 Criteria for successful rehabilitation to meet EPA IPC licence conditions:

- Rewetting of residual peat in the former area of industrial peat production to offset potential silt run off and to encourage and accelerate development of vegetation cover via natural colonisation and reducing the area of bare exposed peat. See Table 7.1 for a summary of the criteria for successful rehabilitation and associated monitoring. The target will be the delivery of measures, and this will be measured by an aerial survey after rehabilitation is completed.
- That there is a stabilizing/improving concentration of suspended solids and ammonia in discharges from Bord na Móna sites, associated with the measures undertaken to stabilize the peat surface by the blocking of the internal drainage system and the maximized rewetting of the peat surface. This will be demonstrated by developing a stable or downward trajectory of water quality indicators (suspended solids and ammonia) towards what would be typical of a re-wetted cutaway bog. This will be measured via water quality monitoring (suspended solids and ammonia) for at least 2 years after the rehabilitation has been completed.
- Receiving water bodies have been classified under the River Basin Management Plan and this classification includes waters that are *At Risk* from peatlands and peat extraction. The success criteria will be that the *At Risk* classification will see improvements in the associated pressures from this peatland or if remaining *At Risk*, that there is an improving trajectory in the pressure from this peatland.

With regard to predicting and estimating likely trends that might materialize or could be considered as a target, monitoring of surface water ammonia emissions from Longfordpass bog in Littleton over 3 years, post cessation of peat extraction with ongoing rehabilitation, were considered. These indicate a downward trend in Ammonia concentrations (Figure 7.1).

Similarly monitoring of surface water ammonia emissions from a Corlea bog in Littleton over the past 4 yrs. post cessation of peat extraction with ongoing rehabilitation, indicate downward trends.

As the monthly monitoring program at Ballybeg/Lanespark/Derryvella Bog continues in 2024/2025 during the rehabilitation measures planned for 2025, and data from the 2024 monitoring program is compiled, further analysis will be completed to identify any ongoing trends.

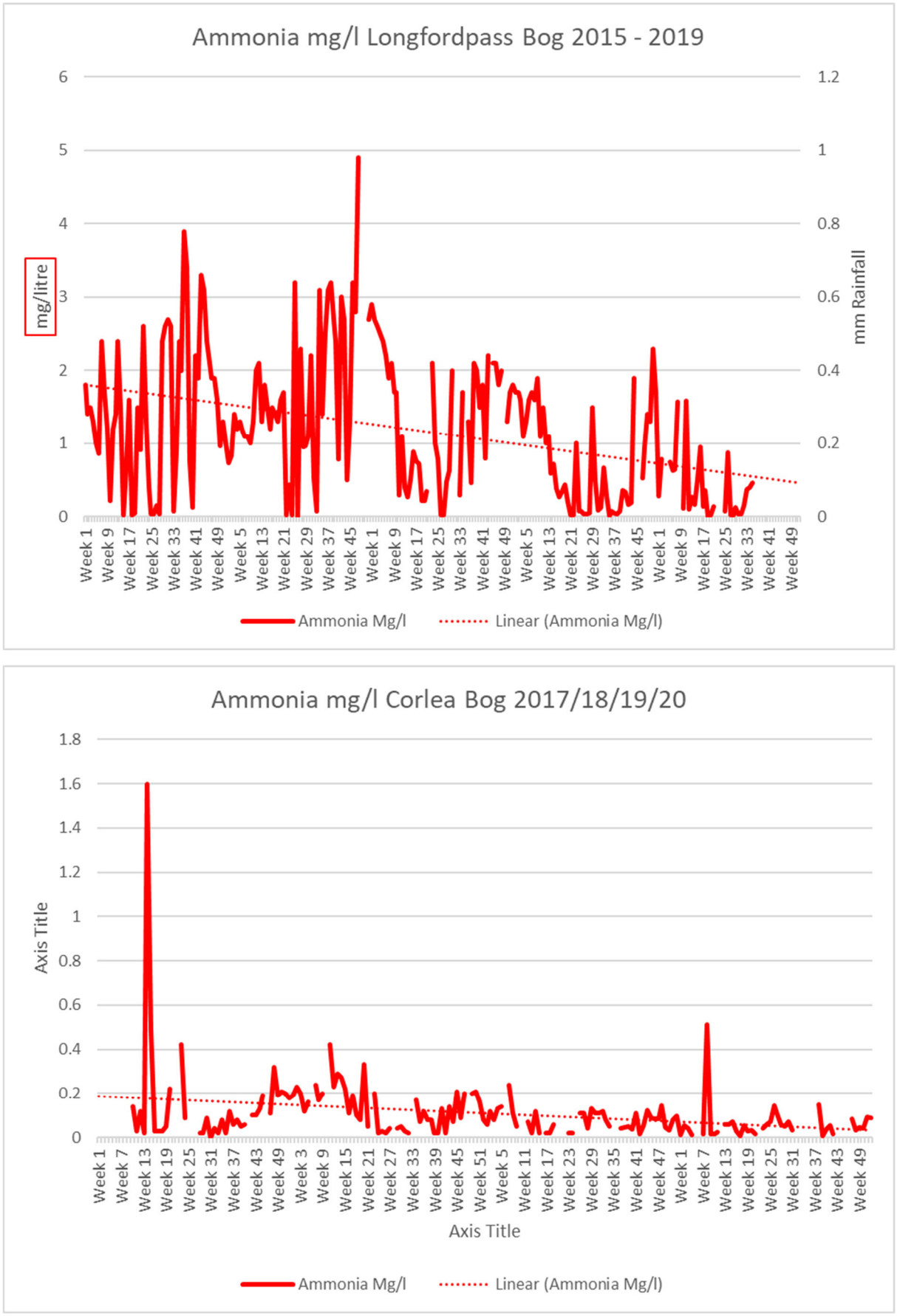


Figure 7.1. Ammonia levels over the period 2015-2019 at Longfordpass and the period 2017-2020 at Corlea.

Additional criteria for successful rehabilitation to optimise climate action and other ecosystem service benefits:

- Optimising the extent of suitable hydrological conditions to optimise climate action and other ecosystem service benefits (optimising and maximising residual peat re-wetting). This will be measured by an aerial survey after rehabilitation has been completed.
- Accelerating the trajectory of the bog towards becoming a reduced carbon source/carbon sink. This will be measured through habitat mapping and the development of cutaway bog condition assessment. This cutaway bog condition assessment will include assessment of environmental and ecological indicators such as vegetation cover, vegetation communities, presence of key species, *Sphagnum* cover, bare peat cover and water levels (similar to ecotope mapping). Baseline monitoring will be carried after rehabilitation is completed (during the scheme). It is proposed that sites can be monitored against this baseline in the future.
- Reduction in carbon emissions. This will be estimated via a combination of habitat condition assessment and application of appropriate carbon emission factors derived from other sites. Baseline monitoring (habitat condition) will be carried after rehabilitation is completed (during the scheme). It is proposed that sites can be monitored against this baseline in the future.
- Setting the site on a trajectory towards establishment of a mosaic of compatible habitats including *Sphagnum*-rich regenerating wet deep peat vegetation communities, wetland, fen, reed swamp, heath, scrub, poor fen, and birch woodland, where conditions are suitable. Some of these habitats have already in part established as pioneer vegetation/wetlands. It will take some time for stable naturally functioning habitats to fully develop at Ballybeg/Lanespark/Derryvella Bog. This will be demonstrated and measured via aerial photography, habitat mapping and cutaway/habitat condition assessment. Baseline monitoring will be carried after rehabilitation is completed (during the scheme). It is proposed that sites can be monitored against this baseline in the future.
- Improvement in biodiversity and ecosystem services. This will be demonstrated by metrics outlined in Section 9.1 that can be used to measure changes in ecosystem services (e.g. water quality parameters, development of pioneer habitats, breeding bird monitoring). This will be measured by collecting a range of scientific data that can then quickly be adapted and into metrics that can be used to measure changes in various ecosystem services. Baseline monitoring will be carried after rehabilitation is completed (during the scheme). It is proposed that sites can be monitored against this baseline in the future.

Table 7-1 Summary of Success criteria, targets, how various success criteria will be measured and expected timeframes.

Criteria type	Criteria	Target	Measured by	Expected Timeframe
IPC validation	Rewetting in the former area of industrial peat production	Delivery of rehabilitation measures Reduction in bare peat.	Aerial photography after rehabilitation has been completed – to demonstrate measures (drain-blocking) Establishment of a baseline for future monitoring of bare peat, vegetation establishment and habitat condition.	2025-2027
IPC validation	Key water quality parameters Ammonia, Phosphorous, Suspended solids, pH and conductivity	Reduction or stabilisation of key water quality parameters associated with this bog	Water quality monitoring for a period after rehabilitation has been completed	2025-2027
IPC validation	Reducing pressure from peat production on the local water body catchment (WFD)	Where this section of the water body, that this bog drains to, has not been identified as under pressure from peat extraction, that the intervening EPA monitoring programme associated with its Programme of Measures for this water body, confirms that its classification remains at not being at risk from peat extraction associated with activities at this bog.	EPA WFD monitoring programme	WFD schedule
Climate action verification	Optimising the extent of suitable hydrological conditions to optimise climate action	Optimal extent of suitable hydrological conditions	Aerial photography and Habitat mapping to map extent of suitable hydrological conditions. Baseline monitoring to be carried out during the scheme when rehabilitation is complete. Sites can be re-monitored in the future and	2025-2027

Criteria type	Criteria	Target	Measured by	Expected Timeframe
			compared against this baseline.	
Climate action verification	Reduction in carbon emissions.	Reduction in carbon emissions	Carbon emissions – estimated using a bog condition assessment and appropriate carbon emission factors.	2025-2027
Climate action verification	Setting the site on a trajectory towards establishment of a mosaic of compatible habitats	Establishment of compatible cutaway habitats	Habitat map, Cutaway bog condition map Baseline monitoring to be carried out during the scheme when rehabilitation is complete. Sites can be re-monitored in the future and compared against this baseline.	2025-2027

Meeting climate action verification criteria and monitoring of these criteria after the scheme has been completed is dependent on support from the Climate Action Fund or other sources of funding. Note that monitoring and verification of the overall scheme will be stratified – not all these criteria will be measured at each individual site. Baseline monitoring to be carried out during the scheme when rehabilitation is complete. Sites can be re-monitored in the future and compared against this baseline.

7.2. Critical success factors needed to achieve successful rehabilitation as outlined in the plan

The achievement of successful rehabilitation as outlined in the plan requires:

- **Funding to pay for resources required to deliver the planned rehabilitation (Bord na Móna and external).** Bord na Móna maintains a provision on its balance sheet to pay for these future costs. Bord na Móna is fully committed to meeting its obligations relating to rehabilitation and decommissioning under the Integrated Pollution Control Licence. It is expected that additional costs of rehabilitation will be supported by Government through the Climate Action Fund and Ireland's National Recovery and Resilience Plan.
- **Bord na Móna to have sufficient resources (staff and training) to deliver the planned rehabilitation with required associated skills and competencies.**
- **Bord na Móna to have sufficient resources (suitable machinery) and staff to maintain this machinery.**
- **Weather conditions to be within normal limits over the rehabilitation plan timeframe.** Long periods of wet weather have the capacity to significantly affect ground conditions and constrain the delivery of rehabilitation. The potential impact of wet weather on ground conditions can be reduced by appropriate planning and management. Bord na Móna have significant experience of managing these issues through 70 years of working in these peatland environments.

- **Rehabilitation measures to be effective.** The rehabilitation measures proposed in this plan are based on 40 years of Bord na Móna experience of peatland management and best practice applied internationally in peatland management. Measures proposed in this plan have already been shown to be affective at other sites. Bord na Móna will apply a flexible and adaptable approach to the more innovative rehabilitation measures proposed in this plan**.** If measures are not initially effective, Bord na Móna will review any requirement for additional practical rehabilitation.
- **Natural colonisation of vegetation to develop semi-natural habitats at a rate within the normal limits.** The development of naturally functioning semi-natural habitats on degraded bog takes time. It may take 30-50 years for active raised bog vegetation to re-develop on suitable cutaway that was previously bare peat. However, Bord na Móna experience has demonstrated the effectiveness of these type of measures for re-wetting bog and creating carbon sinks (Renou-Wilson *et al*. 2018).
- Rehabilitation measures have been designed to accelerate and work with natural colonisation and other natural processes. Bord na Móna experience of rehabilitation has shown that re-wetting improves conditions for natural colonisation and that natural colonisation is accelerated where the environmental conditions are most suitable. Rehabilitation measures have been designed to modify the conditions of areas within sites where conditions are less suitable for natural colonisation (modifying hydrology, topography, nutrient status or availability of potential seed sources).
- **Monitoring to be robust and effective.** Rehabilitation Monitoring will be established to validate the success of rehabilitation as required by Condition 10 of the IPC Licence and to verify the benefits of the proposed measures to optimise climate action. This will focus on a collecting a range of scientific data that can then quickly be adapted and into metrics that can be used to measure changes in various ecosystem services.

8. REHABILITATION ACTIONS AND TIME FRAME

Peatland rehabilitation requires detailed planning and the use of data from desktop surveys and field surveys. This data in association with topographical and hydrological modelling will be important in planning the future peatland landscapes and planning the use of the most appropriate rehabilitation methodologies to maximise climate action benefits. Hydrological modelling indicates those areas that are likely to re-wet when drains are blocked, based on the current topography, and areas where water levels may have to be modified, where needed. Enhanced rehabilitation measures will look to optimise hydrological conditions for re-wetting peat in other areas. This planning is also essential for matching the most sustainable rehabilitation methodology to the most suitable cutaway environment to maximise the benefits of the resource outlay (maximising cost/benefit).

A number of illustrative figures have been produced to inform Rehab Planning and Design, including Aerial Photography, Peat Depths, LiDAR Surface Maps, and Depression Analysis modelling; these are included in the accompanying Mapbook as the drawings referenced below:

BNM-DR-26-07-RP-22: Aerial Imagery 2021

BNM-DR-26-07-RP-04: Peat Depths

BNM-DR-26-07-RP-03: LiDAR Map

BNM-DR-26-07-RP-09: Depression Analysis

The rehabilitation actions themselves will be a combination of PCAS measures to re-wet peat. The distribution of these measures is provisionally outlined in drawing titled *BNM-DR-26-07-RP-05: Enhanced Rehabilitation Measures* in the accompanying Mapbook (note that the actual distribution of these measures may be subject to change in response to stakeholder consultation and refinement of the enhanced rehabilitation measures.)

Drain-blocking was already carried out as part of Phase 1 rehabilitation.

Proposed Phase 2 rehabilitation measures (Table 8.1) for Ballybeg/Lanespark/Derryvella Bog will include:

- Deep Peat measures including intensive drain blocking (max 7/100 m), field re-profiling, creation of shallow depressions on elevated deep peat and management of water levels with overflow pipes and blocking of outfalls and managing overflows.
- Wetland measures will be used across the former production area of Derryvella and the central section of Ballybeg that have been subject to phase 1 rehabilitation. This has increased the height of the water table and several areas of deep, enclosed basins with ponded water have formed. Some additional berms are proposed in these areas. Measures will also include managing outfalls, managing water levels with overflow pipes and targeted blocking of outfalls within the bogs.
- Targeted drain blocking (AW2 measures) is proposed in cutover that has now developed woodland and scrub around the margins of the former production area. This will optimise hydrological conditions/rewet the residual peat.
- Targeted fertiliser application to accelerate vegetation establishment on areas of bare peat on headlands and high fields, and within certain areas of dry cutaway. Areas where vegetation has established do not need fertiliser application.
- Initial hydrological modelling indicates low lying parts of the site will develop a mosaic of wetland habitats with the potential for some deeper water. Hydrological management will look to optimise summer water levels to maximise the development of wetland vegetation (by looking to set water depths at < 0.5 m, where possible. Water-levels will be adjusted at outfalls and by adjusting piped drainage.

Table 8.1: Phase 2 rehabilitation measures at Ballybeg/Lanespark/Derryvella Bog.

Type*	Rehab Code	Phase 2 Rehabilitation Measures	Extent (Ha)
Dry Cutaway	DCT1	Blocking outfalls and managing water levels with overflow pipes.	2.3
	DCT2	Regular drain blocking (3/100m), modifying outfalls and managing water levels with overflow pipes and targeted fertiliser treatment.	3.6
Wetland	WLT2	Turn off or reduce pumping to re-wet cutaway, blocking outfalls and managing water levels with overflow pipes, targeted blocking of outfalls within a site.	63.2
	WLT4	More intensive drain blocking (max 7/100 m), modifying outfalls and managing overflows, transplanting Reeds and other rhizomes.	2.5
Deep Peat	DPT2	More intensive drain blocking (max 7/100 m) and modifying outfalls and managing overflows.	1.0
	DPT7	More intensive drain blocking (max 7/100 m), + field reprofiling, creation of shallow depressions on elevated deep peat + blocking outfalls and managing overflows.	12.8
Marginal land	MLT1	No work required.	15.5
Additional Work	AW2	Targeted Drain Blocking.	24.7
Silt ponds	Silt pond	Silt ponds.	0.5
Constraint	Constraint	Other Constraints (proposed Littleton Wind Farm, Amenity trails, Lough Doire Bhile, Bushcraft site, Coillte/BnM Midlands Native Woodland Project, Littleton Labyrinth).	348.2
Total			474.3

* The types of rehab and areas of rehab may change in response to stakeholder consultation and refinement of the enhanced rehabilitation measures.

8.1 Completed and ongoing

- Previous rehabilitation was carried out in Ballybeg, Lanespark and Derryvella in 2018-2021 (Phase 1 rehabilitation), see Figure *BNM-DR-26-07-30: Previous Rehabilitation* in the accompanying mapbook. Measures included wide-spread drain-blocking, berms, and hydrological management. A pump in Lanespark Bog was decommissioned. There was some fertiliser treatment in Derryvella Bog.
- A significant part of the site has already re-vegetated, with significant cover of pioneer vegetation developing a mosaic of typical cutaway peatland and wetland habitats. The 2000 aerial photo shows that this side of the site was in peat extraction, with some emerging gravel mounds and ridges. By 2006 some areas were cutaway and peat extraction had stopped on a phased basis. Now there is a mosaic of pioneer habitats and the area has also been re-wetted, with wetlands developing in basins.

- Natural re-colonisation of the cutaway so far has been effective. Bare peat areas within the cutaway are reducing as vegetation develops and consolidates. Areas of bare peat treated with fertiliser in Derryvella have also revegetated quite well.

8.2 Short-term planning actions (0-1 years)

- Seek formal approval of the enhanced plan, noting the alternative standard plan should funding from the Scheme not materialise from the EPA.
- Agree an *ex ante* budget of eligible costs (based on the approved enhanced plan) with the Scheme regulator.
- Develop a detailed site plan with engineering drawings outlining how the various rehabilitation methodologies will be applied to Ballybeg/Lanespark/Derryvella Bog. This will take account of peat depths, topography, drainage, and hydrological modelling (see map for an indicative view of the application of different rehabilitation methodologies).
- A drainage management assessment of the proposed enhanced rehabilitation measures will be carried out and any issues identified resolved and the rehabilitation plan adapted.
- A review of known archaeology and an archaeological impact appraisal of the proposed rehabilitation will be carried out. The results of this assessment will be incorporated into the rehabilitation plan to minimise known archaeological disturbance, where possible.
- A review of issues that may constrain rehabilitation such as known rights of way and existing land agreements is to be carried out.
- An ecological appraisal of the potential impacts of the planned rehabilitation on the presence of sensitive ground-nesting bird breeding species (e.g. breeding waders) is to be carried out. The scheduling of rehabilitation operations will be adapted, where required.
- Ensure all activities comply with the environmental protection requirements of the IPC Licence.
- Carry out Appropriate Assessment of the Rehabilitation Plan.
- Track implementation and enforcement of the relevant IPC Licence conditions, the mitigation measures (AA) and other environmental control measures during the implementation of the rehabilitation plan.

8.3 Short-term practical actions (0-2 years)

- Carry out proposed measures as per the Phase 2 rehabilitation. This will include targeted drain-blocking, along with fertiliser application targeting bare peat areas of headlands, high fields and other areas (where required) and hydrological management. All rehabilitation measures will be carried out with regard to best practice environmental control measures (Appendix IV).
- Monitor the success of rehabilitation measures.
- Carry out the proposed monitoring, as outlined.
- Silt ponds will be monitored during this period and there will be continued maintenance and cleaning to prevent potential run-off of suspended solids from the site during the rehabilitation phase.
- Submit an ex-post report to the Scheme regulator to verify the eligible measures to be carried out in year 1 of the Scheme, and an ex-ante estimate for year 2 of the Scheme; and so on for each year of the Scheme.

8.4 Long-term (>3 years)

- Evaluate success of short-term rehabilitation measures outlined above and remediate where necessary.
- Delivery of a monitoring, aftercare and maintenance programme (See section 10.2 below).
- Decommissioning of silt-ponds will be assessed and carried out, where required.
- Reporting to the EPA will continue until the IPC Licence is surrendered.

8.5 Timeframe

- **2025**: Short-term planning actions.
- **2025-2026**: Short-term delivery actions.
- **2026**: Long term delivery actions. Evaluate success of short-term rehabilitation measures outlined above and remediate where necessary.
- **2028**: Decommission silt-ponds, if necessary.

8.6 Budget and costing

Bord na Móna (BnM) appreciates the Minister's intention to support Bord na Móna in developing a package of measures, 'the Scheme', for enhanced decommissioning, rehabilitation and restoration of cutaway peatlands referred to as, the Peatlands Climate Action Scheme'. *However, only the additional costs associated with the additional and enhanced rehabilitation, i.e., measures which go beyond the existing standard mandatory decommissioning and rehabilitation requirements arising from Condition 10 will be eligible for support.*

The enhanced decommissioning, rehabilitation and restoration of the peatlands funded by the Scheme will deliver benefits across climate action (GHG mitigation through reduced carbon emissions and acceleration towards carbon sequestration), enrich the State's natural capital, increase eco-system services, strengthen biodiversity, improve water quality and storage attenuation as well as developing the amenity potential of the peatlands.

Bord na Móna maintains a provision on its balance sheet to pay for the future costs of **standard** rehabilitation and decommissioning. This is updated every year - for more information see the Bord na Móna Annual Report (Bord na Móna, 2024). Bord na Móna is fully committed to meeting its obligations relating to rehabilitation and decommissioning under the Integrated Pollution Control Licence.

At this time, a 'standard' rehabilitation provision (sufficient to discharge the requirement of Condition 10 in the licence) has been allocated to the site based on the area of different cutaway types across the site (See Appendix I).

9. AFTERCARE AND MAINTENANCE

9.1 Programme for monitoring, aftercare and maintenance

This programme for monitoring, aftercare and maintenance has been designed to meet the Conditions of the IPC Licence. This is defined as:

- There will be **initial quarterly monitoring assessments** of the site to determine the general status of the site, the condition of the silt ponds, assess the condition of the rehabilitation work, monitoring of any potential impacts on neighbours land, general land security, boundary management, dumping and littering.
- The number of these site visits will reduce after 2 years to bi-annually and then after 5 years to annual visits.
- These monitoring visits will also consider any requirements for further practical rehabilitation measures.
- The **baseline condition of the site will be established** post-rehabilitation implementation by using an aerial survey to take an up to date aerial photo, when rehabilitation is completed. This will be used to verify completion of rehabilitation measures. The extent of bare peat will be assessed using this baseline data, and habitat maps will be updated, if needed. It is proposed that sites can be monitored against this baseline in the future.
- **Water quality monitoring** at the bog will be established. The main objective of this water quality monitoring will be to establish a baseline and then monitor the impact of peatland rehabilitation on water quality from the bog.
- In order to assist in monitoring surface water quality from this bog, it is planned to increase the existing licence monitoring requirements to sampling for the same parameters to every month during the scheduled activities and for a period up to two years post rehabilitation, depending on the period required to confirm that the main two parameters, suspended solids and ammonia are remaining compliant with the licence emission and trigger limit values and there is an improving trajectory in these two parameters i.e. reduction in concentration.
- Enhanced water quality monitoring will aim to include up to 70% of a bogs drainage catchments.
- Monitoring results will be maintained, trended and reported on each year as part of the requirement to report on Condition 10.1 of the IPC Licence on Bog Rehabilitation in the Annual Environmental Report, which will be available in April each year at www.epa.ie.
- The parameters to be included (as per condition 6.2 of the IPC Licence) include monthly monitoring for pH, Suspended Solids, Total Solids, Total Phosphorus, Total Ammonia, Colour, and COD and DOC.
- This monthly sampling regime on a selected number of silt ponds will be carried out over a two-year cycle. The original (licence) requirement was for a quarterly sampling regime, but this has been increased to a monthly regime to appropriately track the changing water chemistry that will occur as part of this enhanced rehabilitation. In addition, DOC will be included as a parameter to try and identify any changes in carbon in the surface water.
- If, after two years, key criteria for successful rehabilitation are being achieved and key targets are being met, then the water quality monitoring will be reviewed, with consideration of potential ongoing research on site. The water quality data, the aerial surveys and the habitat mapping will be collated and will be submitted to the EPA as part of the final validation report.
- If, after two years, key criteria for successful rehabilitation have **not** been achieved and key targets have **not** been met, then the rehabilitation measures and status of the site will be evaluated and enhanced, where required. This evaluation may indicate no requirement for additional enhancement of

rehabilitation measures but may demonstrate that more time is required before key criteria for rehabilitation has been achieved. Monitoring of water quality will then also continue for another period to be defined.

- Where other uses are proposed for the site that are compatible the provision of biodiversity and ecosystem services, these will be assessed by Bord na Móna in consultation with interested parties. Other after-uses can be proposed for licensed areas and must go through the required assessment process and planning procedures.

Additional monitoring measures are also proposed to monitor ecosystem service benefits that have been derived by enhanced rehabilitation. These proposed monitoring measures will be funded by the proposed Climate Action Fund Scheme or additional other funding. Monitoring of climate action and other ecosystem service benefits will be designed to take account of the requirements of monitoring benefits of the overall Scheme and will be stratified; that is not all monitoring will be carried out in each site. These are defined as:

- Vegetation and habitat monitoring after rehabilitation is completed using a cutaway bog condition assessment. This assessment will include assessment of on environmental and ecological indicators such as vegetation cover, vegetation communities, presence of key species, *Sphagnum* cover, bare peat cover and water levels. It is proposed that sites can be monitored against this baseline in the future.
- The condition of the bog can be assessed using the condition assessment and suitable Greenhouse Gas (GHG) emission factors can be assigned to different habitats. GHG emission factors have been determined for various peatland habitats in Ireland (Wilson *et al*., 2015) and are constantly being refined with more and more research. BnM is actively supporting research into GHG fluxes in different rehabilitated peatland habitats. This means that potential GHG emissions can be estimated from the site, as the site continues along its trajectory towards a naturally functioning peatland ecosystem.

9.2 Rehabilitation plan validation and licence surrender – report as required under condition 10.4

IPC Licence Condition 10.4. *A final validation report to include a certificate of completion for the Rehabilitation Plan, for all or part of the site as necessary, shall be submitted to the Agency within six months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.*

Reporting to the EPA will continue until the IPC Licence is surrendered. The bog will be included in the full licence surrender process as per the Guidance to Licensees on Surrender, Cessation and Closure of Licensed Sites EPA, 2012, when:

- The planned rehabilitation has been completed.
- The key criteria for successful rehabilitation have been achieved and key targets have been met.
- Water quality monitoring demonstrates that water quality of discharge is stabilising or improving; and
- The site has been environmentally stabilised.

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APPENDIX I: STANDARD PEATLAND REHABILITATION THAT HAS ALREADY BEEN COMPLETED TO MEET CONDITIONS OF THE IPC LICENCE

A standard peatland rehabilitation has already been completed to meet conditions of the IPC Licence.

Bord na Móna operates under IPC Licence issued and administered by the EPA to extract peat within the Littleton Bog Group (Ref. PO-499-01). As part of Condition 10.2 of this licence, a rehabilitation plan must be prepared for permanent rehabilitation of the boglands within the licensed area.

This document seeks to address the requirements of Condition 10.2 of IPC Licence Ref. PO-499-01:

> "*The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of the cutaway boglands within the licensed area.*"

Ballybeg/Lanespark/Derryvella Bog was used to supply fuel peat to the Littleton Briquette Factory, Killeen, Thurles, Co. Tipperary. Ballybeg/Lanespark/Derryvella Bog was in industrial peat production from 1970's to 2017. In 2017, Bord na Móna announced the closure of the Littleton Briquette factory and the cessation of industrial peat production in a number of cutaway bogs within the Littleton Bog Group, including Ballybeg/Lanespark/Derryvella Bog. Peatland rehabilitation was carried out in 2018-2021 with extensive drain-blocking and hydrological management (Phase 1 rehabilitation). This standard peatland rehabilitation plan is outlined here to **demonstrate rehabilitation that was completed** between 2018-2021.

Bord na Móna covered the costs that have accrued from these standard decommissioning and rehabilitation activities, as part of its original obligations. The existing costs associated with both the removal of potentially polluting materials and the environmental stabilisation of the peatlands resides with Bord na Móna. However, the expenditure necessary to deliver the additional and enhanced decommissioning, rehabilitation and restoration (EDRRS/PCAS) proposed for 2025 and the benefits that flow from these measures and interventions/improvements will be eligible for funding by the EU through Ireland's National Recovery and Resilience Plan.

Scope of rehabilitation

The principal scope of this rehabilitation plan is to rehabilitate the bog. This is defined by:

- The area of Ballybeg/Lanespark/Derryvella Bog.
- EPA IPC Licence - Ref. P0-499-01. As part of Condition 10.2 of this license, a rehabilitation plan must be prepared for permanent rehabilitation of the boglands within the licensed area. Ballybeg/Lanespark/Derryvella Bog is part of the Littleton Bog Group.
- The current condition of Ballybeg/Lanespark/Derryvella Bog.
- The key objective of rehabilitation, as defined by this licence, is **environmental stabilisation** of the bog.
- To minimise potential impacts on neighbouring land. Boundary drains around Ballybeg/Lanespark/Derryvella Bog will be left unblocked as blocking boundary drains could affect adjacent land.
- Land-use.

Rehabilitation goals and outcomes

The key rehabilitation goal and outcome for Ballybeg/Lanespark/Derryvella Bog is environmental stabilisation of the site via wetland creation. This is defined as:

- Carrying out drain blocking to re-wet peat and slow runoff.
- Stabilising potential emissions from the site (e.g. suspended solids).
- Environmental stabilisation.

The outcome is setting the site on a trajectory towards establishment of natural habitats.

Criteria for successful rehabilitation:

- Rewetting of residual peat and shallow cutaway in the former area of industrial peat production to offset potential silt run off and to encourage development of vegetation cover via natural colonisation and reducing the area of bare exposed peat.
- That there is a stabilising/improving concentration of suspended solids and ammonia associated with the measures undertaken to stabilise the peat surface by the blocking of the internal drainage system and the maximised rewetting of the peat surface. This will be demonstrated by developing a stable or downward trajectory of water quality indicators (suspended solids and ammonia) towards what would be typical of a re-wetted cutaway bog. This will be measured via water quality monitoring (suspended solids and ammonia).
- Receiving water bodies have been classified under the River Basin Management Plan and this classification includes waters that are 'At Risk' from peatlands and peat extraction. The success criteria will be that the 'At Risk' classification will see improvements in the associated pressures from this peatland or if remaining At Risk, that there is an improving trajectory in the pressure from this peatland.

Rehabilitation targets

- Demonstrating the delivery of the rehabilitation through site visits and through updated aerial photography (indicating presence of peat blockages and re-wetting). This will be demonstrated by a post rehab aerial survey.
- Stabilising potential emissions from the site (e.g. suspended solids). The key target will be developing a stable or downward trajectory of water quality indicators (suspended solids and ammonia) towards what would be typical of a re-wetted cutaway bog. This will be demonstrated by water quality monitoring results.

Rehabilitation measures:

- Blocking field drains in drier sections of the former industrial production area to create regular peat blockages (three blockages per 100 m) along each field drain.
- Re-alignment of piped drainage; and management of water levels to create/enhance existing wetlands.
- Decommissioning of a pump in Lanespark Bog.
- Fertiliser application over high fields and headlands in Derryvella Bog.
- No measures are planned for the majority of surrounding marginal peatland habitats.
- Silt ponds will continue to be maintained during the rehabilitation and decommissioning phase.
- Evaluate success of short-term rehabilitation measures and enhance where necessary.

- Decommissioning of silt-ponds will be assessed and carried out, where required.

Timeframe:

- 2018-2021. 1st phase of rehabilitation. Removal of milled peat stock. Field drain blocking.
- 2018-2019. 1st phase of rehabilitation. Field drain blocking across the bog. Removal of the pump.
- 2021. Application of fertiliser along the headland.
- >2027: Decommission silt-ponds, if necessary.

Table AP-1. Rehabilitation measures and target area.

Type	Code	Description	Area (Ha)
Dry cutaway	DCT1	Blocking outfalls and managing water levels with overflow pipes	5.9
Deep peat	DPT1	Regular drain blocking (3/100 m) + blocking outfalls and managing water levels with overflow pipes	13.8
Wetland	WLT1	Turn off or reduce pumping to re-wet cutaway + blocking outfalls and managing water levels with overflow pipes	65.7
Additional Works	AW	Targeted drain blocking	27.4
Marginal Land	MLT1	No work required	15.5
Other	Silt Pond	Silt ponds	0.5
Other	Constraint		348.2
Total			474.3

See Drawing number *BNM-DR-26-07-RP-20 Ballybeg/Lanespark/Derryvella Bog: Standard Rehab Measures* included in the accompanying Mapbook which illustrates the standard rehab measures to be applied.

Monitoring, after-care and maintenance

- There will be initial quarterly monitoring assessments of the site to determine the general status of the site, the condition of the silt-ponds, assess the condition of the rehabilitation work, assess the progress of natural colonisation, monitoring of any potential impacts on neighbouring land and general land security. The number of site visits will reduce after 2 years to bi-annually. These site visits will assess the need to additional rehabilitation.
- Water quality monitoring will be established.
- Monitoring results will be maintained, trended and reported on each year as part of the requirement to report on Condition 10.1 of the IPC Licence on Bog Rehabilitation in the Annual Environmental Report, which will be available in April each year at www.epa.ie.
- The parameters to be included (as per condition 6.2 of the IPC Licence) include monthly monitoring for pH, Flow, Suspended Solids, Total Solids, Total Phosphorus, Total Ammonia, Colour, and COD.
- This sampling regime on a selected number of silt ponds will be carried out over a two-year cycle. The original (licence) requirement was for a quarterly sampling regime.

- Where other uses are proposed for the site, these will be assessed by Bord na Móna in consultation with interested parties. Other after-uses can be proposed for licensed areas and must go through the required assessment and planning procedures.

Validation and IPC Licence surrender

Reporting to the EPA will continue until the IPC Licence is surrendered. The bog will be included in the full licence surrender process as per the Guidance to Licensees on Surrender, Cessation and Closure of Licensed Sites (EPA, 2012) when:

- The planned rehabilitation has been completed;
- Water quality monitoring demonstrates that water quality of discharge is stabilising or improving; and
- The site has been environmentally stabilised.

APPENDIX II: BOG GROUP CONTEXT

The Littleton Bog Group IPC Licenced area has been in industrial peat production for several decades. There are 11 defined bog units covering a total area of 4,421 ha. Each bog area further comprises a range of habitats from bare milled peat former production areas to re-colonising cutaway to workshops areas and transport infrastructure. Industrial peat extraction from these sites mainly supplied briquettes, horticulture and commercial turf for domestic use.

Industrial peat extraction in the Littleton Bog Group ceased in 2017. Some remnant small stockpiles which were harvested within the Bog Group prior to 2017 remain on the bogs. Some rehabilitation has already been undertaken at some of the Littleton bogs, including Carrickhill, Templetuohy, Bawnmore, Inch, Ballybeg, Derryvella and Killeen Bogs.

The rehabilitation plan for the Littleton Bog Group encompasses all areas involved in industrial peat production including former industrial production areas and associated facilities.

A breakdown of the component bog areas for the Littleton Bog Group IPC Licence Ref. P0-499-01 is outlined in Table Ap-2. Industrial peat production history varies across the Littleton bog group, so there is a wide range of peat depths at present.

Table Ap-2: Littleton Bog Group names, area and indicative status

Bog Name	Area (ha)	Stage of development	Land-Use and History	Peat Production Cessation	Rehab Plan Status
Carrickhill	170 ha	Cutover Bog Industrial peat production started in the 1970's and ceased in 2017. There is residual deep peat across much of this site. Carrickhill had a partially pumped drainage system.	Carrickhill Bog formerly supplied peat to the Littleton briquette factory. Some areas of shallow peat cutaway on site are developing pioneer cutaway vegetation communities. The pump was decommissioned in 2018. Drain blocking was carried out in 2018. A fertiliser treatment on part of the headland was carried out in 2021. The majority of the site is still mostly bare peat. Carrickhill is proposed for the Coillte/BnM Midlands Native Woodland Project. 28 ha is proposed for planting at this site. This proposed project is currently being considered for consent by the Forest Service.	2017	Draft 2018 Phase 1 Rehab measures implemented 2018-2021 Updated 2025
Templetuohy	737 ha	Cutover Bog	Templetuohy Bog formerly was developed to supply fuel sod peat	2017	Draft 2018

Bog Name	Area (ha)	Stage of development	Land-Use and History	Peat Production Cessation	Rehab Plan Status
		Industrial peat production commenced at Templetuohy Bog in 1940's. Areas began to develop as cutaway during the 1980s as peat extraction ceased on a phased basis. Industrial peat extraction finally ceased in 2017. This bog has a partially pumped drainage system. Part of the site has developed pioneer cutaway habitats. Areas re-developed for peat extraction in 2015-17 are now revegetating quickly. Areas that were used for peat extraction upto 2017 are a mosaic of re-wetted bare peat and pioneer communities.	and also supplied peat to the Littleton briquette factory. Bord na Móna have constructed a 40MW Wind Farm with 14 turbines and road network on cutaway at Templetuohy bog called Bruckana Wind Farm. This wind farm is operational. Pumping is still operational across this site to support the wind farm infrastructure.		Phase 1 Rehab measures implemented 2018-2021 Updated 2025
Derryville	250 ha	Cutover Bog Industrial peat production commenced at Derryville Bog in 1970's. Areas began to develop as cutaway during the 2000s as peat extraction ceased on a phased basis. Peat extraction finally ceased in 2017. This bog has a partially pumped drainage system.	Derryville Bog formerly supplied peat to the Littleton briquette factory. Part of the site has been developed for conifer forestry and is leased to Coillte. Part of the site was sold to Lisheen Mine and removed from the IPC Licence in the 2000s. Much of the former production area on site is developing pioneer cutaway vegetation communities, the remainder of the site is bare peat and developing wetland. Pumping continued at Derryville until 2022. Pumping has now ceased, and measures have been implemented in 2024 to manage water levels across the site and to decommission the pump.	2017	Updated 2025

Bog Name	Area (ha)	Stage of development	Land-Use and History	Peat Production Cessation	Rehab Plan Status
Bawnmore	531 ha	Revegetating cutover bog. Industrial peat production commenced at Baunmore Bog in 1970's. Areas began to develop as cutaway during the 2000s as peat extraction ceased on a phased basis. Peat extraction finally ceased in 2017. Much of the site is now developing a mosaic of woodland, peatland and wetland habitats. Baunmore had a partially pumped drainage regime.	Bawnmore Bog formerly supplied peat to the Littleton briquette factory. Much of the site is developing pioneer cutaway habitats and the site has significant biodiversity value. Pumping ceased in 2018. Part of the access is used for log biomass storage (for Edenderry Power). Bawnmore is proposed for the Coillte/BnM Midlands Native Woodland Project. 39 ha is proposed for planting at this site. This proposed project is currently being considered for consent by the Forest Service.	2017	Updated 2025
Ballysorrel	196 ha	Drained raised bog – This site was initially drained for peat extraction. It was developed for peat production in the 1970s, but milled peat harvesting only occurred over a short 2 year timeframe. The site was then left as a peat reserve to be re-developed in the future. Restoration/drain blocking carried out in in 2018.	Much of the site was bare peat in the early 2000s. The site has since re-vegetated naturally (in a drier situation) since then and is now responding quickly to the recent re-wetting. Much of the high bog has re-colonised with Heather-dominated vegetation. Small hummocks of *Sphagnum* capillifolium and S. subnitens are present. *Sphagnum* spp. are also present in some low-lying areas that are permanently waterlogged and are spreading.	2017	Final 2019
Inch	120 ha	Cutover Bog Industrial peat production since 1970s. Finally ceased in 2017. Inch had a partially pumped drainage regime.	Inch Bog formerly supplied peat to the Littleton briquette factory. Some areas of shallow peat cutaway on site are developing pioneer cutaway vegetation communities with deep peat areas slow to colonise and remaining mostly bare peat. Pumping ceased in 2018. Inch is proposed for the Coillte/BnM Midlands Native Woodland Project. 19 ha is proposed for planting at this site.	2017	Updated 2025

Bog Name	Area (ha)	Stage of development	Land-Use and History	Peat Production Cessation	Rehab Plan Status
			This proposed project is currently being considered for consent by the Forest Service.		
Longford Pass (Popes Bog)	214 ha	Cutaway Bog Peat production at Longfordpass bog commenced in the 1940's and finally ceased in 2017. Peat extraction ceased and cutaway habitats began to develop on a phased basis. Longfordpass has a partially pumped drainage system.	Longford Pass Bog initially was developed as a sod turf production site. It then formerly supplied peat to the Littleton briquette factory. The site was bisected by the construction of the N8 Motorway in 2000s. A small area between the new motorway and R639 (old main road) was leased and developed for farmland in 2018. Longford Pass is part of the proposed Littleton Wind Farm Project. This project is currently in pre-planning. Some areas of shallow peat cutaway on site are developing pioneer cutaway vegetation communities with deep peat areas slower to colonise. Pumping continued at the site until 2022, when the pumping failed. Since then, measures have been carried out to manage water-levels.	2017	Draft 2018
Ballybeg, Lanespark and Derryvilla	474 ha	Cutaway Bog Industrial peat production since 1970s and finally ceased in 2017. Peat extraction ceased and cutaway habitats developed on a phased basis during this period. .	Ballybeg, Lanespark and Derryvilla initially were developed for sod turf production, and then formerly supplied peat to the Littleton briquette factory. Part of the site has been developed for conifer forestry and is leased to Coillte. Part of Lanespark/Derryvilla (Loch Doire Bhile) was developed as fishing lake and an amenity site in 1999-2002. This site is leased to Slieve Ardagh Rural Development. Lanespark is part of the proposed Littleton Wind Farm Project. This project is currently in pre-planning.	2017	Draft 2018 Ballybeg & Derryvella Updated 2025

Bog Name	Area (ha)	Stage of development	Land-Use and History	Peat Production Cessation	Rehab Plan Status
			A greenway was constructed across the site as part of the Littleton Labyrinth Project in 2024, connecting the historical site of Derrynaflan to Loch Doire Bhile amenity, via Lanespark. Additional greenway is proposed to extend amenity through Derryvilla and Ballybeg as part of Failte Ireland. Midlands Trail project. This is currently in pre-planning. Ballybeg and Lanespark are proposed for the Coillte/BnM Midlands Native Woodland Project. 21 ha is proposed for planting at this site. This proposed project is currently being considered for consent by the Forest Service .		
Killeen	632 ha	Industrial peat production commenced at Killeen Bog in 1980s. Industrial peat extraction finally ceased in 2021.	Killeen bog formerly supplied peat to the Littleton briquette factory and the horticultural market. Re-wetting was carried out across the site in 2021. Some areas of shallow peat cutaway on site are developing pioneer cutaway vegetation communities with deep peat areas slower to colonise since the site was re-wetted. A greenway was constructed across the site as part of the Littleton Labyrinth Project in 2024, connecting the historical site of Derrynaflan to Loch Doire Bhile amenity, via Lanespark. Killeen is proposed for the Coillte/BnM Midlands Native Woodland Project. 31 ha is proposed for planting at this site. This proposed project is currently being considered for consent by the Forest Service .	2017	Draft 2018 Phase 1 Rehab measures implemented 2018-2021 Updated 2025

Bog Name	Area (ha)	Stage of development	Land-Use and History	Peat Production Cessation	Rehab Plan Status
Littleton	1,020 ha	Cutaway Bog Littleton is a relatively old industrial peat production bog. Large-scale industrial peat production began in the 1940's where sod peat was produced for fuel. Sod peat production was mechanised during the 1950's. Milled peat production began in the 1970's and milled peat was supplied to the Briquette factory (constructed in 1981) at Lanespark. Peat extraction ceased and cutaway habitats developed on a phased basis since the 1890s and some well-established cutaway habitats have developed. Industrial peat extraction finally ceased in 2018. Littleton has a partially pumped drainage system.	Littleton Bog formerly supplied sod peat before supplying peat to the Littleton briquette factory. Older cutaway has already extensively colonised with pioneer cutaway, wetland and scrub habitats. Part of the site has been developed for conifer forestry and is leased to Coillte. A small area (10 ha) was used as a pilot biomass project and Eucalyptus was planted in 2018. Littleton is part of the proposed Littleton Wind Farm Project. This project is currently in pre-planning. Some pumps in Littleton Bog have been decommissioned and some have been retained and are still operational.	2017	Draft 2018

See Drawing number *BNM-DR-26-07-RP-24: Bog Group,* included in the accompanying Mapbook which illustrates the location of Ballybeg/Lanespark/Derryvella Bog and the Littleton Bog Group in context to the surrounding area.

APPENDIX III: ECOLOGICAL SURVEY REPORT

The ecological survey reports for Ballybeg/Lanespark/Derryvella Bog are presented as two standalone reports below. The areas of Lough Doire Bhile and Lanespark Bog have been constrained out of the PCAS rehabilitation extent; therefore the ecological reports for these areas are not included here.

Derryvella Bog

Ecological Survey Report

Note: This report outlines an ecological survey of the bog. This report should not be taken as a management plan for the site as other land-uses may still be considered. Information within this report may inform the development of other land-uses and identify areas with particular biodiversity value. The report outlines potential options for biodiversity management after industrial peat production has ceased.

Bog Name:	**Derryvella (Lanespark)**	**Area (ha):**	123.3 ha
Works Name:	Littleton	**County:**	Tipperary
Recorder(s):	MMC	**Survey Date(s):**	28/08/2012

Habitats present (in order of dominance)

The most common habitats present at this site include:

- Bare peat (Codes refer BnM classification of pioneer habitats of former peat production areas. See Appendix II).
- Pioneer poor fen dominated by Soft Rush (pJeff) and or Bog Cotton (pEang)
- Pioneer Purple Moorgrass-dominated communities (gMol) (around margins and in mosaic)
- Exposed gravel (Gr)
- Birch scrub (oBir, cBir) (generally in mosaic with other cutaway habitats)
- Pioneer dry heath (developing on some stock-piles and high fields)

- Scrub (WS1) (Codes refer to Heritage Council habitat classification, Fossitt 2000), See Appendix II)
- Birch woodland (WN7)
- Improved grassland (GA1)

Description of site

Derryvella Bog is located in Co. Tipperary, 5 km south-east of Littleton Village. Derryvella is part of the Littleton Bog group and is located north of the former Littleton/Lanespark briquette factory, and to the east of the Lough Doire Bhile amenity area and biodiversity area. A branch of the BnM railway network connects Derryvella and Lanespark.

Derryvella is a relatively small bog and is a sub-section of the larger Ballybeg/Lanespark/Derryvella bog unit. Former peat fields are orientated north to south. The bog property extends north to a local road that marks the northern boundary. The BnM railway extends along the southern margin of the site. The majority of the bog was formerly developed for peat production and the marginal zones within the BnM property line are rather narrow and dominated by scrub on old high bog. Improved grassland in adjacent farmland extends up to the BnM bog margin along the west side of the bog. There is some recent conifer forestry planted along the eastern margin of the site.

Up until 2017/2018, the majority of the bog was managed for milled peat production and is dominated by bare peat as a result. The narrower southern end of the site has been out of industrial peat production for several years. A ridge of glacial till extends under the peat layer and is exposed in parts. A new deep outfall has been recently dug through this ridge to help drain former production areas to the north. There is some light vegetation over this mound of glacial sub-soil and in the small area of peat trapped to the south of the mound that is now out of production. Purple Moorgrass and Soft Rush dominate the vegetation over the mound with some scattered Heather. However, it has been disturbed recently by the construction of the outfall. There is still significant bare substrate cover with exposed gravel. There is some Gorse scrub developed to the west of the mound and outfall on an old high field that is no longer in use. To the south and on remnant peat there is typical colonisation of pioneer Poor Fen with Soft Rush and Bog Cotton. There is also some scattered Birch scrub but again there is also significant bare peat cover still present. A small sub-basin has developed in this area between the margin of the bog and the mound and the lowest section is wetter and being vegetated by Bog Cotton. There is also a small sub-basin to the east of the mound where there was water lying at the time of the survey. Both Bog Cotton and Bottle Sedge were present in this section.

Other sections that are vegetated include an old stock-pile that has been colonised with Heather and Purple Moorgrass. The south-east margin of the former production bog is situated along a channelized stream and there is a verge of grazed grassland (GS2) developed along this drain on spoil taken from the drain. Purple Moorgrass dominates the marginal vegetation along the western margin of the former production bog.

Designated areas on site (cSAC, NHA, pNHA, SPA other)

None

Adjacent habitats and land-use

The surrounding area is largely dominated by farmland, with improved agricultural grassland (GA1) and some wet grassland (GS4) that extends to the majority of the margins around the bog. Conifer Plantation has been developed along the eastern margin of the bog.

Watercourses (major water features on/off site)

- Derryvella is located within the River Suir catchment.
- Derryvella has a single catchment. The bog drains south towards the new outfall and on to a drain that flows east along the northern margin of Lough Doire Bhile amenity area and biodiversity area. The catchment is treated by a silt-pond that is located to the west of Lough Doire Bhile, where it then drains into the Black River.
- The Black River drains west towards the River Suir. It flows along the south-east and southern margins of the bog.

Peat type and sub-soils

Dark fen peat is exposed over most of this site.

The bog is underlain by mixed glacial till.

Fauna biodiversity

Birds

Several bird species were noted on the site during the survey.

- Blackbird, Wren, Meadow Pipit, Grey Crow (4), Kestrel, Wood Pigeon and Swallow.

Mammals

Signs of several mammal species were noted on the site during the survey.

- Rabbit were sighted along south-west margin and there are frequent signs of grazing.

- Fox droppings and Hare droppings were noted around the site.

Other species

- Butterfly species noted on the site included Large White and Meadow Brown.

Ballybeg Bog

Ecological Survey Report

Note: This report outlines an ecological survey of the bog. This report should not be taken as a management plan for the site as other land-uses may still be considered. Information within this report may inform the development of other land-uses and identify areas with particular biodiversity value. The report outlines potential options for biodiversity management after industrial peat production has ceased.

Bog Name:	**Ballybeg (Lanespark)**	**Area (ha):**	123.3 ha
Works Name:	Littleton	**County:**	Tipperary
Recorder(s):	MMC	**Survey Date(s):**	20/09/2012 11/2017

Habitats present (in order of dominance)

The most common habitats present at this site include:

- Bare peat (Codes refer BnM classification of pioneer habitats of production bog. See Appendix II).
- Birch scrub (oBir, cBir) (generally in mosaic with other cutaway habitats)
- Pioneer dry heath (generally in mosaic with Birch scrub and Purple Moorgrass-dominated grassland)
- Pioneer poor fen dominated by Soft Rush (pJeff)
- Pioneer Purple Moorgrass-dominated communities (gMol) (around margins and in mosaic)
- Open water (OW)
- Bog timber
- Scrub (WS1) (Codes refer to Heritage Council habitat classification, Fossitt 2000), See Appendix II)
- Birch woodland (WN7)
- Improved grassland (GA1)
- Raised bog (PB1)
- Treeline (WS2)

Description of site

Ballybeg Bog is located in Co. Tipperary, 1 km south-east of Littleton Village. Ballybeg is part of the Littleton Bog group and is located adjacent to Lanespark and the former briquette factory. There is a branch of the railway connecting Ballybeg and Lanespark.

Ballybeg is a small bog and has a dog-leg shape with a narrower eastern portion. Peat fields are orientated south-east to north-west. The bog property extends south to a local road that accesses the former Lanespark Briquette Factory. Another local road crosses the travel path to the east the bog that links Ballybeg and Lanespark. The BnM railway extends along this travel path and along the southern margins of the east half of the bog, with a branch along the eastern margin.

The majority of the bog was managed for milled peat production and is dominated by bare peat. There are only several tiny sections beginning to develop pioneer cutaway habitats. A low mound is beginning to be exposed at the east end of the site with gravel appeared with some vegetation along the edges of the drains. A small part of the north-west corner was wet at the time of the survey and colonised by species associated with pioneer poor fen habitats (i.e. Soft Rush (*Juncus effusus*) and Bulbous Rush (*Juncus bulbosus*). The majority of this former production area is considered to comprise relatively deep peat with some exposed lighter peat present also. In contrast, the eastern half of the bog has a relatively thin layer of peat remaining. The southern part of the site appears to have more potential for wet peatland habitat development with a basin developed around the main outfall.

A small section at the southern end has been out of production for some time (cutaway) (prior to the 2017 decision to close Littleton Briquette Factory). Silt-ponds have been developed adjacent to the road and grassland (likely grazed) has developed between the silt-ponds. Several fields to the north have been out of industrial peat production for some time or had limited production. They are developing dense Birch scrub/woodland with a mosaic of lighter Birch scrub and pioneer dry heath in sections. Purple Moor-grass (*Molinia caerulea*) and Common Cotton-grass and Hare's-tail Cotton-grass (*Eriophorum angustifolium* and *Eriophorum vaginatum*) are also prominent around the margin of this section and in some parts of the fields where the drainage is impeded. The majority of this section is vegetated.

Several fields along the western part of the northern margin have also developed dry heath and Birch/Gorse scrub mosaics. There has been limited industrial peat production along these fields (fields are relatively high). There are also some sections of bare peat with occasional stands of Ling Heather (*Calluna vulgaris*) re-colonising this area. An area within this section has been developed for the creation of silt-ponds.

Similar vegetation is found in the eastern part of the northern margin. This area is in a localised basin. A dense mosaic of dry Heath, Purple Moorgrass-dominated grassland and Birch scrub form the main part of the mosaic. The marginal areas tend to be Heather dominated. Some sections are wetter and contain more frequent Soft Rush-dominated poor fen with the Birch scrub. The majority of this area is completely vegetated. Several portions of fields adjacent to the milled peat production area have been out of production for a shorter amount of time and are developing Soft Rush-dominated poor fen vegetation with some emergent Birch scrub.

Part of the western production bog margin seems to have been planted with broad-leaved saplings, including Alder), to help form a screen between the bog and an adjacent farmyard. A tall Grey Popular-dominated tree-line is present along the travel path entrance into the bog.

Designated areas on site (cSAC, NHA, pNHA, SPA other)

None

Adjacent habitats and land-use

The surrounding area is largely dominated by farmland, with improved agricultural grassland (GA1) and some wet grassland (GS4) that extends to the majority of the margins around the bog.

Watercourses (major water features on/off site)

- Ballybeg is located within the River Suir catchment.
- Ballybeg is separated into three separate catchments. The northern half of the bog is divided into two separate catchments that both drain north to silt-ponds on the margins of the site. Both ponds drain north towards the Black River via drains.

- The southern catchment drains south through silt-ponds to the Ballyley River. Both rivers drain west towards the River Suir.

Peat type and sub-soils

Dark fen peat is exposed over most of this site. Lighter *Sphagnum*-type peat is also exposed in places where there is deeper peat.

The bog is underlain by mixed glacial till.

Fauna biodiversity

Birds

Several bird species were noted on the site during the survey.

- Blackbird, Mistle Thrush (4), Wren, Robin and Rook (2).

Mammals

Signs of several mammal species were noted on the site during the survey.

- Rabbit were sighted along the railway.
- Fox droppings and Hare droppings were noted around the site.

Other species

N/A

ADDENDUM 1- APPROPRIATE ASSESSMENT REPORT FINDINGS

Bord na Móna operates under IPC Licence issued and administered by the EPA to extract peat within the Littleton bog group (Ref. P0409-01). As part of Condition 10.2 of this license, a rehabilitation plan must be prepared for permanent rehabilitation of the boglands within the licensed area. Ballybeg/Lanespark/Derryvella Bog is located in Co. Tipperary, 1 km south-east of Littleton Village and approximately 7 km southeast of Thurles. The bog unit consists of three closely linked bogs. This addendum outlines the findings of the Appropriate Assessment reporting carried out in respect of proposed PCAS activities at Ballybeg/Lanespark/Derryvella Bog.

An Appropriate Assessment Report[6] was commissioned by Bord na Móna to inform whether the proposed PCAS activities at Ballybeg/Lanespark/Derryvella Bog Bog had the potential to result in Likely Significant Effects on European Sites.

The concluding statement of this report reads as follows:

> *'In light of this conclusion, it is the considered opinion of ROD, as the author of this AA Screening Report, that the competent authority, BnM, may find in completing its AA Screening in respect of the Ballybeg-Lanespark-Derryvella Bog Decommissioning and Rehabilitation Plan, that the project, either individually or in combination with other plans and projects, is not likely to have a significant effect on any European site, in view of best scientific knowledge and the Conservation Objectives of the sites concerned. Therefore, it is the recommendation of the author of this AA Screening Report that the competent authority may determine that AA is not required in respect of the project'.*

Therefore, following screening, Appropriate Assessment is not required for the project as it is not directly connected with or necessary to the management of any European Site(s) and as it can be concluded, on the basis of objective information, that the project, individually or in combination with other plans or projects is not likely to have a significant effect on any European Site(s).

[6] ROD (2025). Ballybeg/Lanespark/Derryvella Bog Bog Decommissioning and Rehabilitation Plan 2025, Screening for Appropriate Assessment.

APPENDIX IV: ENVIRONMENTAL CONTROL MEASURES TO BE APPLIED TO BOG REHABILITATION

- Bog restoration/rehabilitation measures will be restricted to within the footprint of the proposed rehabilitation area.
- The proposed rehabilitation will have due regard to noise limits and hours of operation (i.e. dusk and dawn) to minimise any potential disturbance on resident and local fauna that utilise the site and immediate environs.
- All plant and equipment for use will comply with the Construction Plant and Equipment Permissible Noise Levels Regulations (SI 359/1996).
- The proposed activities will be restricted to daylight hours and there will be no requirement for artificial lighting.
- Silt ponds will be inspected and maintained as per the IPC Licence.
- During periods of heavy precipitation and run-off, activities will be halted.
- Measures will be carried out using a suitably sized machine and, in all circumstances, excavation depths and volumes will be minimised where possible.
- All machines will be regularly checked and maintained prior to arrival at the site to prevent hydrocarbon leakage.
- Hoses and valves will be checked regularly for signs of wear and will be closed and securely locked when not in use.
- Fuelling and lubrication of equipment shall only be carried out in designated areas away from surface water drainage features and ecologically sensitive areas.
- Waste oils and hydraulic fluids will be collected in leak-proof containers and removed from the site for disposal or re-cycling.
- Vehicles will never be left unattended during refuelling.
- No direct discharges to waters will be made. No washings from vehicles, plant or equipment will be carried out on site.
- All plant refuelling will take place using mobile fuel bowsers. Only dedicated trained and competent personnel will carry out refuelling operations.
- Mobile storage such as fuel bowsers will be bunded to 110% capacity to prevent spills. Tanks for bowsers and generators shall be double skinned. When not in use, all valves and fuel trigger guns from fuel storage containers will be locked. All pumps using fuel or containing oil will be locally and securely bunded where there is the possibility of discharge to waters.
- Potential impacts caused by spillages etc. during rehabilitation will be reduced by keeping spill kits and other appropriate equipment on-site.
- Site activities will be carried out in accordance with 'best practice'. In order to ensure compliance and implementation of 'best practice', these measures will be communicated to relevant Bord na Móna staff and updated as required.

APPENDIX V: BIOSECURITY

The potential for importation or introduction of non-native plant species (such as Japanese Knotweed, Himalayan Balsam, etc.) during future rehabilitation management, such as drain-blocking using excavators, has the potential to result in the establishment of invasive species within the site. Section 49 of the European Communities (Birds and Natural Habitats) Regulations 2011 prohibits the introduction and dispersal of invasive alien species (particularly plant species) listed on Part 1 (third column) of the 'Third Schedule'.

This section aims to reduce the risk from, and impacts of, invasive species and protecting biodiversity on lands under Bord na Móna ownership. Rehabilitation and decommissioning in the bog will have due regard to the relevant biosecurity measures outlined below:

- Records of problematic invasive species within the various bog units will be marked out with signs to highlight areas of infestation to personnel.
- All plant machinery will be restricted from disturbing known colonies of invasive species.
- All plant machinery will avoid unnecessary crossings to adjoining lands.
- Good site hygiene will be employed to prevent the introduction and spread of problematic invasive alien plant species (i.e. Japanese Knotweed (*Fallopia japonica*), Himalayan Balsam (*Impatiens glandulifera*), Himalayan Knotweed (*Persicaria wallichii*), etc.) by thoroughly washing vehicles prior to entering the area.

The biosecurity measures outlined above are in line with best practice guidelines issued by the National Roads Authority (NRA, 2010) – The Management of Noxious Weeds and Non-native Invasive Plant Species on National Roads and broadly based on the Environment Agency's (2013) – The Knotweed Code of Practice: Managing Japanese Knotweed on Development Sites (Version 3, amended in 2013).

In addition to the above, Best Practice measures around the prevention and spread of Crayfish plague[7] will be adhered with throughout all rehabilitation measures and activities.

[7] https://www.biodiversityireland.ie/projects/invasive-species/crayfish-plague/

APPENDIX VI: POLICY AND REGULATORY FRAMEWORK

Bord na Móna Plc is a publicly owned company, originally established in 1934 to develop some of Ireland's extensive peat resources for the purposes of economic development and to support energy security. In the decades since its establishment the company has employed tens of thousands of people in its fuel, energy, and horticultural growing media businesses. For much of its history the company's support of important national policy aims has been enabled and encouraged in a variety of ways by Government.

Today, Bord na Móna is undertaking a number of highly significant actions in support of climate policy. These actions involve a radical transformation and decarbonisation of nearly the entire Bord na Móna business. This transformation will be driven by unlocking the full potential of our land and creating significant value for Ireland and the Midlands in particular.

Bord na Móna is an integral part of the economic, social, and environmental fabric of Ireland and Irish life. As a key employer in the Midlands, the company is conscious that its obligations go beyond purely commercial and environmental – there is also a social responsibility to employees and the communities served by Bord na Móna. It is the company's role and absolute priority to ensure that its long-term strategy delivers on all of these important areas in a robust and balanced way.

There are a wide range of policies, plans, legislation and land designations that inform the development of this Bord na Móna peatland rehabilitation plan. Bord na Móna have also developed and operate various policies and strategies that also inform the development of this rehabilitation plan.

1 EPA IPC Licence

Bord na Móna operates under IPC Licence issued and administered by the EPA to extract peat within the Littleton bog group (Ref. PO-499-01). As part of Condition 10.2 of this license, a rehabilitation plan must be prepared for permanent rehabilitation of the boglands within the licensed area. The bog is part of the Littleton group. This regulatory requirement is the main driver of the development of this rehabilitation plan.

2 The Peatlands Climate Action Scheme (PCAS)

Bord na Móna (BnM) understand that it is the Minister's (DECC) intention to impose an obligation on Bord na Móna to develop a programme of measures, 'the Scheme', for the enhanced decommissioning, rehabilitation and restoration of boglands previously used to supply peat for electricity generation within the State. The enhanced decommissioning, rehabilitation and restoration of the peatlands funded by the Scheme (PCAS) will deliver benefits across climate action (GHG mitigation through reduced carbon emissions and acceleration towards carbon sequestration), enrich the State's natural capital, increase eco-system services, strengthen biodiversity, improve water quality and storage attenuation as well as developing the amenity potential of the peatlands.

It is envisaged that Bord na Móna carry out an enhanced decommissioning, rehabilitation and restoration, under the Scheme (PCAS), and supported by the Climate Action Fund and Ireland's National Recovery and Resilience Plan across a footprint of 33,000 ha. This scheme will significantly go beyond what is required to meet rehabilitation and decommissioning obligations under existing EPA IPC licence conditions. Interventions and measures supported by the Scheme will ensure that environmental stabilisation is achieved (meaning IPC obligations are met), and importantly, significant additional benefits, particularly relating to climate action and other ecosystem services, will also be delivered. However, only the additional costs associated with the additional

and enhanced rehabilitation, i.e., those activities which go beyond the existing decommissioning and rehabilitation requirements arising from Condition 10 will be eligible for support under the Scheme.

The proposed enhanced rehabilitation detailed in this document, are predicated on the understanding that the element of the activities, over and above the 'standard' rehabilitation necessary to comply with pre-existing Condition 10 IPC Licence requirements, will be deemed eligible costs by the Scheme regulator and funded by the Climate Action Fund and Ireland's National Recovery and Resilience Plan.

For the avoidance of doubt, should the Scheme and the associated statutory obligation on Bord na Móna not materialise, Bord na Móna will not carry out the enhanced decommissioning, rehabilitation and restoration measures described in this plan. Bord na Móna will instead plan to complete an adapted standard decommissioning and rehabilitation measures required under Condition 10 and outlined in Appendix I.

3 National Climate Policy

The National Policy Position establishes the fundamental national objective of achieving a transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. It sets out:

- the context for the objective;
- clarifies the level of GHG mitigation ambition envisaged; and
- establishes the process to pursue and achieve the overall objective.

The evolution of climate policy in Ireland will be an iterative process based on the adoption by government of a series of national plans over the period to 2050. GHG mitigation and adaptation to the impacts of climate change are to be addressed in parallel national plans – respectively through the National Climate Action Plan. The plans will be continually updated, as well as being reviewed on a structured basis at appropriate intervals and, at a minimum, every five years. This will include early identification and ongoing updating of possible transition pathways to 2050 to inform sectoral strategic choices.

Bord na Móna is following a decarbonisation programme aimed at reducing the carbon emissions from its activities. Industrial peat production has now ceased, and several other decarbonisation measures are being implemented. The company aims to further develop renewable energy and resource recovery markets with a key objective of reducing the carbon intensity of all products. In addition, the carbon emission mitigation benefits associated with the post-peat extraction rehabilitated peatland following re-wetting, revegetation and colonisation of significant areas with native woodland will make a significant contribution to achieving the State's carbon emission reduction targets.

4 National Peatlands Strategy

The National Peatlands Strategy (2015) contains a comprehensive list of actions, necessary to ensure that Ireland's peatlands are preserved, nurtured and become living assets within the communities that live beside them. It sets out a cross-governmental approach to managing issues that relate to peatlands, including compliance with EU environmental law, climate change, forestry, flood control, energy, nature conservation, planning, and agriculture. The Strategy has been developed in partnership between relevant Government Departments/State bodies and key stakeholders through the Peatlands Council.

The strategy recognises that Ireland's peatlands will continue to contribute to a wide variety of human needs and to be put to many uses. It aims to ensure that Ireland's peatlands are sustainably managed so that their benefits

can be enjoyed responsibly. It aims to inform appropriate regulatory systems to facilitate good decision making in support of responsible use. It also aims to inform the provision of appropriate incentives, financial supports and disincentives where required. The strategy attempts to strike an appropriate balance between different needs, including local stakeholders like turf-cutters and semi-state bodies such as Bord na Móna.

In line with a National Peatlands Strategy recommendation, a Peatlands Strategy Implementation Group (PSIG), was established, assisted in the finalisation of the Strategy, is overseeing subsequent implementation and will report to Government on an annual basis on the implementation of the actions and principles contained within the Strategy.

Bord na Móna is a key stakeholder in the National Peatlands Strategy and the Peatlands Strategy Implementation Group. The strategy recognises the potential for some Bord na Móna sites to be restored and to contribute to the national SAC and NHA network of protected raised bog sites. The strategy (agreed in 2015) also recognises the various different values of cutaway bog and developed six key principles (with Bord na Móna) for the after-use of cutaway bog.

- Bord na Móna will continue to assess and evaluate the potential of the company's land bank, using a land use review system. The assessment will help prepare a set of evidence-based management plans for the various areas of peatland. These plans will also inform its cutaway bog rehabilitation.
- The policy of Bord na Móna is not to open up any undrained new bogs for peat production.
- Lands identified by Bord na Móna as having high biodiversity value and/or priority habitats will be reserved for these purposes as the principal future land use.
- Generally, Bord na Móna cutaway bogs that flood naturally will be permitted to flood unless there is a clear environmental and/or economic case to maintain pumped drainage.
- In deciding on the most appropriate afteruse of cutaway peatlands, consideration shall be given to encouraging, where possible, the return to a natural functioning peatland ecosystem.
- This will require re-wetting of the cutaway peatlands which may lead in time to the restoration of the peatland ecosystem.
- Environmentally, socially and economically viable options should be analysed to plan the future use of industrial cutaway peatlands, in conjunction with limiting factors as outlined in Bord na Móna's Strategic Framework for the Future Use of Peatlands.

The National Peatlands Strategy highlights the importance and value of developing peatland rehabilitation plans for Bord na Móna cutaway sites and implementing this peatland rehabilitation. Some of these principles have now been superseded by the company's decision to cease industrial peat extraction. The National Peatlands Strategy is currently being reviewed by Government.

5 National River Basin Management Plan 2022-2027 (Water Framework Directive)

The River Basin Management Plan for Ireland 2022-2027 (DHLGH 2024) is the key national plan for Ireland to achieve the objectives of the Water Framework Directive (WFD). In broad terms, the objectives of the WFD are (1) to prevent the deterioration of water bodies and to protect, enhance and restore them with the aim of achieving at least good status and (2) to achieve compliance with the requirements for designated protected areas.

The NRBMP 2022-2027 outlined how peat extraction can be a potentially significant pressure on various water quality parameters. Peatland rehabilitation of Bord na Móna cutaway (in addition to other measures) was part of

the WFD (2022-2027) programme of measures. The NRBMP 2022-2027 takes account of the fact that Bord na Móna was in the process of phasing out the extraction of peat for energy production, that it set a target to rehabilitate 9,000 ha of cutaway bogs (covering 25 peatlands) by 2021 (in 2018) and will look to implement best-available mitigation measures to further reduce water quality impacts caused by peat extraction while the phasing-out process is taking place. This NRBMP 2022-2027 rehabilitation target was superseded by the acceleration of the Bord na Móna de-carbonisation programme and the Scheme (PCAS).

The development of site rehabilitation plans and the delivery of peatland rehabilitation by Bord na Móna was expected to have a positive impact on water quality and will help the NRBMP 2022-2027 deliver its objectives in relation to the Water Framework Directive and is one of the five key principal actions.

The NRBMP 2022-2027 describes how the number of waterbodies impacted by peat, industry and forestry have decreased by 10, 10 and 5 waterbodies, respectively since the second cycle. Impacts on water quality and river habitat arising from peat and peat extraction and associated drainage include the release of ammonium and fine-grained suspended sediments, and physical alteration of aquatic habitats. Drainage of peatlands also results in changes to the hydromorphological condition of rivers.

The NRBMP 2022-2027 outlines how maintaining and restoring Irish bogs will lead to a decrease in waterborne carbon leaching to levels comparable with intact bogs as well as reducing losses of peat silt and ammonia. Vegetation on the surface of the peat can also slow the flow of water over the land surface. Based on the EPA's most recent reports, peat extraction and drainage is impacting on 106 water bodies across the country, with peat the single pressure on 28 of these water bodies. However, compared to the data in the second-cycle plan, the number of water bodies impacted by peat has decreased.

The cessation of industrial peat extraction by Bord na Móna in 2021 was expected to have a significant positive impact on water quality of receiving water courses by reducing the impact of peat extraction as a key pressure on particular water courses. This is now being supported by the results and conclusions of the draft NRBMP 2022-2027.

6 4th National Biodiversity Action Plan 2023-2030

Ireland's 4th National Biodiversity Action Plan (NBAP) sets the national biodiversity agenda for the period 2023-2030 and aims to deliver the transformative changes required to the ways in which we value and protect nature. The 4th NBAP has been developed with the support, advice and input of the interdepartmental Biodiversity Working Group and the independent Biodiversity Forum. Ireland's 2nd National Biodiversity Conference was held to gather insights and recommendations for the development of the NBAP and a public consultation process was held to provide further opportunities to engage with the Plan.

The 4th NBAP strives for a "whole of government, whole of society" approach to the governance and conservation of biodiversity. The aim is to ensure that every citizen, community, business, local authority, semi-state and state agency has an awareness of biodiversity and its importance, and of the implications of its loss, while also understanding how they can act to address the biodiversity emergency as part of a renewed national effort to "act for nature".

The delivery of rehabilitation via PCAS is expected to significantly contribute in the future to actions and targets of the 4th National Biodiversity Action Plan 2023-2030, particularly in relation to peatland restoration, nature restoration and creation of new habitats such as wetlands and woodlands.

7 EU Nature Restoration Law

The EU Nature Restoration Law is a key element of the EU Biodiversity Strategy, which sets binding targets to restore degraded ecosystems, in particular those with the most potential to capture and store carbon and to prevent and reduce the impact of natural disasters. The regulation combines an overarching restoration objective for the long-term recovery of nature in the EU's land and sea areas with binding restoration targets for specific habitats and species. These measures should cover at least 20% of the EU's land and sea areas by 2030, and ultimately all ecosystems in need of restoration by 2050.

This regulation has now been adapted and it is expected that all Member States will be required to produce a National Restoration Plan within two years of adoption. This will be led by the National Parks and Wildlife Service and will comprise a broad and deep public participation process, informed by robust ecological and socio-economic impact assessments. Bord na Móna are working with NPWS to identify bog restoration and other re-wetted cutaway sites that can contribute towards Irelands targets for the Nature Restoration Law.

8 National conservation designations

Bord na Móna operates in a wider landscape that also includes a network of European and National nature conservation sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs), National Heritage Areas (NHAs, pNHAs) and National Nature Reserves). Bord na Móna will take account of this network of conservation objectives and their conservation objectives when developing these rehabilitation plans. It is expected that peatland rehabilitation will, in general, benefit the conservation objectives of this network of nature conservation sites.

9 National Raised Bog Special Area of Conservation Management Plan 2017-2022.

The National Raised Bog Special Area of Conservation Management Plan 2017-2022 sets out a roadmap for the long-term management, restoration and conservation of protected raised bogs in Ireland. The Plan strikes an appropriate balance between the need to conserve and restore Ireland's raised bog network as part of Ireland's commitments towards the EU Habitats Directive, and the needs of stakeholders and gives recognition to the important role that communities have to play in the conservation and restoration of raised bogs. The National Raised Bog Special Areas of Conservation (SACs) Management Plan 2017-2022 is part of the measures being implemented in response to the on-going infringement action against Ireland in relation to the implementation of the EU Habitats Directive, with regard to the regulation of turf cutting on the Special Areas of Conservation (SACs). The then Minister for Arts, Heritage and the Gaeltacht, also published a **Review of Raised Bog Natural Heritage Area Network** in 2014.

Bord na Móna has played a key role in the development of the National Raised Bog Special Area of Conservation Management Plan 2017-2022 and the Review of the Raised Bog Natural Heritage Area Network. Several Bord na Móna sites were assessed by the National Parks and Wildlife Service as part of the above Plan and Review and there is an expectation that several Bord na Móna sites will be designated as SACs and NHAs in the future. This will reinforce the network of protected raised bog sites and replace in part sites that will be de-designated as they have been deemed to be significantly damaged and are deemed to have no raised bog restoration prospects. PCAS is expected to restore several sites that will contribute to The National Raised Bog Special Areas of Conservation (SACs) Management Plan 2017-2022 targets in relation to the restoration of raised bog habitat.

Bord na Móna has also responded to the needs of the NRBMP and provided several sites to the government for the relocation of turf-cutters from SACs. This is part of a suite of ongoing bog conservation measures in the NRBMP to manage turf-cutting in protected sites. Bord na Móna and the National Parks and Wildlife Service continues to engage regarding the ongoing relocation of turf-cutters from protected raised bog sites.

10 All-Ireland Pollinator Plan 2021-2025

The All-Ireland Pollinator Plan 2021-2025 outlines key objectives and actions to protect and support pollinating insects and the habitats they rely on. A Bord na Móna specific action in this plan includes the adoption of pollinator-friendly management within the Bord na Móna network of sites. One action to help achieve this objective is habitat rehabilitation and restoration, where possible, of pollinator-friendly habitats, including peatland habitats.

11 Land-use planning policies

As Bord na Móna operates in many counties across Ireland, it is important to note the respective development plans in these counties. Many of the existing development plans recognise the potential that exists in the after-use of cutover/cutaway peatlands. Bord na Móna seeks to work with all of the relevant local authorities to ensure that the most appropriate after-uses are reflected in local planning policy. The following areas of consistent importance are of both direct and indirect relevance to Bord na Móna: heritage, tourism, biodiversity/conservation, landscape, renewable energy, and economy/enterprise.

12 National Archaeology Code of Practice

Bord na Móna operates under an agreed Code of Practice regarding archaeology with the Department of Arts, Heritage and the Gaeltacht and the National Museum of Ireland which provides a framework to enable the Company to progress peat extraction whilst carrying out archaeological mitigation. (https://www.archaeology.ie/sites/default/files/media/publications/cop-bord-na-mona-en.pdf

The Code replaced a set of Principles agreed with the Department of Arts, Heritage and the Gaeltacht in the 1990s. Under the Code Bord na Móna, the Minister and Director work together to ensure that appropriate archaeological mitigation is carried out in advance of peat extraction.

- BNM must ensure that any monuments or archaeological objects discovered during peat extraction are protected in an appropriate manner by following the Archaeological Protection Procedures.
- BNM must ensure that any newly discovered monuments on Bord na Móna lands are reported in a timely manner to the National Monuments Service of the Department of Arts, Heritage and the Gaeltacht.
- BNM must ensure that any archaeological objects discovered on Bord na Móna lands are reported immediately to the Duty Officer of the National Museum of Ireland.
- Bord na Móna will adhere to the Archaeology Code of Practice relating to management of any archaeological finds that may arise during cutaway peatland rehabilitation and decommissioning.

13 Bord na Móna Biodiversity Action Plan 2016-2021

Rehabilitation of industrial peatlands is a key objective of the Bord na Móna Biodiversity Action Plan 2016-2021. This action plan outlines the main objectives and actions around biodiversity on Bord na Móna lands. The Bord na Móna Biodiversity Action Plan also outlines key International and European policy in relation to biodiversity. This includes the **United Nations Convention on Biodiversity 2011-2020 (CBD)** and **European Biodiversity Strategy to 2020**. Further details of these policies and Bord na Móna s responses can be found in the Bord na Móna Biodiversity Action Plan (Bord na Móna, 2016). Both policy documents highlight targets such as reducing pressure on biodiversity, promoting sustainability, habitat restoration and benefits of ecosystem services.

One example of a key CBD target is:

- *"Restore at least 15% of degraded areas through conservation and restoration activities."*

The EUs headline target for progress by 2020 is to:

- *"halt the loss of biodiversity and the degradation of ecosystems in the EU by 2020, restore them as far as feasible, while stepping up the EU contribution to averting global biodiversity loss."*

This rehabilitation plan is aligned to the CBD target and the EU Biodiversity Strategy target and will help Ireland meet its commitment to these international Biodiversity polices.

14 Bord na Móna commitments

Bord na Móna made the commitment in 2009 not to develop any new peatland sites for industrial peat production. The company has continued to work with different stakeholders.

In line with Bord na Móna's accelerated decarbonisation programme, the company made a further commitment to a significantly larger rehabilitation target. This was reflected in our plans to rehabilitate a further 20,000 hectares of cutaway and cutover bog to wetland and woodland mosaics by 2025. In addition, we planned to restore a further 1,000 hectares of raised bog habitat by 2025. These initial targets have been achieved.

The company announced the cessation of industrial peat production in 2021 and that it would rehabilitate a target of 33,000 ha between 2021-2026 . Rehabilitation measures will continue to be carried out with the focus on re-wetting and rehabilitation of cutover and cutaway areas in line with national policies (such as the National Peatland Strategy, the National Biodiversity Action Plan, The Nature Restoration Law, the Climate Action Plan, the Water Framework Directive, etc.) and rehabilitation guidelines set down by the Environmental Protection Agency. Bord na Móna has now transitioned to a Climate Solutions company with a key commercial and development focus being the delivery of renewable energy to support Ireland's Climate Action Plan. In general, Bord na Móna will seek to balance and optimise commercial, social, and environmental value of its bogs, and develop integrated land-uses, while taking account of the need for sustainability and their biodiversity value.

These commitments outline the importance of peatland rehabilitation to Bord na Móna. The company will continue to demonstrate environmental responsibility and continue to deliver on these commitments in relation to peatland rehabilitation and in relation to the future management of these lands to maximise their benefits, particularly their ecosystem service benefits, along with the sustainable development of a portion of the land bank for other uses, such as renewable energy.

APPENDIX VII: DECOMMISSIONING

1. Condition 10 Decommissioning

Decommissioning is a requirement of the applicable Integrated Pollution Control Licence issued by the Environmental Protection Agency. This condition 10.1 requires the following:

10.1 Following termination of use or involvement of all or part of the site in the licensed activity, the licensee shall:

10.1.1 Decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.

The main success criteria pertaining to successfully complying with this condition is ensuring that no environmental liability remains from this infrastructure and material and that the bog can be deemed suitable for surrender of the licence under section 95 of the EPA Acts. This is achieved by Bord na Móna identifying and quantifying any mechanical and infrastructural resources that were installed in the bog to enable the development and production operation at the site. This list is then refined to identify any items that would be deemed as possibly resulting in environmental pollution, should they not be removed.

Typically, these items/infrastructures would be any remaining, unconsolidated plant, equipment and attachments, waste materials, unused raw materials such as land drainage pipes, remaining peat stockpiles, stock pile covering, pumps, septic tanks and fuel tanks.

In relation to this bog, the list and tasks would be as follows:

Item	Description	Ballybeg/Lanespark/Derryvella Decommissioning Plan
1	Clean-up of remaining or unconsolidated waste or materials located in Bogs, Yards, Buildings and Offices	Clean-up of Bog
2	Cleaning Silt Ponds	Cleaning Silt Ponds
3	Decommissioning Peat Stockpiles	Peat Stockpile Management
4	Decommissioning or Removal of Buildings and Compounds	Decommissioning or Removal of Buildings and Compounds
5	Decommissioning Fuel Tanks and associated facilities	Where relevant
6	Decommissioning and Removal of Bog Pump Sites	Where relevant
7	Decommissioning or Removal of Septic Tanks	Where relevant

In addition, condition 7 of the licence requires these now defined waste items to be disposed of or recovered as follows:

7.1 Disposal or recovery of waste shall take place only as specified in *Schedule 2(i) Hazardous Wastes for Disposal/Recovery* and *Schedule 2(ii) Other Wastes for Disposal/Recovery* of this licence and in accordance with the appropriate National and European legislation and protocols. No other waste shall be disposed of/recovered either on-site or off-site without prior notice to, and prior written agreement of, the Agency.

7.2 Waste sent off-site for recovery or disposal shall only be conveyed to a waste contractor, as agreed by the Agency, and only transported from the site of the activity to the site of recovery/disposal in a manner which will not adversely affect the environment.

7.3 A full record, which shall be open to inspection by authorized persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall as a minimum contain details of the following:

7.3.1 The names of the agent and transporter of the waste.

7.3.2 The name of the persons responsible for the ultimate disposal/recovery of the

waste.

7.3.3 The ultimate destination of the waste.

7.3.4 Written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site.

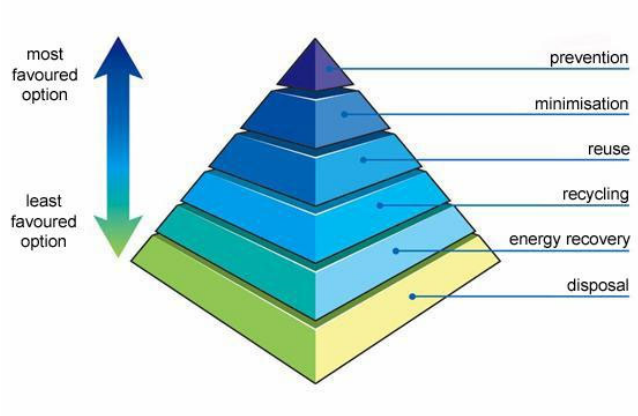
7.3.5 The tonnages and EWC Code for the waste materials listed in *Schedule 2(i) Hazardous Wastes for Disposal/Recovery* and *Schedule 2(ii) Other Wastes for Disposal/Recovery* sent off-site for disposal/recovery.

7.3.6 Details of any rejected consignments.

A copy of this Waste Management record shall be submitted to the Agency as part of the AER for the site.

As required by the licence, these waste items will be removed for recycling or disposal, using external contractors with the required waste collection permits, approved under 7.2, with waste records maintained as required under 7.3.

Where possible, Bord na Móna will utilize the appropriate waste hierarchy to identify waste that can reused or recycled ahead of disposal.



The validation of the success of condition 10.1 is carried out through an Independent Closure Audit (ICA), followed by and EPA Exit Audit (EA) and the eventual partial or full surrender of the licence.

2. Enhanced Decommissioning.

The remaining infrastructure does not constitute a risk to the environment and would not be a requirement of condition 10 of the licence. The removal of these are deemed as enhanced measures. These may enhance the future after use of the bog for amenity value, security against access for illegal and unsocial activities and general State and community benefit. In relation to this bog, this would include the infrastructure defined below:

Item	Enhanced Decommissioning Type	Ballybeg/Lanespark/Derryvella Decommissioning Plan
1	Removal of Railway Lines	Removal of Railway Lines
2	Decommissioning Bridges and Underpasses	Where Applicable
3	Decommissioning Railway Level Crossing	Where Applicable
4	Restricting Access (bogs and silt ponds)	Restricting Access to Bog
5	Removal of High Voltage Power Lines	Where Applicable

APPENDIX VIII: GLOSSARY

Cutaway Bog: A Bord na Móna site generally becomes cutaway when it is economically unviable to continue industrial peat extraction or when the majority of peat has been removed.

Deep peat cutover bog. Deep peat cutover bog is defined as former raised bogs that have been in industrial peat production, where production has ceased but the residual peat depth is typically in excess of 2m. *Sphagnum* mosses are key species of raised bogs and the majority of the peat mass is formed from these mosses. *Sphagnum* species and other raised bog species are a key part of raised bog habitat function and prefer more acidic, nutrient poor, water-logged conditions. Typical raised bog *Sphagnum* mosses and other bog species do not thrive with the more typical alkaline water chemistry of cutaway bog but do grow well in these more acidic conditions where peat has been re-wetted. There is potential to re-develop *Sphagnum*-rich plant communities in these conditions if the peat can be re-wetted. This brings the opportunity of re-developing *Sphagnum*-rich vegetation communities that are considered Carbon sinks or peat-forming habitats and restoring the carbon sequestration function of these sites.

Dry cutaway bog: Cutaway bog is categorised as dry cutaway where it is not practical or feasible to re-wet these areas completely. It is inevitable that some areas of cutaway will remain relatively dry due to the heterogenous topography of the cutaway, as well as requirements for continued drainage on site for identified after-uses, or off site in relation to neighbouring lands or other infrastructure. Ridges and mounds of glacial deposits can become exposed during peat extraction and form a heterogenous topographical mosaic separated by basins. Dry cutaway may have very thin or no residual peat where ridges and mounds have been exposed. The exposed sub-soils are a mix of glacial gravels, muds and tills that can be quite free-draining. Dry cutaway may also have deeper residual peat, but in a location (i.e. at the margin) where the peat cannot be re-wetted due to boundary constraints. Dry cutaway may also develop in situations where there a relatively steep slope that inhibits re-wetting. The majority of dry cutaway will develop towards grassland, heath, scrub and dry woodland habitats.

Enhanced decommissioning: This is defined as decommissioning carried out under the Scheme, which is proposed to be externally funded.

Enhanced rehabilitation: This is defined as rehabilitation carried out under Scheme, which is proposed to be externally funded. It is proposed by Government that Bord na Móna be obligated to carry out enhanced decommissioning, rehabilitation and restoration on peatlands. This Scheme will significantly go beyond what is required to meet rehabilitation and decommissioning obligations under existing EPA IPC licence conditions. Interventions and activities supported by the Scheme will ensure that environmental stabilisation is achieved (meaning IPC obligations are met), and importantly, significant additional benefits, particularly relating to climate action and other ecosystem services, will also be delivered. However, only the costs associated with the additional, enhanced and accelerated measures, i.e., those interventions which go beyond the existing decommissioning and rehabilitation requirements arising from Condition 10 will be eligible for support under the Scheme.

Environmental stabilisation: The key objective of peatland rehabilitation is environmental stabilisation. This means developing habitats and vegetation back onto the bare peat, slowing water movement across the bog, minimising effects to downstream waterbodies and meeting the conditions of the IPC Licence. This is achieved by a combination of re-wetting, where possible, and natural colonisation of the former cutaway, with or without intervention**.** Habitats will develop that reflect the underlying environmental conditions. Other after-use development may also serve to act as environmental stabilisation.

Marginal land. Marginal land is defined as land around the margin of the industrial peat production area. This margin generally contains a range of habitats including scrub, birch woodland, cutover bog and raised bog remnants. It has a variety of land-uses including turf-cutting (private turbary). The Scheme will consider potential rehabilitation and restoration actions (e.g. drain blocking) within marginal land zones, where appropriate.

Rehabilitation: Rehabilitation is defined in general by Bord na Móna as environmental stabilisation of the former cutaway. This is generally achieved via re-wetting, where possible, and natural colonisation of the former cutaway, with or without intervention. It is not possible to restore raised bog habitats on BnM cutaway in general in the short-term. In general, most of the peat mass has been removed from many BnM cutaway sites and the environmental characteristics of these areas have therefore changed radically (peat depths, hydrology, water chemistry, substrate type, nutrient status. This means there will therefore be different habitat outcomes (wetlands, fen, heathland, grassland and Birch woodland). Other after-use development may also serve to act as rehabilitation.

Restoration: Ecological restoration is defined as the process of re-establishing to the extent possible the structure, function and integrity of indigenous ecosystems and the sustaining habitats they provide" (SER, 2004). Defined in this way, restoration encompasses the repair of ecosystems (Whisenant, 1999) and the **improvement of ecological conditions in damaged wildlands** through the **reinstatement of ecological processes**. In general, Bord na Móna cutaway peatlands cannot be restored back to raised bog in a reasonable timeframe as their environmental conditions has changed so radically (with the removal of the acrotelm – the living layer and much of the peat mass). However, they can be returned to a **trajectory** towards a naturally functioning peatland system (Renou-Wilson, 2012). **Raised bog restoration** is an objective of some BnM sites where there is residual natural raised bog vegetation and where the majority of the peat is still intact.

Standard rehabilitation: This is defined as rehabilitation that is designed to meet the conditions of the EPA IPC Licence. The key objective of rehabilitation is environmental stabilisation. This is achieved by a combination of re-wetting, where possible, and natural colonisation of the former cutaway, with or without intervention**.** Other after-use development may also serve to act as rehabilitation.

Standard decommissioning: This is defined as decommissioning that is designed to meet the conditions of the EPA IPC Licence. This is defined as to render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.

Wetland cutaway bog. Wetland cutaway bog is defined as former raised bogs that have been in industrial peat production, where production has ceased and the majority of peat has been cutaway, and where this cutaway has the potential to be re-wetted. A significant number of Bord na Móna sites have pumped drainage and these sites are likely to develop a mosaic of wetland habitats when pumping in reduced or stopped. The water chemistry of wetland cutaway frequently is strongly influenced by the more alkaline sub-soils that have been exposed during peat production. This means that pioneer vegetation is more typical of fen and wetland, rather than raised bog. Wetland cutaway will have a broad range of hydrological conditions depending on the local topography. In some cases, these wetlands may form deep water (> 0.5 m) whilst other areas may have the water table at or just below the surface of the ground.

APPENDIX IX: EXTRACTIVE WASTE MANAGEMENT PLAN

(Minimisation, treatment, recovery and disposal)

Objective:
The objective of this generic plan is to comply with the requirements of regulation 5 of the Waste Management (Management of Waste from Extractive Industries) Regulations, and to prevent or reduce waste production and its harmfulness.

Scope:
This plan covers IPPC Licence's Ref PO-499-01, Littleton Group of Bogs located in Counties Kilkenny and Tipperary.

1.0 Extractive Waste:
Waste classified as extractive waste from peat extraction operations arise from three operations associated with this activity.

1.1 Silt Pond excavations and maintenance.
All peat extraction activities in the Littleton bog group are serviced by silt lagoons/ponds. During the excavation of these silt ponds, pre IPPC Licensing in 1999 and since licensing, the excavated material is stored adjacent to the silt pond, where it either remains in situ ores levelled out. As required by condition 6.6, these silt lagoons are cleaned twice per annum or more often if inspections dictate. These silt cleanings are also deposited on the same location, adjacent to the silt pond, where they may be levelled periodically to allow room for subsequent cleanings. These mounds of silt pond excavation material and cleanings are generally no higher that 2-3 metres.

1.2 Bog Timbers:
During peat extraction operations, bog timbers often arise in the bog surface and are required to be cleared. These timbers consist of bog pine, oak and some yew. Some of these timbers, such as the oak and yew are removed for use in the wood craft industry, with the remaining bog pine stockpiled in locations at the opposite end of each bog, where it generally becomes a habitat for flora and fauna. These piles of timber are generally no higher than 1-2 metres.

2.0 PO-499-01 IPPC Licence Extractive Waste Conditions

2.1 Condition 7.5 Extractive Waste Management
The licensee shall draw up a Waste Management Plan (to be known as an Extractive Waste Management Plan) for the minimisation, treatment, recovery and disposal of extractive waste. This Plan shall meet the requirements of regulation 5 of the Waste Management (Management of Waste from the Extractive Industries) Regulations,2009. The Plan shall be submitted for agreement by the Agency by the 31st of December 2012. The Plan shall be reviewed at least once every five years thereafter in a manner agreeable to the Agency and amended in the event of substantial changes to the operation of a waste facility or to the waste deposited. Any amendments shall be notified to the Agency.
All extractive waste shall be managed in accordance with the Extractive Waste Management Plan. A report on the implementation of the Extractive Waste Management Plan shall be provided in the AER.

2.2 Condition 7.6 Waste Facility

(i) No new waste facility may be developed or an existing waste facility modified unless agreed by the Agency.
(ii) The licensee shall ensure that all existing waste facilities are managed and maintained to ensure their physical stability and to prevent pollution or contamination of soil, air, surface water or groundwater.
(iii) The licensee shall ensure that all new waste facilities are constructed, managed and maintained to ensure their physical stability and to prevent pollution or contamination of soil, air, surface water or groundwater.
(iv) Operational measures shall be continuously employed to prevent damage to waste facilities from personnel, plant or equipment.
(v) The licensee shall establish and maintain a system for regular monitoring and inspection of waste facilities.
(vi) All records of monitoring and inspection of waste facilities, as required under the licence, shall be maintained on-site in order to ensure the appropriate handover of information in the event of a change of operator or relevant personnel.

2.3 Condition 7.7 Excavation Voids

7.7.1 Unless otherwise agreed by the Agency, only extractive waste shall be placed in excavation voids.
7.7.2 When placing extractive waste into excavation voids for rehabilitation and construction purposes, the licensee shall, in accordance with regulation 10 of the Waste Management (Management of Waste from the Extractive Industries) Regulations, 2009, and the Extractive Waste Management Plan:

- Secure the stability of the waste
- Put in place measures to prevent pollution of soil, surface water and ground water.
- Carry out monitoring of the extractive waste and excavation void.

Condition 7.5. Extractive Waste Management Plan. 5 (1)

3.0 Minimisation.

3.1 Silt pond excavation material and cleanings.

IPPC Licence conditions require all production areas to be serviced by an appropriately designed silt pond based on storage volume and retention time. Condition 6.6 requires all ponds to be cleaned bi-annually and more often if inspections dictate, so the only opportunity for minimisation of same is through Standard Operating Procedures. These are required under condition 2.2.2 (i) regarding minimisation of suspended solids, and are in-place to minimise the generation of silt, which in-turn will minimise the generation of silt pond waste.

3.2 Power Station Screenings.

These screenings cannot be minimised as they are a consequence of peat production, stones, timbers and oversize peat materials are naturally occurring on the bog, and are required to be removed prior to processing.

3.3 Bog Timbers.

Bog timbers are also naturally occurring materials within a bog and are required to be removed prior for production. The volume of these bog timbers varies from bog to bog and as such their minimisation is not controllable or quantifiable.

4.0 Treatment

4.1 Silt pond excavation material and cleanings.

The silt pond excavation material and silt cleanings do not require any treatment for its end use which will be either backfilling these silt pond voids as per condition 7.7.1 above as part of the Bog Rehabilitation Plan, or reincorporated into the surrounding peatlands.

4.2 Power Station Screenings.
The factory screenings are permitted to be returned to the bog as they were naturally occurring materials from the bog, and as such do not require any treatment to serve this purpose.

4.3 Bog Timbers
As per 1.3 above, these timbers are stockpiled at two locations in each bog, as per the attached list of sites and become habitats for various flora and fauna.

5.0 Recovery
5.1 Silt pond excavation material and cleanings.
Condition 2.2.2 (vi) requires the reuse of silt pond waste to be examined. This was undertaken in 2006, the outcome of which was that this waste peat silt material, as a fuel, was contaminated with sub-soils, rendering it unsuitable for combustion. In addition, volumes are small compared to overall peat production volumes.

5.2 Power Station Screenings.
Given the nature of these screenings as outlined in 1.2 above, there is no further use identified and they are permitted to be disposed of back to the bog.

5.3 Bog Timbers
Investigations into processing these materials into smaller fractions for potential heating purposes did not yield any viable results. In addition, these older stockpiles are now classified as habitats and as such would not be considered for reuse as a fuel.

6.0 Disposal
6.1 Silt pond excavation material and cleanings.
Schedule 3 (ii) permits the disposal of silt pond cleanings (Lagoon Sediments) to the bog and these locations, adjacent to the silt pond site, are presented in the attached spreadsheet, with associated grid coordinates.

6.2 Power Station Screenings.
Schedule 3 (ii) permits the disposal of screenings (Peat Screenings) to the bog at designated locations agreed under Condition 7.4, and these locations, are presented in the attached spreadsheet, with associated grid coordinates.

6.3 Bog Timbers
These naturally occurring bog timbers are stockpiled at locations in each bog, grid coordinates attached.

7.0 Extractive Waste Management Plan

5 (2a)(i)
The vast majority of peat extraction bogs were all designed and drained for production prior to the 1960's and as such the production fields layout cannot' be altered. Under our Cleaner Reduction Procedures, various design

changes have been implemented to the production machines and process to reduce lost peat which eventually is captured in the silt ponds and requires removal as waste peat silt. This along with training and ongoing research and development will continuously reduce waste peat and subsequently waste silt pond cleanings. Bog timbers are present naturally in various volumes and quantities in different bogs and as peat production involves stripping peat in layers, the exposure, generation and removal of these timbers is unavoidable. Work has been undertaken recently into project looking at grinding of these bog timbers in situ using a timber miller, and if this project becomes viable it will contribute to the reduction of bog timbers.

5 (2a)(ii)

Given the nature and expanse of peat bogs, the stockpiling and storage of these waste materials do not present a visual, storage or stability problem. As required under Condition 10 of the IPPC Licence, the silt pond excavations and screenings will be utilised to backfill the silt pond voids once the bogs have finished and stabilised in accordance with out Bog Rehabilitation Plan. Storage of these wastes in the interim, open to the elements does not present a change on the nature of these wastes that will threaten the environment or prevent their reuse during the bog rehabilitation process.

5 (2a)(iii)

Under Condition 10 of the IPPC Licence, all silt ponds will be decommissioned once the bog surface has stabilised, in agreement with the Agency. This will involve the removal of weirs and flow controls, returning the silt pond back to its original drain or removing the silt pond from the drainage system. Both of these activities will involve placing the silt pond extraction and cleaning material back into the excavation void.

5 (2a)(iv)

The peat bogs do not contain any topsoil, so this is not required.

5 (2a)(v)

Peat mineral resources do not undergo any treatment.

5 (2b)

These three extractive waste are all being reused and recovered back to their original extraction points and have not undergone any physical, chemical, or biological change.

5 (2c)(i, ii & iii)

These three extractive wastes, stored on the bog for reuse or recovery during the bog rehabilitation phase, do not require any management or monitoring during the operation of these bogs. Silt pond excavations and cleanings are stored adjacent to the silt pond and quickly revegetated and stabilise, the screenings are graded back into the bog at the agreed locations upon disposal and the bog timbers do not prevent any water or airborne danger to the environment.

5 (3)

The three extractive wastes arising from peat extraction operations at this site are classified wastes from mineral non-metalliferous excavation, with an EWC code of 0101 02. The materials are not classified as hazardous under Directive 91/689/EEC20, and do not contain substances or preparations classified as dangerous under Directives 67/548/EEC5 or 1999/45/EC6 above a certain threshold.

The peat excavations and cleanings are stored in locations and in a manner that they could not collapse, and are remote in their nature. The stockpiles are located adjacent to silt ponds that are cleaned regularly and as such these stockpiles are managed and levelled to facilitate further cleanings.
Therefore the material stored at these waste facilities would not be considered to be a Category A waste facility.

Classification in accordance Annex II.

Waste Material	Description	Classification	Chemical Process treatment	Deposition description	Transport System
Silt Pond Excavations and cleanings	Peat and mineral soils associated with peatlands. Stored for reuse during bog rehabilitation, with no displacement of overburden	01 01 02	None	Excavated from silt ponds by excavator and deposited adjacent to the silt pond.	Excavator
Peat Screenings	Stones, timbers and oversized peat particles, reincorporated into low areas, agreed with the Agency, and stabilized under normal natural bog conditions	01 01 02	None	Removed by screen at the factory and transported by tractor and trailer to the designated and agreed locations	Tractor and trailer.
Bog Timbers	Pine, Oak and Yew species, stored at locations in each bog. Not subject to any stability issues due to exposure to atmospheric/meteorological conditions.	01 01 02	None	Removed from the bog surface by excavator and transported by tractor and trailer to the agreed locations	Tractor and Trailer

Description of operations.
Silt pond excavations arise from the requirement to have silt ponds treating all peat extraction sites. Silt pond cleanings arise from the removal of peat silt from silt ponds as required under IPPC Licence. Bog timbers arise from preparation of the bogs surface for peat production. Estimated quantities of materials are below:

Closure plan. (Bog Rehabilitation Plan).
Condition 10.1 – 10.3 of the IPPC Licence requires the following:

- 10.1 Following termination of use or involvement of all or part of the site in the licensed activity, the licensee shall:
- 10.1.1 Decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.
- 10.1.2 Implement the agreed cutaway bog rehabilitation plan (refer Condition 10.2).

10.2 Cutaway Bog Rehabilitation Plan:

- 10.2.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of the cutaway boglands within the licensed area. This plan shall be submitted to the Agency for agreement within eighteen months of the date of grant of this licence.
- 10.2.2 The plan shall be reviewed every two years and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the written agreement of the Agency.

10.3 The Rehabilitation Plan shall include as a minimum, the following:

- 10.3.1 A scope statement for the plan; to include outcome of consultations with relevant Agencies, Authorities and affected parties (to be identified by the licensee).
- 10.3.2 The criteria which define the successful rehabilitation of the activity or part thereof, which ensures minimum impact to the environment.
- 10.3.3 A programme to achieve the stated criteria.
- 10.3.4 Where relevant, a test programme to demonstrate the successful implementation of the rehabilitation plan.
- 10.3.5 A programme for aftercare and maintenance.

10.4 A final validation report to include a certificate of completion for the Rehabilitation Plan, for all or part of the site as necessary, shall be submitted to the Agency within six months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment. This plan including maps and ecological classifications are available on file at the Allen Clonsast IPPC Licence Coordinators office.

The location in relation to the silt pond excavations and cleanings are adjacent to the silt ponds, which are considered under the Shannon River Basin Management Plan in accordance with the requirements of Directive 2000/60/EC.

Screenings and bog timbers are all naturally occurring elements of peatland and there placement back to the bog in smaller concentrated designated waste facilities does not constitute a risk to the prevention of water compliance.

The lands under where these materials are deposited are peatlands and are un-effected by the placing of this material.

Review.

This plan will be reviewed every five years, the first review to take place in September 2017. This review will entail an inspection of these waste facilities to ensure their placing, management, maintenance and stability comply with the requirements of the Extractive Waste Management requirements and condition 7.5, 7.6 and 7.7 of the Littleton IPPC Licence PO-499-01.

APPENDIX X: MITIGATION MEASURES FOR THE APPLICATION OF FERTILISER

- Any fertiliser used will be Rock Phosphate and will not be applied in the following conditions:
    1. The land is waterlogged;
    2. The land is flooded, or it is likely to flood;
    3. The land is frozen, or covered with snow;
    4. Heavy rain is forecast within 48 hours (forecasts will be checked from Met Éireann).
    5. The ground slopes steeply and there is a risk of water pollution, when factors such as surface run-off pathways, the presence of land drains, the absence of hedgerows to mitigate surface flow, soil condition and ground cover are taken into account.
- No fertiliser will be spread on land within 2 metres of a surface watercourse.
- Buffer zones in respect of waterbodies, as specified on https://www.epa.ie/about/faq/name,57156,en.html, will be adhered with at all times with regard to fertiliser application. Reproduced as follows:

Water body / Feature	Buffer zone
Any water supply source providing 100m^3 or more of water per day, or serving 500 or more people	200 metres (or as little as 30 metres where a local authority allows)
Any water supply source providing 10m^3 or more of water per day, or serving 50 or more people	100 metres (or as little as 30 metres where a local authority allows)
Any other water supply for human consumption	25 metres (or as little as 30 metres where a local authority allows)
Lake shoreline	20 metres
Exposed cavernous or karstified limestone features (such as swallow holes or collapse features)	15 metres
Any surface watercourse where the slope towards the watercourse exceeds 10%	10 metres
Any other surface waters	5 metres*

APPENDIX XI: CONSULTATION SUMMARIES

Table APXI -1 Consultees contacted. ***Note: This includes consultation undertaken as part of the Phase 1 rehabilitation plan.***

Bog Name	Contact Organisation	Contact Name	Date of Issue	Format	Date Response Received	Response Format
Consultation undertaken in 2017-2018						
Ballybeg-Lanespark-Derryvella	Private individual A					
Littleton Bog Group	Irish Peatland Conservation Council	Several staff members				
Ballysorrell, Templetouhy, Baunmore	National Parks and Wildlife Service	Several staff members				
Lanespark	Private individual B					
Ballysorrell, Carrickhill Baunmore	NUIG	Several staff members				
Littleton Bog Group	Private individual C					
Derryvilla	Slieve Ardagh Rural Development Group	Several members				
Littleton Bog Group	National Parks and Wildlife Service	Regional staff				
Littleton Bog Group	General community meeting – Loch Doire Bhile, site visit to Baunmore					
Littleton Bog Group	National Parks and Wildlife Service	Regional staff				
Littleton Bog Group	Tipperary County Council	Heritage Officer				
Derryvilla	Private Individual D					
Littleton Bog Group	Birdwatch Ireland	Several staff members				
Littleton Bog Group	Irish Peatland Conservation Council	Several staff members				
Littleton Bog Group	Kilkenny County Council	Heritage Officer				
Littleton Bog Group	National Parks and Wildlife Service	Several staff members				
Littleton Bog Group	Irish Peatland Conservation Council	Several staff members				
Littleton	Forest Service	Several staff members				
Baunmore & Littleton	Birdwatch Ireland – Tipperary Branch	Several staff members				
Littleton Bog Group	Tipperary County Council	Several staff members				

Bog Name	Contact Organisation	Contact Name	Date of Issue	Format	Date Response Received	Response Format
Littleton Bog Group	Tipperary Heritage Forum	Several staff members				
Knockahaw	Private Individual E					
Littleton Bog Group	Environmental Protection Agency, National Parks and Wildlife Service, Irish Peatland Conservation Council	Several staff members				
Baunmore	Irish Wildlife Trust	Several staff members				
Lanespark Derryvilla	National Parks and Wildlife Service and Slieve Ardagh Rural Development Group – Loch Doire Bhile	Several staff members				
Longfordpass	Private Individual F					
Ballysorrell	Heritage Week Walk - Ballysorrell	Several staff members				
Baunmore Carrickhill	Limerick Institute of Technology (LIT)	Several staff members				
Consultation undertaken in 2025						
Ballybeg-Lanespark-Derryvella	Department of Housing, Local Government and Heritage NPWS	General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Department of Agriculture, Food and the Marine	General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Head of Ecological Advisory Unit - NPWS	General email contact	23/07/2025	Email		

Bog Name	Contact Organisation	Contact Name	Date of Issue	Format	Date Response Received	Response Format
	Department of Housing, Local Government and Heritage NPWS					
Ballybeg-Lanespark-Derryvella	National Monuments Service	General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Department of Housing, Local Government and Heritage	General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Department of Housing, Local Government and Heritage	General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Dept of Agriculture Food & the Marine	General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Department of Climate, Energy and the Environment	General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email contact	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Dept of Rural and Community Development	Minister Dara Calleary	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Department of the Housing Local Government and Heritage	(Minister of State at the Department of Housing, Local Government and Heritage) Minister James Browne	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Minister of state for Agriculture with responsibility for Land use and Biodiversity	Senator Pippa Hackett Minister of State for Land Use and Biodiversity)	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Minister of State with responsibility for Nature, Heritage and Biodiversity	Christopher O'Sullivan TD	23/07/2025	Email	24/07/2025	Email
Ballybeg-Lanespark-Derryvella	Iarnród Éireann/Irish Rail	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	An Taisce	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Environmental Protection Agency (EPA)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Inland Fisheries Ireland	General email	23/07/2025	Email		

Bog Name	Contact Organisation	Contact Name	Date of Issue	Format	Date Response Received	Response Format
Ballybeg-Lanespark-Derryvella	Local Authority Waters Programme (West and Border Region)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Local Authority Waters Programme	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Local Authority Waters Programme (Midlands and Eastern Region)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Northern and Western Regional Assembly (NWRA)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	National Museum of Ireland	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Teagasc	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	The Heritage Council	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Waterways Ireland	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	An Forum Uisce (The Water Forum)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Coillte	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Irish Water- Water Supply Project Eastern and Midlands Region	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Uisce Éireann (formerly Irish Water)	General email	23/07/2025	Email	12/08/2025	Email
Ballybeg-Lanespark-Derryvella	Office of Public Works (OPW)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	CARO (Climate Action Regional Office) Eastern and Midlands	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Bat Conservation Ireland	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Birdwatch Ireland	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Butterfly Conservation Ireland	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Eastern and Midland Regional Assembly	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Friends of the Irish Environment	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	ICMSA (Irish Creamery Milk Suppliers Association)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	ICSA (Irish Cattle and Sheep Farmers Association	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Irish Environmental Network (Agriculture and Land Use Policy and Advocacy Officer)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Irish Farmers Association	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Irish Farmers Association (Senior Policy Exec)	General email	23/07/2025	Email		

Bog Name	Contact Organisation	Contact Name	Date of Issue	Format	Date Response Received	Response Format
Ballybeg-Lanespark-Derryvella	Irish Farmers Association (Galway/Leitrim/Longford/Roscommon/Sligo)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella		General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Irish Peatlands Conservation Council (IPCC)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Irish Raptor Study Group	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Irish Rural Link	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Irish Wildlife Trust	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Inland Waterways Association of Ireland (IWAI)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	National Association of Regional Game Councils	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	National Association of Regional Game Councils	Chairperson	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	NPWS Rangers North Midlands	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	NUIG Galway	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	PPN Roscommon Public Participation Network	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Outdoor Recreation NI	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Ranger Association Committee	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Mid-Shannon Wilderness Park Awareness Group	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Sustainable Water Action Network (SWAN)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Trinity College Dublin	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Turf Cutters and Contractors Association	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	UCD / Irish Rural Link	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	University College Dublin	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Earthy Matters	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Waterways Ireland	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Waterways Ireland Org	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Woodlands of Ireland	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	University of Galway	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Iarnrod Eireann (Infrastructure)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Iarnrod Eireann	General email	23/07/2025	Email		

Bog Name	Contact Organisation	Contact Name	Date of Issue	Format	Date Response Received	Response Format
Ballybeg-Lanespark-Derryvella	Tipperary County Council, General Address	General email	23/07/2025	Email	21/09/2025	Email
Ballybeg-Lanespark-Derryvella	Senior Executive Officer, Nenagh Municipal District Administrator	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Senior Executive Officer, Corporate Services	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Chief Executive	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Director of Services, roads and transportation, Health and Safety	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Director of Services, Economic and Rural Development (including just Transition)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Director of Services, Environment and Climate Action.	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Director of Services, Local Authorities Water Programme (LAWPRO)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Alan Kelly TD	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Michael Lowry TD	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Ryan O Meara TD	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Seamus Healy TD	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Mattie McGrath TD	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Michael Murphy TD	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Sean Ryan	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Shane Lee	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Siobhan Ambrose	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr William Kennedy	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Michael O Meara	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Michael Smith Cathaoirleach	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Micheal Anglim	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Micheal Lowry Leas Chaoirleath	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Niall P Dennehy	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Pamela Quirke O Meara	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Pat English Deputy Mayor Clonmel BD	General email	23/07/2025	Email		

Bog Name	Contact Organisation	Contact Name	Date of Issue	Format	Date Response Received	Response Format
Ballybeg-Lanespark-Derryvella	Cllr Peggy Ryan	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Richie Molloy	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Roger Kennedy Leas Chathaoirleach	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Ryan O Meara	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Seamus Morris Leas Chathaoirleach	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr John Fitzgerald	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr John O Heney	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Kay Cahill Skehan	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Kieran Bourke	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Liam Browne	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Louise Morgan Walsh	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Mairin McGrath	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Marie Murphy	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Mark Fitzgerald Cathaoirleach	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Mary Hanna Hourigan	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Michael Brennan	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Micheal Murphy Mayor-Clonmel BD	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Jim Ryan	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Joe Hannigan	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr John Carroll	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr John Crosse Cathaoirleach	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Eddie Moran	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Fiona Bonfield Cathaoirleach	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Amy Goldsboro	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Declan Burgess Cathaoirleach	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Dr Phyll Bugler	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr David Dunne	General email	23/07/2025	Email		

Bog Name	Contact Organisation	Contact Name	Date of Issue	Format	Date Response Received	Response Format
Ballybeg-Lanespark-Derryvella	Cllr Anne Maire Ryan-(Shiner)	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr Tom Acheson	General email	23/07/2025	Email		
Ballybeg-Lanespark-Derryvella	Cllr JP O'Meara	General email	23/07/2025	Email		

APXI -2 Response summary from Consultees contacted (*Note: This includes consultation undertaken as part of the Phase 1 rehabilitation plan).*

Organisation	Summary of Response by Stakeholder	BnM Response
NPWS 8/3/2018	Ballysorrell All walked over the bog and viewed the bog restoration works. MCC outlined work carried out so far and work planned for the future. Planned work is > 75% complete. NPWS staff very complementary of the bog restoration work (drain-blocking with peat dams) carried out so far. All agreed that the bog had significant potential for bog restoration, and future nature conservation. Signs that the bog is already re-wetting in places due to drain-blocking. Discussions about potential for designation of the site for nature conservation by NPWS in future. Review and discussion of NPWS degraded raised bog model outputs for Ballysorrell. Model predicted that 9 ha would have potential for development into active raised bog in the future. General view was that this was probably an under-estimate and that the model likely to be affected by the intensive BnM drainage network. Discussion of potential measures to further increase re-wetting of the bog including berms across high bog at southern section. Bruckana All visited the Bruckana Windfarm. Viewed a cutaway bog area within the windfarm complex where there has been significant natural colonisation for at least 20 years and some targeted hydrological management. Discussion of the former history of Templetuohy Bog as a sod turf production bog. Sod turf cutaway tends to have deeper remnant peat, which in turn can develop Sphagnum-rich vegetation, where conditions suit. Attendees viewed some wet cutaway where there has been some Sphagnum colonisation. Discussion of environmental conditions that led to the development of this specific vegetation type. Discussion of potential to re-wet similar cutaway, with similar environmental conditions and deeper peat, to encourage development of Sphagnum-rich peat-forming vegetation. Discussion of different constraints and opportunities for this type of re-wetting. This Sphagnum-rich peat-forming vegetation only has potential to develop in certain environmental conditions in association with deeper peat. NPWS staff suggested that intensive bunding would have potential to increase the overall re-wetted area. There was general discussion of potential larger project opportunities, in association with planned BnM rehabilitation or future BnM afteruse development. These larger projects could potentially focus on GHG emission reduction, creation of peat-forming habitats, biodiversity enhancement, other ecosystem services enhancement/restoration. Baunmore All visited Baunmore cutaway. Baunmore is a typical milled peat cutaway with pumped drainage and with shallower remnant peat more typical of milled cutaway in the Littleton Bog Group, in contrast to Bruckana. All walked part of the bog where some recent rehabilitation trials have been carried out. MMC pointed out the recent field drain blocking using a bull-dozer that has been carried out so far. The target here was to block drains, re-establish surface drainage and re-wet peat. This work has already successfully held back surface water in places. The cambered fields and variable topography mean that a proportion of the peat fields remain dry. The expected habitat development is a mosaic of poor fen wetland communities, Reed swamp and scrub/wet woodland. MMC explained how blocking the field drains is Phase 1 of the planned rehab trial and that Phase 2 will involve blocking outfalls and cutting new overflow drains to further manipulate overall water levels. The overall strategy is to maximise the area of re-wetted peat with water levels close to the peat surface and emergent wetland communities. NPWS staff also suggested that more intensive bunding would have potential to increase the overall re-wetted area and help manage water levels. All then	

Organisation	Summary of Response by Stakeholder	BnM Response
	examined some cutaway that is colonising naturally with pioneer vegetation. This cutaway is much more alkaline compared to Bruckana with indicators such as the presence of Black Bog-rush.	
Tipperary Cunty Council	The draft plan is an overview of the rehabilitation within the Littleton bog group this comprises of 12 bog areas. The plan is developed under Condition 10 of IPC Licence Ref. P0499-01. (An incorrect licence ref. is given in the plan.) Any consideration for future after uses for the bog areas will be subject to the planning regulatory framework and the Environment section will be obliged to comment at this time on a more detailed proposal. The rehabilitation plan should include best practice measures for the restoration of an optimal range of biodiversity and ecosystems. The aftercare management activities on the level, quantity and quality of water both on site and in the surrounding landscape should avoid any unnecessary deterioration in the quality and quantity of ground and surface waters. After use, peatland water levels and flow regimes should be restored to as close to the natural reference conditions as possible. Any works carried out must be detailed and all stakeholders consulted.	
Irish Peatland Conservation Council	The IPCC welcome the zonation of Ballysorrell Bog for biodiversity and the decision not to develop it for peat resources (Page 3). Ballysorrell Bog is quite southerly in its location and its rehabilitation and zonation for biodiversity will help to extend the range of raised bog habitat in Ireland, which according to "The Status of EU Protected Habitats and Species in Ireland | 2013" (NPWS, 2013) is "BAD". We have a few questions and points to make on the draft rehabilitation plan with the aim to improving its content. It is good to see that Bord na Móna will be restoring the hydrology of the high bog through drain blocking as mentioned on Page 4 and that you also intend to carry out a trial rehab programme of a selected area for training purposes. Could you please elaborate on this? What training/trials do you intend to conduct and is it only inhouse training for Bord na Móna staff? The rehabilitation process may be a good time to test the Canadian method of Sphagnum transfer as there would be time to prepare the site prior to drain blocking. Please give this suggestion consideration as you indicated the peat present as light red brown Sphagnum peat (Page 9). There is Sphagnum on site that could be harvested and used as a donor inoculum for a Sphagnum trial. Page 5 gives information on the short and long-term time-frames of the plan. Could you give more details on the methods that will be utilised to monitor the hydrology i.e. will piezometers be used to measure water levels and will they be measured before drain blocking? This could ensure that any hydrological successes will be shown. In addition, how frequently will the ecotope mapping be conducted? Page 3 details the time-line for the development of Ballysorrell ("Ballysorrell was originally developed……."). Could this historical timeline be re-written as it is difficult to follow. For instance, when did the private sodpeat cutting around the bog cease? When did the milled peat production cease? Could you please specify how Ballysorrell Bog will help to achieve the national conservation target for active raised bog and supporting habitat in Ireland? Are there plans to formally designate this site in the future? Thank you for giving us this opportunity to make some comments on this welcome initiative by Bord na Mona.	
Private Individual A	Seeking return of land at Baunmore CPOed by Bord na Móna	

Organisation	Summary of Response by Stakeholder	BnM Response
NPWS 9/10/2018	The Department, particularly, welcomes the restoration measures proposed for Ballysorrell Bog and Knockahaw Bog which will result in the development of active raised bog habitat and acknowledge that this will significantly aid Ireland in meeting its commitments under the EU Habitats Directive. Whilst it is appreciated that "the rehabilitation measures will be adapted to the various baseline conditions" (Part 1, pg.20) the Department recommends that Bord na Móna consider more fully the potential for forward-planning during production phases of its operation so that the topography of the commercial fields could be engineered so as to best facilitate rewetting of the sites. Such an approach would better conform to Principle 17 (afteruse of cutaway peatlands) of the National Peatlands Strategy (2015). The Department recommends that the ongoing research into the interaction between rehabilitation measures and carbon emissions is prioritized so as to better inform future rehabilitation plans. In the absence of the assimilation of such research outputs into rehabilitation planning it is nonetheless recommended that serious consideration is giving to reprofiling works within the Littleton Bog Group. In relevant sites this could greatly improve the baseline conditions for rewetting and would be justified on the basis that rewetted cutaway has lower carbon emissions that dry, bare cutaway. The foregoing is in line with Principle 19 (contribution of peatland rehabilitation and restoration to climate change mitigation and adaption) of the National Peatlands Strategy. There is some difficulty interpreting the maps due to their complexity and the size of the legend. Maps showing specific restoration actions would be useful, possibly in the form of an overview grid at a scale 1:35,000 with more detailed mapping as per grid squares. Eco-hydrological modelling based on LiDAR/DTM would be essential to ascertain the potential to achieve wet habitats with the potential to turn into carbon sinks. ….. 2 The Department is keen to continue engagement with Bord na Móna as regards investigating more engineered restoration techniques likely to provide results in line with the principles of the National Peatlands Strategy. The NPWS of the Department would welcome an opportunity to meet with you to allow for the Plan to be presented by your Ecology Team and to further explore the options of external funding such as EU LIFE funding, as discussed in previous meetings.	
IPCC 15/08/2018	Could you please clarify the correct area for the group of 12 sites included: is it 5050ha (Page 11, Section 4.2) or is it 4824ha (Page 11, Table 1). If it is the latter could you clarify what the other 226ha constitutes please. IPCC's principal interest in this plan lies in the future of existing acid peat bog remnants, the potential of the cutaway areas to provide biodiversity value and priority habitats for nature conservation, climate change mitigation and the extent to which the plan meets requirements of the National Peatlands Strategy 2015. The area of peatland included in the Littleton Bog Group is significant in the county of Tipperary as it represents one third of the original area of raised bog that occurred in the whole County particularly concentrated in South Tipperary (Hammond 1979 Peatland Map of Ireland) the southern distribution range for raised bogs described in the Status of EU Protected Habitats and Species. In your plan on Table 5 only two bog restoration sites (Ballysorrell and Knockahaw) are proposed covering an area of 567ha. Can you explain the method used in choosing these areas for bog restoration and were any other sites considered within the group? IPCC maintain that two sites is far too little considering the area of the land in the Littleton Group and the lack of any sites of conservation value in this area of former raised bog distribution. We note that Killeens Bog contains acidic peat and that it appears to be earmarked for horticultural peat (sod moss judging from the satellite photograph) should this be required. On Page 16 in conclusion 5 the plan states that this bog could be restored if horticultural peat extraction is stopped. IPCC strongly recommend the immediate cessation of this activity on this site and its inclusion in the restoration sites plan. We have reasoned with Bord na Móna on numerous occasions about the continued national production of horticultural peat as we do not agree that this use represents responsible management as defined in principle P24 in the National Peatlands Strategy. We understand that Sod Moss is regarded in economic terms as a "lost leader" product which negates any economic argument for keeping this site in production. Here in Littleton where Bord na Móna have exploited over 5000ha of Tipperary's	

Organisation	Summary of Response by Stakeholder	BnM Response
	natural peatland resources, all peat production should cease and every effort should be made to restore suitable acid peat resources to living bog where they exist. In this regard on Page 15 (Section 4.3.1.1 [ii]) two further sites with acid peat are mentioned - Carrickhill (substantial raised bog cutover east and west of the cutaway) & Inch (raised bog cutover to the south west of the cutaway) - why are these sites not being included in the bog restoration sites line-up? In the IPCC Sites Database we have a site named Longford Pass - Littleton Bog which is a remnant raised bog that we surveyed with a former Bord na Móna employee Sean Canney and which we subsequently used for educational purposes with local schools with the agreement of Bord na Móna. We would like to see this site included in the bog sites restoration list. (Grid ref. = S 23023 59319). IPCC are very unclear about your aims for the non-designated sites with considerable wildlife interest described on Page 21 of the plan. We estimate that there are 10 sites mentioned that are noteworthy for birds, crustaceans and invertebrates. In addition a further 3 rehabilitation sites are included in the Bord na Móna Biodiversity Plan. On the one hand Bord na Móna makes use of the fact that cutaway bogs are rich in biodiversity as part of the "Naturally Driven" image you like to portray but we can see no substantial commitment to undertake targeted management actions in relation to enhancing and maintaining these species on the sites. For example on Page 19 you state that without additional funding targeted conservation works for breeding birds will not be a feature of this plan. This is wrong and is at odds with Principle 15 in the National Peatlands Strategy 2015. In relation to climate change this rehabilitation plan needs to ensure that all of the cutaway bogs within the Littleton Group are rewetted to prevent carbon leakage. In our experience through visits to Mount Lucas, Ballycon and Lullymore cutaway bogs there are substantial areas within these rehabilitated sites that are dry and emitting carbon. Why does Bord na Móna not recontour sites with un-even topography to ensure that the majority of the bare peat is rewetted? Surely at the peat production stage more effort could be made to extract the peat so that flat substrate remains. Can you indicate within the plan the percentage of peat that will be rewetted and be carbon neutral? This is an important consideration in line with national climate change policy. IPCC find that the plan is overstating the company's intention to cease peat production for electricity by 2030 as their contribution to climate change policy	
Private Individual B	Meeting to discuss land security issues and leasing of land at Lanespark and Derryvilla.	
Private Individual C	Phone call to discuss potential to develop greenway amenity across the Littleton Bog Group.	
Private Individual D	Meeting to discuss boundary issues and potential impact of rehabilitation on adjoining land	
Private Individual E	Meeting to discuss potential gun club project at Knockahaw Bog.	
Private Individual F	Meeting to discuss rare orchids at Longfordpass railway cutting	

Consultation undertaken in 2025		
Uisce Éireann (formerly Irish Water)	In their response, Uisce Éireann stated that 'UÉ has undertaken a review of the rehabilitation plan, and the bogs are not located within any public drinking water abstraction catchments, however, UÉ is supportive of the key environmental and water quality benefits of the proposed rehabilitation'. .	BnM acknowledged the response and consultation is ongoing.
Tipperary County Council	In their submission, Tipperary County Council highlighted that the rehabilitation plan should 'ensure that future options for amenity or tourism uses of the lands are not discounted, having regard to the Council's aspirations to develop eco-tourism projects throughout the county'. Further, it was highlighted that archaeological impacts associated with rehabilitation of Ballybeg Lanespark Derryvella bogs, given the rich archaeological heritage of the lands, should be assessed. Tipperary County Council provided information on the relevant policies and objectives within the Tipperary County Council's Climate Action Plan 2024-2029 that aligned with peatland restoration. Other information focused on the Tipperary Decarbonising Zone, and how peatland restoration would benefit such decarbonisation. Other information was provided on the council's policies on Land-use, Land-use Change and Forestry (LULUCF). It notes that the 'management of agricultural ecosystems, such as grasslands and peatlands' are emitters of CO2 and 'the management of agricultural ecosystems, such as grasslands and peatlands 'an important area for climate mitigation measures'. 'For example, alternative land management measures such as raising the water table in existing pastures and peatlands, new crop types, forestry etc could make this sector a net remover of GHGs'. The submission notes that 'Bord na Móna is to be commended for its decarbonisation programme aimed at reducing the carbon emissions from its activities. This programme supports the National policy position and objective of achieving a transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050'. The submission requests: • 'stakeholder collaboration to deliver concerted efforts towards carbon and GHG emissions reductions within the DZ, which can lead the way for wider application across Tipperary'. • 'BnaM are requested to considered if there are opportunities for collaboration with stakeholders, including Tipperary County Council, as part of the delivery of their PCAS programme'. • 'The Mid-Tipperary Decarbonising Zone is within the JTF area and thus there are opportunities to engage local communities, including those previously employed in the peat harvesting industry, in areas related to training and upskilling and sustainable local job creation'. • 'BnaM are requested to consider the referring of the Mid-Tipperary DZ in their relevant publications and projects. In particular to include details on the Mid-Tipperary Decarbonising Zone in the relevant Rehabilitation Plans and associated Map Books'.	BnM acknowledged the response. Consultation is ongoing.

	• 'The strategic location of the national Bioeconomy Campus (Irish Bioeconomy Foundation) at Lisheen should be noted and it is requested that BnaM consider the vision for the National Bioeconomy campus as part of their overall plans in the Mid-Tipperary DZ areas'. 'BnaM are requested to consider, given the particular role of the national DZ programme in emissions reduction, if there is an opportunity to monitor the changes in carbon emissions from a current baseline within the Killeen bog and report on reduced the carbon emissions in support of the national objective of achieving a transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. Thus, the rehabilitation plans can explicitly state how emissions will be monitored and reported. Such reporting will also support Tipperary County Council objectives for supporting moves towards low-carbon communities within the Decarbonising Zone'.	
(Minister of State at the Department of Housing, Local Government and Heritage) Minister James Browne	Acknowledged receipt of rehabilitation plan.	BnM acknowledged the response. Consultation is ongoing.

APPENDIX XII: ARCHAEOLOGY

Role of the Archaeological Liaison Officer

1. To communicate this Code of Practice and the *Archaeological Protection Procedures* (Appendix IV) to all personnel operating on the bog.
2. To ensure that all notices relating to the *Archaeological Protection Procedures* are posted and maintained at appropriate locations on the bog.
3. To report any stray finds, presented to the Liaison Officer from his/her group of bogs, to the Duty Officer of the National Museum of Ireland.
4. To provide for the appropriate protection of the stray find, whether in-situ or removed from the bog, as directed by the Duty Officer of the National Museum of Ireland.



Code of Practice

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Code of Practice

5. To arrange for the delivery or collection of the stray find, as directed by the Duty Officer of the National Museum of Ireland.

6. To complete the Report of Discovery of Archaeological Object(s) in Bogs (Appendix V), as directed by the Duty Officer of the National Museum of Ireland.

7. To maintain a file of all stray finds and associated documentation and provide copies to the Project Archaeologist.

8. To provide assistance, where required, to the Department during archaeological surveys.

9. To provide assistance, where required, to Bord na Móna's Consultant Archaeologists, during investigation and mitigation of monuments.

10. To report to the Bord na Móna members on the Archaeology Management Liaison Committee any planned developments or new activities on cutaway peatland areas within his/her group of bogs.



Bord na Móna		Land & Habitats– Bog Operations **Archaeological Findings**	
Document Approved By:	**Revision Date:**	**Doc No:**	**Revision No:**
EMD	13/08/2024	ENV017	2
	Control Location		**Page**
	Environment Department		1 of 5

Purpose

The purpose of this procedure is to describe the arrangements in Bord na Móna for findings of Archaeological material (Stray Finds).
All objects, sites or monuments, no matter how fragmentary, are important elements of our heritage.

Procedure

1. Check whether there are any known archaeological monuments in your area.
2. Be vigilant at all times - objects or traces of structures can be found on the field surfaces, in the drain faces, on the bog margins or caught within the mechanics of machinery.
3. If an object is found leave it in place, if it is safe to do so, note its position and immediately contact your Archaeological Liaison Officer who will assess the situation and contact the Duty Officer of the National Museum of Ireland.
4. Resist the temptation to investigate the find spot as this may disturb fragile archaeological deposits.
5. If the object is already dislodged or is in imminent danger, remove it carefully, mark its find spot and report it immediately to your Archaeological Liaison Officer.
6. Objects made of wood, leather or textile, which are removed from peat should be kept in conditions similar to those in which they are found. This can be done by packing them in peat or, if waterlogged, placing them in a clean basin of water and sealing the container. Resist the temptation to clean or remove peat from the object.
7. If timbers or other materials, such as gravel or stones, which could be part of a manmade structure are noted on the bog, mark the location and report it immediately to your Archaeological Liaison Officer. If you suspect the find is of archaeological importance, resist the temptation to expose it any further as this could result in damage to the structure.
8. Report anything that looks unnatural in the bog – your Archaeological Liaison Officer will decide whether it should be referred to the appropriate authorities.

NOTE: Our archaeological heritage is a finite, non-renewable resource. Once a site is destroyed its information is lost forever and we have lost the chance to understand a little more about our past, where we have come from and perhaps the opportunity to learn for the future.

Your Archaeological Liaison Officer is Enda McDonagh.

2) Records

Revision Index			
Revision	Date	Description of change	Approved
1	13/19/2020	First release	EMcD
2	13/08/2024	Second release	EMcD

APPENDIX XIII: WATER QUALITY MONITORING RESULTS FOR BALLYBEG BOG & DERRYVELLA BOG

PCAS SW Sampling Scheme				Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids
Bog Group	**Licence No**	**Bog Name**	**SW Code GIS**	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
				1/7/23	1/8/23	1/9/23	1/10/23	1/11/23	1/12/23	1/1/24	1/2/24	1/3/24	1/4/24	1/5/24	1/6/24	1/7/24	1/8/24	1/9/24	1/10/24	1/11/24	1/12/24
Littleton Group	PO499-01	BALLYBEG	SW11	2			<2			3			<2			N/R			<2		
Littleton Group	PO499-01	BALLYBEG	SW13	10			3			4			<2			N/R			3		
Littleton Group	PO499-01	LANESPARK	SW14	15			13			<2			2			13			3		
Littleton Group	PO499-01	LANESPARK	SW15	<2			<2			<2			<2			3			<2		
Littleton Group	PO499-01	LANESPARK	SW16	4			<2			18			<2			3			2		
			Suspended Solids ELV	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
		Rainfall (mm) CLONOULTY_Clogher		178.5	82.5	136.2	137	83.7	131.3	62.1	155	93.9	74.9	50.9	42.8	50.7	44.7	64.6	51.5	70.3	79.6

PCAS SW Sampling Scheme				Colour	Colour	Colour	Colour	Colour	Colour	Colour	Colour	Colour	Colour	Colour	Colour	Colour	Colour	Colour	Colour	Colour	Colour
Bog Group	**Licence No**	**Bog Name**	**SW Code GIS**	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co	mg/l Pt Co
				1/7/23	1/8/23	1/9/23	1/10/23	1/11/23	1/12/23	1/1/24	1/2/24	1/3/24	1/4/24	1/5/24	1/6/24	1/7/24	1/8/24	1/9/24	1/10/24	1/11/24	1/12/24
Littleton Group	PO499-01	BALLYBEG	SW11	357			359			231			256			N/R			234		
Littleton Group	PO499-01	BALLYBEG	SW13	396			441			356			442			N/R			167		
Littleton Group	PO499-01	LANESPARK	SW14	340			450			269			350			174			300		
Littleton Group	PO499-01	LANESPARK	SW15	119			439			145			335			165			210		
Littleton Group	PO499-01	LANESPARK	SW16	306			396			76			141			54.9			56.6		
		Rainfall (mm) CLONOULTY_Clogher		178.5	82.5	136.2	137	83.7	131.3	62.1	155	93.9	74.9	50.9	42.8	50.7	44.7	64.6	51.5	70.3	79.6

PCAS SW Sampling Scheme				COD	COD	COD	COD	COD	COD	COD	COD	COD	COD	COD	COD	COD	COD	COD	COD	COD	COD
Bog Group	**Licence No**	**Bog Name**	**SW Code GIS**	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
				1/7/23	1/8/23	1/9/23	1/10/23	1/11/23	1/12/23	1/1/24	1/2/24	1/3/24	1/4/24	1/5/24	1/6/24	1/7/24	1/8/24	1/9/24	1/10/24	1/11/24	1/12/24
Littleton Group	PO499-01	BALLYBEG	SW11	84			75			56			90			N/R			74		
Littleton Group	PO499-01	BALLYBEG	SW13	77			98			76			116			N/R			51		
Littleton Group	PO499-01	LANESPARK	SW14	80			103			66			76			41			87		
Littleton Group	PO499-01	LANESPARK	SW15	39			126			43			74			37			62		
Littleton Group	PO499-01	LANESPARK	SW16	81			114			14			40			10			28		
			COD Trigger Level	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
		Rainfall (mm) CLONOULTY_Clogher		178.5	82.5	136.2	137	83.7	131.3	62.1	155	93.9	74.9	50.9	42.8	50.7	44.7	64.6	51.5	70.3	79.6

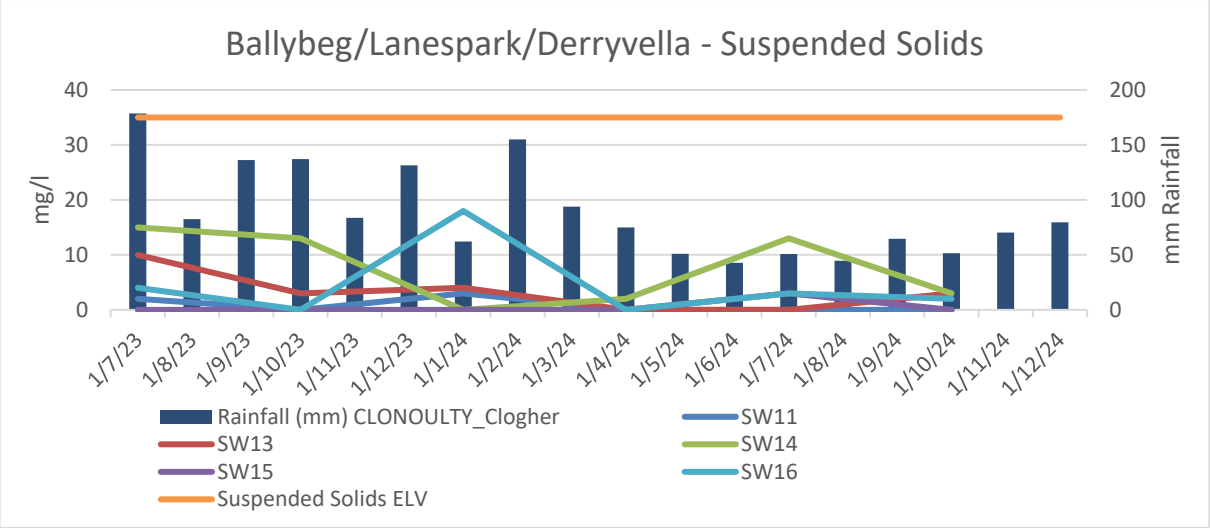
PCAS SW Sampling Scheme				pH	pH	pH	pH	pH	pH	pH	pH	pH	pH	pH	pH	pH	pH	pH	pH	pH	pH
Bog Group	**Licence No**	**Bog Name**	**SW Code GIS**	pH Units	pH Units	pH Units	pH Units	pH Units	pH Units	pH Units	pH Units	pH Units	pH Units	pH Units	pH Units	pH Units	pH Units	pH Units	pH Units	pH Units	pH Units
				1/7/23	1/8/23	1/9/23	1/10/23	1/11/23	1/12/23	1/1/24	1/2/24	1/3/24	1/4/24	1/5/24	1/6/24	1/7/24	1/8/24	1/9/24	1/10/24	1/11/24	1/12/24
Littleton Group	PO499-01	BALLYBEG	SW11	7			7.1			7.2			7.3			N/R			7.2		
Littleton Group	PO499-01	BALLYBEG	SW13	7.3			7.1			7			7.1			N/R			7.5		
Littleton Group	PO499-01	LANESPARK	SW14	7.2			6.9			7.2			7.2			6.9			7.6		
Littleton Group	PO499-01	LANESPARK	SW15	7.7			6.9			7.5			7.5			7.4			7.4		
Littleton Group	PO499-01	LANESPARK	SW16	7.2			7.1			7.9			7.7			7.8			7.8		
		Rainfall (mm) CLONOULTY_Clogher		178.5	82.5	136.2	137	83.7	131.3	62.1	155	93.9	74.9	50.9	42.8	50.7	44.7	64.6	51.5	70.3	79.6

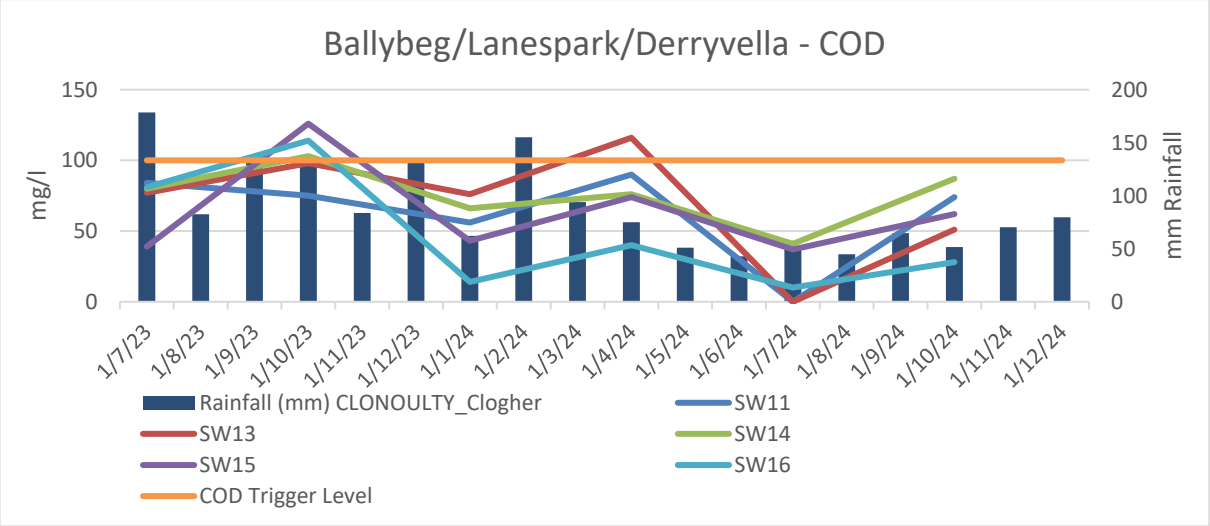
PCAS SW Sampling Scheme				TP as P	TP as P	TP as P	TP as P	TP as P	TP as P	TP as P	TP as P	TP as P	TP as P	TP as P	TP as P	TP as P	TP as P	TP as P	TP as P	TP as P	TP as P
Bog Group	**Licence No**	**Bog Name**	**SW Code GIS**	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
				1/7/23	1/8/23	1/9/23	1/10/23	1/11/23	1/12/23	1/1/24	1/2/24	1/3/24	1/4/24	1/5/24	1/6/24	1/7/24	1/8/24	1/9/24	1/10/24	1/11/24	1/12/24
Littleton Group	PO499-01	BALLYBEG	SW11	<0.05			<0.05			<0.05			<0.05			N/R			<0.05		
Littleton Group	PO499-01	BALLYBEG	SW13	<0.05			<0.05			<0.05			<0.05			N/R			<0.05		
Littleton Group	PO499-01	LANESPARK	SW14	0.07			<0.05			<0.05			<0.05			<0.05			0.05		
Littleton Group	PO499-01	LANESPARK	SW15	<0.05			<0.05			<0.05			<0.05			<0.05			<0.05		
Littleton Group	PO499-01	LANESPARK	SW16	<0.05			0.06			0.07			<0.05			<0.05			<0.05		
		Rainfall (mm) CLONOULTY_Clogher		178.5	82.5	136.2	137	83.7	131.3	62.1	155	93.9	74.9	50.9	42.8	50.7	44.7	64.6	51.5	70.3	79.6

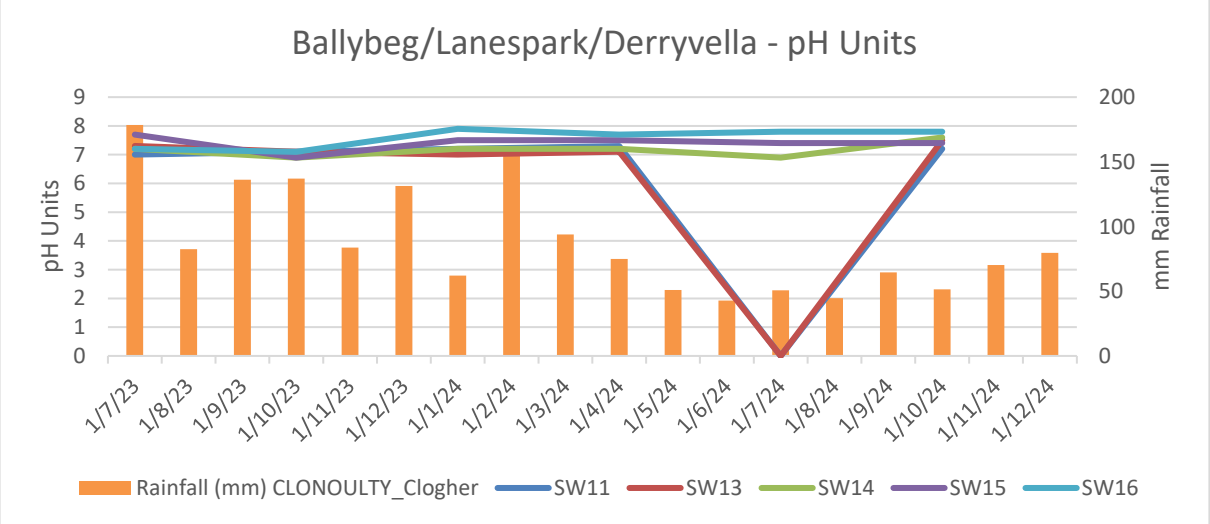
PCAS SW Sampling Scheme				TS	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS
Bog Group	**Licence No**	**Bog Name**	**SW Code GIS**	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
				1/7/23	1/8/23	1/9/23	1/10/23	1/11/23	1/12/23	1/1/24	1/2/24	1/3/24	1/4/24	1/5/24	1/6/24	1/7/24	1/8/24	1/9/24	1/10/24	1/11/24	1/12/24
Littleton Group	PO499-01	BALLYBEG	SW11	87			224			217			202			N/R			257		
Littleton Group	PO499-01	BALLYBEG	SW13	310			378			245			207			N/R			335		
Littleton Group	PO499-01	LANESPARK	SW14	569			258			419			217			838			345		
Littleton Group	PO499-01	LANESPARK	SW15	469			268			202			139			327			246		
Littleton Group	PO499-01	LANESPARK	SW16	341			219			416			270			388			367		
		Rainfall (mm) CLONOULTY_Clogher		178.5	82.5	136.2	137	83.7	131.3	62.1	155	93.9	74.9	50.9	42.8	50.7	44.7	64.6	51.5	70.3	79.6

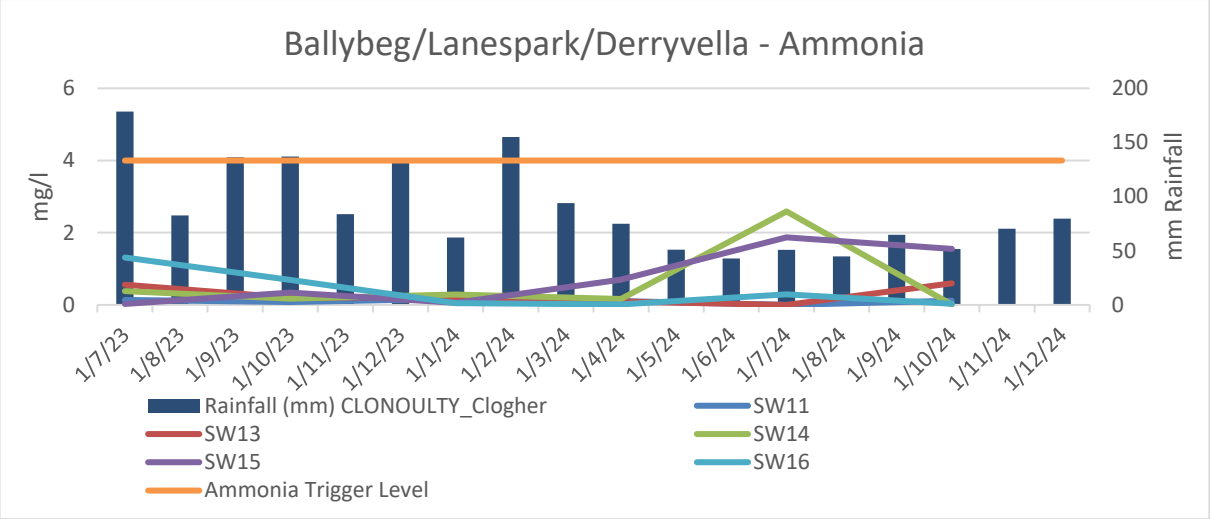
PCAS SW Sampling Scheme				Ammonia as N	Ammonia as N	Ammonia as N	Ammonia as N	Ammonia as N	Ammonia as N	Ammonia as N	Ammonia as N	Ammonia as N	Ammonia as N	Ammonia as N	Ammonia as N	Ammonia as N	Ammonia as N	Ammonia as N	Ammonia as N	Ammonia as N	Ammonia as N
Bog Group	**Licence No**	**Bog Name**	**SW Code GIS**	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
				1/7/23	1/8/23	1/9/23	1/10/23	1/11/23	1/12/23	1/1/24	1/2/24	1/3/24	1/4/24	1/5/24	1/6/24	1/7/24	1/8/24	1/9/24	1/10/24	1/11/24	1/12/24
Littleton Group	PO499-01	BALLYBEG	SW11	0.135			0.076			0.169			0.102			N/R			0.111		
Littleton Group	PO499-01	BALLYBEG	SW13	0.557			0.198			0.214			0.088			N/R			0.595		
Littleton Group	PO499-01	LANESPARK	SW14	0.379			0.168			0.283			0.162			2.59			0.006		
Littleton Group	PO499-01	LANESPARK	SW15	0.026			0.338			0.055			0.697			1.87			1.55		
Littleton Group	PO499-01	LANESPARK	SW16	1.31			0.688			0.045			0.012			0.29			0.028		
			Ammonia Trigger Level	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		Rainfall (mm) CLONOULTY_Clogher		178.5	82.5	136.2	137	83.7	131.3	62.1	155	93.9	74.9	50.9	42.8	50.7	44.7	64.6	51.5	70.3	79.6

PCAS SW Sampling Scheme				DOC	DOC	DOC	DOC	DOC	DOC	DOC	DOC	DOC	DOC	DOC	DOC	DOC	DOC	DOC	DOC	DOC	DOC
Bog Group	**Licence No**	**Bog Name**	**SW Code GIS**	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
				1/7/23	1/8/23	1/9/23	1/10/23	1/11/23	1/12/23	1/1/24	1/2/24	1/3/24	1/4/24	1/5/24	1/6/24	1/7/24	1/8/24	1/9/24	1/10/24	1/11/24	1/12/24
Littleton Group	PO499-01	BALLYBEG	SW11	30			27.1			24.3			20.1			N/R			N/R		
Littleton Group	PO499-01	BALLYBEG	SW13	27.8			36.4			30.9			30.9			N/R					
Littleton Group	PO499-01	LANESPARK	SW14	31.4			32.7			28.6			28.6			17.6			27.3		
Littleton Group	PO499-01	LANESPARK	SW15	15.5			51.5			19.1			28.4			19.5			18.9		
Littleton Group	PO499-01	LANESPARK	SW16	29.7			42.4			8.59			14.3			8.75			7.38		
		Rainfall (mm) CLONOULTY_Clogher		178.5	82.5	136.2	137	83.7	131.3	62.1	155	93.9	74.9	50.9	42.8	50.7	44.7	64.6	51.5	70.3	79.6


Ballybeg/Lanespark/Derryvella - Suspended Solids
mg/l
mm Rainfall
40
30
20
10
0
200
150
100
50
0
1/7/23
1/8/23
1/9/23
1/10/23
1/11/23
1/12/23
1/1/24
1/2/24
1/3/24
1/4/24
1/5/24
1/6/24
1/7/24
1/8/24
1/9/24
1/10/24
1/11/24
1/12/24
Rainfall (mm) CLONOULTY_Clogher
SW11
SW13
SW14
SW15
SW16
Suspended Solids ELV


Ballybeg/Lanespark/Derryvella - COD
mg/l
mm Rainfall
150
100
50
0
200
150
100
50
0
1/7/23
1/8/23
1/9/23
1/10/23
1/11/23
1/12/23
1/1/24
1/2/24
1/3/24
1/4/24
1/5/24
1/6/24
1/7/24
1/8/24
1/9/24
1/10/24
1/11/24
1/12/24
Rainfall (mm) CLONOULTY_Clogher
SW11
SW13
SW14
SW15
SW16
COD Trigger Level


Ballybeg/Lanespark/Derryvella - pH Units
pH Units
mm Rainfall
9
8
7
6
5
4
3
2
1
0
200
150
100
50
0
1/7/23
1/8/23
1/9/23
1/10/23
1/11/23
1/12/23
1/1/24
1/2/24
1/3/24
1/4/24
1/5/24
1/6/24
1/7/24
1/8/24
1/9/24
1/10/24
1/11/24
1/12/24
Rainfall (mm) CLONOULTY_Clogher
SW11
SW13
SW14
SW15
SW16


Ballybeg/Lanespark/Derryvella - Ammonia
mg/l
mm Rainfall
6
4
2
0
200
150
100
50
0
1/7/23
1/8/23
1/9/23
1/10/23
1/11/23
1/12/23
1/1/24
1/2/24
1/3/24
1/4/24
1/5/24
1/6/24
1/7/24
1/8/24
1/9/24
1/10/24
1/11/24
1/12/24
Rainfall (mm) CLONOULTY_Clogher
SW11
SW13
SW14
SW15
SW16
Ammonia Trigger Level

APPENDIX XIV: STOCKPILE DECOMMISSIONING PROCEDURE

Scope
All IPC licensed peatlands with residual peat stockpiles requiring decommissioning and rehabilitation, as required by Condition 10.

The aim of this Stockpile Decommissioning Procedure is to stabilise any remaining stockpiles by depositing the peat in the two drains located immediately adjacent to the stockpile field, enabling the re-shaping of the stockpile to facilitate stabilization and revegetation.

Condition 10:
10.1 Following termination of use or involvement of all or part of the site in the licensed activity, the licensee shall:

10.1.1 Decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.

Procedure:

1. Strip any remaining stockpile protection and remove using the poly wrapper for recycling.
2. Ensure the silt pond servicing this pile field catchment has been cleaned within the last six months as per condition 6.8, and visually inspected as per condition 6.7, prior to any pile decommissioning.
3. Where stockpiles occur within areas planned for rehabilitation, such planned rehabilitation measures (regular drain blocking) will be implemented in advance of any stockpile decommissioning, with priority given to the required adjacent stockpile field drains.
4. Once the rehabilitation measure above has been completed, proceed to reprofile the stockpile as per below.
5. Using suitable available excavator/dozer to make a safe ramp up onto the end of the pile.
6. Track up onto the pile and establish a safe level base.
7. Using the machine to reduce and reprofile the pile height and deposit into the adjoining pile field drains. The residual height to be determined based on stockpile size and area required to reprofile.
8. Work along the pile using this method until reaching the pile end.
9. Using a suitable machine, track the peat into the pile field drain along both sides of the pile, ensuring the final level is below the existing drain blocks and any damage to existing drain blocks avoided.
10. If required, use a suitable machine to track along the top of the reprofiled stockpile to level and flatten the profile to reduce the runoff gradient.
11. Fertiliser application and any grass seed mix should be applied to each stockpile following completion of the above steps, to accelerate the stabilisation.

FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

APPENDIX 10

IPC Licence P0499-01 and 3 no. Technical Amendments

This licence was amended on 25 September 2012, 22 August 2019 and 17 September 2021 under Section 96(1) of the Environmental Protection Agency Act 1992, as amended. The details of Amendment A, Amendment B and Amendment C must be read in conjunction with this licence. The amendment documents are entitled "Technical Amendment A", "Technical Amendment B" and "Technical Amendment C".

Headquarters,
Johnstown Castle Estate,
County Wexford, Ireland

INTEGRATED POLLUTION CONTROL LICENCE

Licence Register Number:	499
Licensee:	Bord na Móna Fuels Limited
Location of Activity:	Littleton Group c/o Littleton Briquette Factory Thurles County Tipperary

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Glossary of Terms

The Agency	Environmental Protection Agency.
The Licensee	Bord na Móna Fuels Limited, Main Street, Newbridge, County Kildare.
Location of Activity	Littleton Group, c/o Littleton Briquette Factory, Thurles, County Tipperary.
AER	Annual Environmental Report.
Annually	All or part of a period of twelve consecutive months.
BATNEEC	Best Available Technology Not Entailing Excessive Cost.
Bi-annually	All or part of a period of six consecutive months.
COD	Chemical Oxygen Demand.
Daily	During all days of plant operation, and in the case of emissions, when emissions are taking place; with no more than 1 measurement on any one day.
Day	Any 24 hr. period.
Daytime	0800 hrs to 2200 hrs.
dB(A)	Decibels (A weighted).
Dust Sensitive location	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or area of high amenity which for its proper enjoyment requires the absence of dust at nuisance levels.
EMP	Environmental Management Programme.
EWC	European Waste Catalogue (94/3/EEC, see also Agency Guidance Note on the EWC).
Flood Period	Any period in which the daily rainfall exceeds 50mm.
Fortnightly	At least 20 measurements in a calendar year with no more than one measurement in any one week.
IPC	Integrated Pollution Control.
Leq	Equivalent continuous sound level.
Lighting-up time	30 minutes after sun set.

Local Authorities	Tipperary SR County Council, Tipperary NR County Council, Kilkenny County Council and Laois County Council.
Monthly	At least 12 times per year at approximately monthly intervals.
NHA	National Heritage Area.
Night-time	2200 hrs to 0800 hrs.
Noise sensitive location	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.
Quarterly	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
Screenings	Wood, stone and other debris removed from milled peat (by screening) prior to introduction to processing.
SAC	Special Area of Conservation.
Standard Methods	As detailed in "Standard Methods for the Examination of Water and Wastewater", (prepared and published jointly by A.P.H.A., A.W.W.A & W.E.F) 19th Ed. 1995, American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA.
TA Luft	Technical Instructions on Air Quality Control - TA Luft in accordance with art. 48 of the Federal Immission Control Law (BImSchG) dated 15 March 1974 (BGBl. I p.721). Federal Ministry for Environment, Bonn 1986 and amendments.
Waste disposal operation	Means any of the operations included in the Third Schedule to the Waste Management Act 1996.
Waste recovery operation	Means any of the operations included in the Fourth Schedule to the Waste Management Act 1996.
Weekly	During all weeks of plant operation, and in the case of emissions, when emissions are taking place; with no more than one measurement in any one week.

Reasons for the Decision

The Agency is satisfied, on the basis of the information available that, subject to compliance with the conditions of this licence, any emissions from the activity will comply with and not contravene any of the requirements of Section 83(3) of the Environmental Protection Agency Act, 1992.

In reaching this decision the Agency has considered the application and supporting documentation received from the applicant, all objections received and the report of its inspectors.

Activities Licensed

In pursuance of the powers conferred on it by the Environmental Protection Agency Act, 1992, the Agency hereby grants a licence to:

Bord na Móna Fuels Limited, Main Street, Newbridge, County Kildare,

under Section 83(1) of the said Act to carry on the following activity,

-: the extraction of peat in the course of business which involves an area exceeding 50 hectares

at Littleton Group, c/o Littleton Briquette Factory, Thurles, County Tipperary (lands labelled as Littleton Group on Location Map Drawing 2.2 (Attachment 2) of the IPC Application), subject to the following fifteen Conditions, with the reasons therefor and associated schedules attached thereto.

Conditions

Condition 1 Scope

1.1 The activity shall be controlled, operated, and maintained and emissions shall take place as set out in this Integrated Pollution Control licence. All programmes required to be carried out under the terms of this licence, become part of this licence.

1.2 No alteration to, or reconstruction in respect of, the activity or any part thereof which would, or is likely to, result in a material change or increase in:

1.2.1 The nature or quantity of any emission,

1.2.2 The abatement/treatment or recovery systems,

1.2.3 The range of processes to be carried out,

1.2.4 The fuels, raw materials, intermediates, products or wastes generated,

or any changes in:

1.2.5 The site management and control with adverse environmental significance

shall be carried out or commenced without prior notice to, and without the prior written agreement of, the Agency.

1.3 This licence is for the purposes of IPC licensing under the EPA Act, 1992 only and nothing in this licence shall be construed as negating the licensee's statutory obligations or requirements under any other enactments or regulations.

1.4 Any reference in this licence to 'site' shall mean the areas outlined in red on Drawing 2.2 of Attachment 2 in the IPC licence application.

Reason: To clarify the scope of this licence.

Condition 2 Management of the Activity

2.1 The licensee shall establish and maintain an Environmental Management System (EMS) which shall fulfil the requirements of this licence. The EMS shall assess all operations and review all practicable options for the use of cleaner technology, cleaner production and the reduction and minimisation of waste, and shall include as a minimum those elements specified in the Conditions 2.2 to 2.7 below:

2.2 Environmental Management Programme (EMP)

2.2.1 The licensee shall, not later than six months from the date of grant of this licence, establish, maintain and submit to the Agency for agreement an EMP, including a time schedule, for achieving objectives and targets. The EMP shall thereafter, form part of the AER and shall be agreed with the Agency prior to implementation. It shall include:

(i) designation of responsibility for targets;

(ii) the means by which they may be achieved;

(iii) the time within which they may be achieved.

2.2.2 The EMP shall as a minimum include the following objectives:

(i) Minimisation of suspended solids movement to surface water systems via peatland surface water drainage channels during development and operation of boglands.

(ii) Rationalisation of surface water discharge points.

(iii) Investigation of reed-bed systems for final polish of silt pond discharges.

(iv) Reduction of fugitive dust emissions during loading and transfer operation on the bog and during unloading operations at the tippler and works yard areas.

(v) Provision of measures to protect dust sensitive areas.

(vi) Reuse of silt pond waste.

(vii) Collection, storage and reuse of polythene covering.

(viii) Use of reusable material for stockpile protection.

(ix) Use of wind power technology for pumped drainage.

(x) Separation of storm water runoff from process and non process areas.

(xi) Effective spill/leak management of mobile fuelling units.

(xii) Replacement (and remediation where necessary) of all underground fuel tanks.

(xiii) Reduction of particulate emissions to air from briquette factory stacks.

2.2.3 A report on the programme, including the success in meeting agreed targets, shall be prepared and submitted to the Agency as part of the AER. Such reports shall be retained on-site for a period of not less than seven years and shall be available for inspection by authorised persons of the Agency.

2.3 Documentation

2.3.1 The licensee shall establish and maintain an environmental management documentation system which shall be to the satisfaction of the Agency.

2.3.2 The licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.

2.4 Corrective Action

2.4.1 The licensee shall establish procedures to ensure that corrective action is taken should the specified requirements of this licence not be fulfilled.

The responsibility and authority for initiating further investigation and corrective action in the event of a reported non-conformity with this licence shall be defined.

2.5 Awareness and Training

2.5.1 The licensee shall establish and maintain procedures for identifying training needs, and for providing appropriate training, for all personnel whose work can have a significant effect upon the environment. Appropriate records of training shall be maintained.

2.5.2 Personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and/or experience, as required.

2.6 Responsibilities

2.6.1 The licensee shall ensure that a person in charge, as defined under the terms of the Environmental Protection Agency Act, 1992 shall be available on-site at all times when the activity is in operation. The person in charge shall also be available to meet with authorised persons of the Agency at all reasonable times.

2.7 Communications

2.7.1 The licensee shall, within six months of date of grant of this licence, put in place a programme to ensure that members of the public can obtain information concerning the environmental performance of the licensee at all reasonable times.

2.7.2 The licensee shall submit to the Agency, by 1 March each year, an AER which shall be to the satisfaction of the Agency. This report shall include as a minimum the information specified in *Schedule 5 Recording and Reporting to the Agency* and shall be prepared in accordance with any relevant guidelines issued by the Agency.

Reason: To make provision for management of the activity on a planned basis having regard to the desirability of ongoing assessment, recording and reporting of matters affecting the environment.

Condition 3 Interpretation

3.1 Emission limit values for emissions to atmosphere in this licence shall be interpreted in the following way:-

3.1.1 For Non-Continuous Monitoring:

(i) For any parameter where, due to sampling/analytical limitations, a 30 minute sample is inappropriate, a suitable sampling period should be employed and the value obtained therein shall not exceed the emission limit value.

(ii) For flow, no hourly or daily mean value, calculated on the basis of appropriate spot readings, shall exceed the relevant limit value.

(iii) Mass flow thresholds refer to a rate of discharge expressed in units of kg/h, above which the concentration emission limit value applies. Mass flow threshold rates shall be determined on the basis of a single 30 minute measurement (i.e. the concentration determined as a 30 minute average shall be multiplied by an appropriate measurement of flow and the result shall be expressed in units of kg/h).

(iv) Mass flow limits shall be calculated on the basis of the concentration, determined as an average over the specified period, multiplied by an appropriate measurement of flow. No value, so determined, shall exceed the mass flow limit value.

(v) For all other parameters, no 30 minute mean value shall exceed the emission limit value.

3.1.2 Dust deposition at Dust Sensitive Locations

(i) No value shall exceed the emission limit value.

3.2 The concentration limits for emissions to atmosphere specified in this licence shall be achieved without the introduction of dilution air and shall be based on gas volumes under standard conditions of :-

3.2.1 In the case of non-combustion gases:

Temperature 273K, Pressure 101.3 kPa (no correction for oxygen or water content).

3.2.2 In the case of combustion gases:

Temperature 273K, Pressure 101.3 kPa, dry gas; 3% oxygen for liquid and gas fuels; 6% oxygen for solid fuels.

3.3 Emission limit values for emissions to water in this licence shall be interpreted in the following way:-

3.3.1 Non-Continuous Monitoring:

(i) eight out of ten consecutive results, on the basis of 24hr flow proportionate composite sampling, shall not exceed the emission limit value. No individual daily result shall exceed 1.5 times the emission limit value.

(ii) 75% of grab samples for each monitored discharge shall not exceed the emission limit value; and no individual grab sample value shall exceed 3 times the emission limit value.

3.4 Noise

3.4.1 Noise from the activity shall not give rise to sound pressure levels ($Leq_{,30\ min.}$) measured at noise sensitive locations which exceed the limit value(s) by more than 2 dB(A).

Reason: To clarify the interpretation of emission limit values fixed under the licence.

Condition 4 Notification

4.1 The licensee shall notify the Agency by both telephone and facsimile, if available, to the Agency's Headquarters in Wexford, or to such other Agency office as may be specified by the Agency, as soon as practicable after the occurrence of any of the following:

4.1.1 Any release to atmosphere resulting in significant impairment of, or significant interference with amenities or the environment.

4.1.2 Any emission which does not comply with the requirements of this licence.

4.1.3 Any malfunction or breakdown of abatement equipment as set out in Attachment 8 of the IPC licence application which is likely to lead to loss of control of the abatement system.

4.1.4 Any incident with the potential for environmental contamination of surface water or groundwater, or posing an environmental threat to air or land, or requiring an emergency response by a Local Authority.

The licensee shall include as part of the notification, date and time of the incident, details of the occurrence, and the steps taken to minimise the emissions and avoid recurrence.

4.2 The licensee shall make a record of any incident as set out in Condition 4.1 above. The notification given to the Agency shall include details of the circumstances giving rise to the incident and all actions taken to minimise the effect on the environment and minimise wastes generated.

4.3 A summary report of reported incidents shall be submitted to the Agency as part of the AER. The information contained in this report shall be prepared in accordance with any relevant guidelines issued by the Agency.

4.4 In the case of any incident as set out in Condition 4.1.2 above which relates to discharges to water, the licensee shall notify the Southern Regional Fisheries Board as soon as practicable after such an incident.

4.5 In the event of any incident, as set out in Condition 4.1.4 having taken place, the licensee shall notify the appropriate Local Authority as soon as practicable, after such an incident

4.6 In the case of any incident, as set out in Condition 4.1.4, which has the potential to impact the conservation objectives of any NHA or SAC site having taken place, the licensee shall notify Dúchas of the Department of Arts, Heritage, Gaeltacht and the Islands as soon as practicable after such an incident.

4.7 The licensee shall as part of their AER, or more frequently as may be necessary, notify the Agency of boglands, and discharges from same, intended to be included in the subsequent years development and operational programmes.

Reason: To provide for the notification of incidents and update information on the activity.

Condition 5 Emissions to Atmosphere

5.1 No specified emission to the atmosphere shall exceed the emission limit value set out in *Schedule 1(i) Emissions to Atmosphere*, subject to Condition 3 of this licence. There shall be no other emission to the atmosphere of environmental significance.

5.2 The licensee shall within eighteen months of the date of grant of licence, conduct a feasibility study to investigate the reduction of particulate emissions from stacks A103, A104 and B101. This study shall include an environmental cost-benefit analysis, which shall quantify the optimum reduction for each stack, and propose a timeframe for implementation of the required measures.

5.3 Combustion Efficiency of boiler AB1 (Templetuohy works) shall be tested annually and results reported on annually as part of the AER.

5.4 The licensee shall ensure that all operations on-site shall be carried out in a manner such that air emissions and/or dust do not result in significant impairment of, or significant interference with amenities or the environment beyond the site boundary.

5.5 Within six months of the date of grant of the licence, the licensee shall submit to the Agency for agreement, a proposal for:

- The identification and monitoring of Dust Sensitive Locations (DSL's) on and off site for dust deposition. A report on this monitoring shall be submitted annually as part of the AER.
- Maintenance of the cyclones and grit arrestors.

5.6 Activities on-site shall not give rise to dust levels off site at any Dust Sensitive Location which exceed 350 mg/m^{2}/day. [The sampling method to be in

accordance with German TA Luft Emission Standards for Particle Deposition (IW1)].

5.7 In relation to Dust Control the licensee shall, within twelve months of the date of grant of this licence, develop, for implementation, procedures to ensure that:

- shelter belts are planted in sensitive areas,
- harvesting in sensitive areas is avoided during windy weather,
- where possible machinery use grassed pathways,
- stockpiles are sheeted where possible,
- moving machinery maintains slow speeds when travelling along dusty headlands,
- when harvesting, the jib is maintained low to the stockpile,
- shelter belts are planted around outloading facilities,
- road transported peat is adequately covered (sheeted or similar),
- wind breaks are planted wherever appropriate.

5.8 Monitoring and analyses of each emission shall be carried out as specified in *Schedule 1(ii) Monitoring of Emissions to Atmosphere* of this licence. A report on the results of this monitoring shall be submitted to the Agency on a quarterly basis.

5.9 The licensee shall not operate the briquette manufacturing plant during the last two weeks of May, and the months of June, July, and August, unless it can demonstrate by appropriate use of air dispersion modelling, or the fitting of abatement, that operation of the plant during these times will not result in any breach of Air Quality Standards.

Reason: To provide for the protection of the environment by way of control, limitation, treatment and monitoring of emissions.

Condition 6 Emissions to Water

6.1 No specified emission to water shall exceed the emission limit values set out in *Schedule 2(i) Emissions to Water* subject to Condition 3 of this licence. There shall be no other emissions to water of environmental significance.

6.2 The licensee shall within three months of the date of grant of this licence submit to the Agency for approval, a proposal for a surface water discharge monitoring location programme. This programme shall, *inter alia*, have regard to the current status of each bogland (virgin, under development, operational or worked out), sensitivity of the receiving water, status of silt pond upgrade programme. This programme shall be reviewed and revised as necessary each year as part of the AER.

6.3 The licensee shall, within six months of the date of grant of licence, present a proposal for the installation (on a long term basis) of a composite sampler to one representative discharge point within the licensed area. The proposal shall set out the rationale for selection of the nominated discharge point as well as the sampling programme. The results of this monitoring are to be reported each year as part of the AER. Any proposal to relocate the composite sampler is to be dealt with under Condition 6.2.

6.4 Monitoring and analyses of each agreed emission monitoring location shall be carried out as specified in *Schedule 2(ii) Monitoring of Emissions to Water* of this licence. A report on the results of this monitoring shall be submitted to the Agency quarterly.

6.5 A summary report of emissions to water shall be submitted to the Agency as part of the AER. The information contained in this report shall be prepared in accordance with any relevant guidelines issued by the Agency.

6.6 The licensee shall, within six months of the date of grant of licence submit to the Agency for agreement, a programme to ensure that all drainage water from all boglands in the licensed area is discharged via an appropriately designed silt pond treatment arrangement. The programme, to be implemented within a period to be agreed with the Agency, shall ensure that all discharges associated with operational boglands are prioritised. The programme shall also include measures to minimise the discharge from the briquette plant to the river Ballybeg, and include proposals to monitor both the discharge and it's impact on receiving waters.

6.7 Within three months of the date of grant of licence, the licensee shall prepare an operational procedure for de-silting of the silt ponds. The procedure shall as a minimum provide for visual inspection of all ponds on a fortnightly basis. The de-silting roster shall be based on recommendations of such visual inspection. A log of visual inspection and de-silting shall be maintained and a summary report on the de-silting programme shall be included in the AER. The licensee shall within twelve months of the date of grant of the licence demonstrate to the satisfaction of the Agency that the programme of inspection is adequate.

6.8 Silt ponds serving operational bogs shall be cleaned as a minimum twice a year, once before ditching and once before harvesting, and more frequently as inspections may dictate (refer Condition 6.7).

6.9 Within six months of the date of grant of licence, the licensee shall submit a programme, for agreement with the Agency, to upgrade the sedimentation pond treatment system. The programme shall, *inter alia*, address provision of additional ponds, weir or pipe installation (inlet and outlet), pond configuration, use of baffles, performance efficiency and frequency of de-silting. The upgrade programme, to be implemented within a period to be agreed with the Agency, shall have regard to the minimum silt pond specifications detailed in Condition 6.10.

6.10 Within three years of date of grant of this licence all existing silt ponds serving operational bogs shall achieve the following minimum performance criteria (flood periods excepted):

- Maximum flow < 10 cms^{-1},
- Silt design capacity of lagoons, minimum 50m^3 per net ha of bog serviced.

All new ponds installed shall be designed to achieve these stated minimum design criteria.

6.11 All silt ponds prone to flooding shall be de-silted by 1st November of each year. Excavated sludge shall be removed for disposal to a location outside the flood plain to be agreed with Agency.

6.12 In respect of silt control the licensee shall, within six months of the date of grant of this licence, prepare and implement procedures to ensure that:

- drainage manholes are protected and maintained free of peat,
- harrows, millers, ridgers do not drag loose peat onto manholes or into drains,
- headlands are kept clean and free of loose peat,
- drivers of bog plant do not turn short (over drains) at headlands,
- outside harrow spoons are directed away from drains,
- silt run-off while piping is prevented,
- outfalls are cleaned from the upstream direction with downstream end dammed,
- drains are ditched in dry weather,
- while ditching, outfalls are blocked and ditch towards outfall,
- outlets from field drains are blocked during stockpile loading,
- field drains adjacent to stockpiles are cleaned immediately after stockpile loading,
- adequate room is allowed for rail bed beside Peco stockpiles,
- all fields that have been milled are ridged at the end of the production season,
- all fields liable to winter flooding have been cleared of milled peat at the end of the production season,

- all new manholes and outfalls are set well back from turning grounds,
- pond outlets are sealed off during cleaning.

6.13 The licensee shall maintain a rain gauge on site and record rainfall level daily.

Reason: To provide for the protection of the environment by way of control, limitation, treatment and monitoring of emissions.

Condition 7 Waste Management

7.1 Disposal or recovery of waste shall take place only as specified in *Schedule 3(i) Hazardous Wastes for Disposal/Recovery* and *Schedule 3(ii) Other Wastes for Disposal/Recovery* of this licence and in accordance with the appropriate National and European legislation and protocols. No other waste shall be disposed of/recovered either on-site or off-site without prior notice to, and prior written agreement of, the Agency.

7.2 Waste sent off-site for recovery or disposal shall only be conveyed to a waste contractor, as agreed by the Agency, and only transported from the site of the activity to the site of recovery/disposal in a manner which will not adversely affect the environment.

7.3 A full record, which shall be open to inspection by authorised persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall as a minimum contain details of the following:

7.3.1. The names of the agent and transporter of the waste.

7.3.2. The name of the persons responsible for the ultimate disposal/recovery of the waste.

7.3.3. The ultimate destination of the waste.

7.3.4. Written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site.

7.3.5. The tonnages and EWC Code for the waste materials listed in *Schedule 3(i) Hazardous Wastes for Disposal/Recovery* and *Schedule 3(ii) Other Wastes for Disposal/Recovery* sent off-site for disposal/recovery.

7.3.6. Details of any rejected consignments.

A copy of this Waste Management record shall be submitted to the Agency as part of the AER for the site.

7.4 Within six months of the date of grant of licence, the licensee shall submit to the Agency for agreement, a proposal for identification and management of all ash and screening disposal areas. Once agreed, the proposal shall be implemented within a time-scale stipulated by the Agency.

Reason: To provide for the disposal of waste and the protection of the environment.

Condition 8 Noise

8.1 Activities on-site shall not give rise to noise levels off site at any noise sensitive location which exceed the following sound pressure limits ($Leq,_{30min}$) subject to Condition 3:

8.1.1 Daytime: 55 dB(A),

8.1.2 Night-time: 45 dB(A).

8.2 There shall be no clearly audible tonal component or impulsive component in the noise emission from the activity at any noise sensitive location.

8.3 The licensee shall carry out a noise survey of the site operations as may be required by the Agency. The licensee shall consult with the Agency on the timing, nature and extent of the survey and shall develop a survey programme to the satisfaction of the Agency. The survey programme shall be submitted to the Agency in writing at least one month before the survey is to be carried out. A record of the survey results shall be available for inspection by any authorised persons of the Agency, at all reasonable times and a summary report of this record shall be included as part of the AER when relevant.

Reason: To provide for the protection of the environment by control of noise.

Condition 9 Water Protection

9.1 Surface & Groundwater Protection

9.1.1 No potentially polluting substance or matter shall be permitted to discharge to off-site surface waters, off site storm drains or groundwaters.

9.1.2 Monitoring and analyses of each surface water discharge shall be carried out as specified in *Schedule 4 Monitoring of Workshop/Depot Surface Water Run-off* of this licence. A report on the results of this monitoring shall be submitted to the Agency quarterly.

9.1.3 In the event that any analyses or observations made on the quality or appearance of surface water runoff should indicate that contamination has taken place, the licensee shall

(i) carry out an immediate investigation to identify and isolate the source of the contamination,

(ii) put in place measures to prevent further contamination and to minimise the effects of any contamination on the environment,

(iii) and notify the Agency as soon as is practicable.

9.1.4 Within twelve months of the date of grant of licence, all tank and drum storage areas shall be rendered impervious to the materials stored therein. In addition, tank and drum storage areas shall, as a minimum

be bunded, either locally or remotely, to a volume not less than the greater of the following;

(i) 110% of the capacity of the largest tank or drum within the bunded area,

(ii) 25% of the total volume of substance which could be stored within the bunded area.

9.1.5 Drainage from bunded areas shall be diverted for collection and safe disposal.

9.1.6 The integrity and water tightness of all the bunding structures and their resistance to penetration by water or other materials stored therein shall be tested and demonstrated by the licensee to the satisfaction of the Agency and shall be reported to the Agency within eighteen months from the date of grant of this licence and every two years thereafter. A report on such tests shall be included in the AER.

9.1.7 Within twelve months of the date of grant of licence, the loading and unloading of fuel oils shall be carried out in designated areas protected against spillage and leachate run-off. While awaiting disposal, all materials shall be collected and stored in designated areas protected against spillage and leachate run-off.

9.1.8 With the exception of roof water, all surface water discharges from workshop areas shall, within twenty-four months of date of grant of this licence, be fitted with oil interceptors.

9.1.9 A maintenance/cleaning log for all oil interceptors and septic tanks shall be maintained. This log shall also record the observations made during weekly inspections of all oil interceptors and bi-annual inspections of septic tanks.

9.1.10 An inspection for leaks on all flanges and valves on over-ground pipes used to transport materials other than water shall be carried out weekly. A log of such inspection shall be maintained.

9.1.11 The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage.

9.1.12 The licensee shall maintain a log of bi-annual inspections of all rail and tractor transported fuelling units. These inspections as a minimum should record any damage or leaks or flaws in rolling stock that could result in accidental spillage.

9.2 Groundwater

9.2.1 The licensee shall within twelve months from the date of grant of this licence present a report to the Agency outlining the nature and extent of any historical waste disposal on site. This report should detail the likely effects, if any, on environmental media, and include a suitable proposal for monitoring of these effects and/or remediation of the site.

Reason: To provide for the protection of surface waters and groundwater.

Condition 10 Cutaway Bog Rehabilitation

10.1 Following termination of use or involvement of all or part of the site in the licensed activity, the licensee shall:

10.1.1 Decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.

10.1.2 Implement the agreed cutaway bog rehabilitation plan (refer Condition 10.2).

10.2 Cutaway Bog Rehabilitation Plan:

10.2.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of the cutaway boglands within the licensed area. This plan shall be submitted to the Agency for agreement within eighteen months of the date of grant of this licence.

10.2.2 The plan shall be reviewed every two years and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the written agreement of the Agency.

10.3 The Rehabilitation Plan shall include as a minimum, the following:

10.3.1 A scope statement for the plan; to include outcome of consultations with relevant Agencies, Authorities and affected parties (to be identified by the licensee).

10.3.2 The criteria which define the successful rehabilitation of the activity or part thereof, which ensures minimum impact to the environment.

10.3.3 A programme to achieve the stated criteria.

10.3.4 Where relevant, a test programme to demonstrate the successful implementation of the rehabilitation plan.

10.3.5 A programme for aftercare and maintenance.

10.4 A final validation report to include a certificate of completion for the Rehabilitation Plan, for all or part of the site as necessary, shall be submitted to the Agency within six months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.

Reason: To make provision for the proper closure of the activity ensuring protection of the environment.

Condition 11 Energy Use

11.1 The licensee shall carry out an audit of the energy efficiency of the site within one year of the date of grant of this licence. The licensee shall consult with the Agency on the nature and extent of the audit and shall develop an audit programme to the satisfaction of the Agency. The audit programme shall be submitted to the Agency in writing at least one month before the audit is to be carried out. A copy of the audit report shall be available on-site for inspection by authorised persons of the Agency and a summary of the audit findings shall be submitted as part of the Annual Environmental Report. The energy efficiency audit shall be repeated at intervals as required by the Agency.

11.2 The audit shall identify all opportunities for energy use reduction and efficiency and the recommendations of the audit will be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2.2 above.

Reason: To provide for the efficient use of energy in all site operations.

Condition 12 Monitoring

12.1 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out in Schedules:-

Schedule 1(ii) Monitoring of Emissions to Atmosphere,

Schedule 2(ii) Monitoring of Emissions to Water,

Schedule 4 Monitoring of Workshop/Depot Surface Water Run-off,

of this licence.

12.2 Where the ability to measure a parameter is affected by mixing before emission, then, with prior written agreement from the Agency, the parameter may be assessed before mixing takes place.

12.3 All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. Prior written agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.

12.4 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission or discharge.

12.5 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended with the written agreement of the Agency following evaluation of test results.

12.6 The licensee shall provide signage to clearly identify and label all emission points.

12.7 The licensee shall install on all emission points such sampling equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.

12.8 The licensee shall provide safe and permanent access to the following sampling and monitoring points:

(i) Waste storage areas on-site,

(ii) Surface and process water discharges,

(iii) Dust sampling locations,

(iv) Emission to atmosphere sampling points

and safe access to any other sampling and monitoring points required by the Agency.

Reason: To ensure compliance with the requirements of other conditions of this licence by provision of a satisfactory system of measurement and monitoring of emissions.

Condition 13 Recording and Reporting to Agency

13.1 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence.

13.2 The licensee shall record all incidents which affect the normal operation of the activity and which may create an environmental risk.

13.3 The licensee shall record all complaints of an environmental nature related to the operation of the activity. Each such record shall give details of the date and time of the complaint, the name of the complainant and give details of the nature of the complaint. A record shall also be kept of the response made in the case of each complaint. The licensee shall submit a report to the Agency, during the month following such complaints, giving details of any complaints which arise. A summary of the number and nature of complaints received shall be included in the AER.

13.4 The format of all records required by this licence shall be to the satisfaction of the Agency. Records shall be retained on-site for a period of not less than seven years and shall be available for inspection by the Agency at all reasonable times.

13.5 Reports of all recording, sampling, analyses, measurements, examinations, calibrations and maintenance as set out in *Schedule 5 Recording and*

Reporting to the Agency of this licence, shall be submitted to the Agency Headquarters as specified in this licence. The format of these reports shall be to the satisfaction of the Agency. One original and three copies shall be submitted as and when specified.

13.6 Provision shall also be made for the transfer of environmental information, in relation to this licence, to the Agency's computer system, as may be requested by the Agency.

13.7 All reports shall be certified accurate and representative by the licensee's Plant Manager or other senior officer designated by the Plant Manager.

13.8 All written procedures controlling operations affecting this licence shall be available on-site for inspection by the Agency at all reasonable times.

13.9 The frequency and scope of reporting, as set out in this licence, may be amended with the written agreement of the Agency following evaluation of test results.

Reason: To provide for the collection and reporting of adequate information on the activity.

Condition 14. Accidents and Emergency Response

14.1 The licensee shall, within six months of the date of grant of this licence, ensure that a documented Accident Prevention Policy is in place which will address the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment.

14.2 The licensee shall, within six months of the date of grant of this licence, ensure that a documented Emergency Response Procedure is in place, which shall address any emergency situation which may originate on-site. This Procedure shall include provision for minimising the effects of any emergency on the environment.

14.3 Both policies shall be reviewed annually and up-dated as necessary. These policies shall be made available on-site for inspection by the Agency at all reasonable times.

Reason: To provide for the protection of the environment.

Condition 15 Financial Provisions

15.1 Agency Charges

15.1.1 The licensee shall pay to the Agency an annual contribution of £8,503 (Euro – 10,796.58) or such sum as the Agency from time to time determines, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the

Environmental Protection Agency Act, 1992. The licensee shall in 2002 and subsequent years, not later than January 31 of each year, pay to the Agency this amount updated in accordance with changes in the Public Sector Average Earnings Indices from the date of the licence to the renewal date. The updated amount shall be notified to the licensee by the Agency. For 2001, the licensee shall pay a pro rata amount from the date of this licence to December 31 2001. This amount shall be paid to the Agency within one month of the date of grant of this licence.

Reason:	*To provide for adequate financing for monitoring and financial provisions for measures to protect the environment.*

Schedule 1(i) Emissions to Atmosphere

Emission Point Reference No.: B101

Location: Boiler House – Littleton Briquette Factory

Volume to be emitted: Maximum in any one day: 864,000 m^3

Maximum rate per hour: 36,000 m^3

Minimum discharge height: 30 m above ground

Parameter	Emission Limit Value [Note 1]
Oxides of sulphur	1000 mg/m^3
Nitrogen oxides as (NO_2)	100 mg/m^3
Particulate	400 mg/m^3

Note 1: The emission limit values do not apply during sootblowing. Sootblowing shall not occur more than twice daily, and each sootblowing period shall not last more than 30 minutes.

Emission Point Reference No.: A101 – Drier 2B stack

Location: Drying Plant

Volume to be emitted: Maximum in any one day: 836525 m^3

Maximum rate per hour: 34852 m^3

Minimum discharge height: 30 m above ground

Parameter	Emission Limit Value
Particulate	50 mg/m^3 (at mass flows>0.5kg/h)
	150 mg/m^3 (at mass flows<0.5kg/h)

Emission Point Reference No.: A102 – Drier 2A stack

Location: Drying Plant

Volume to be emitted: Maximum in any one day: 1017792 m^3

Maximum rate per hour: 42400 m^3

Minimum discharge height: 30 m above ground

Parameter	Emission Limit Value
Particulate	50 mg/m^3 (at mass flows>0.5kg/h) 150 mg/m^3 (at mass flows<0.5kg/h)

Emission Point Reference No.: A103 – Conveyor exhaust stack

Location: Drying Plant

Volume to be emitted: Maximum in any one day: 140,000 m^3

Maximum rate per hour: 5800 m^3

Minimum discharge height: 30 m above ground

Parameter	Emission Limit Value
Particulate	7 kg/hr

Emission Point Reference No.: A104 – Stemple suction stack

Location: Process House

Volume to be emitted: Maximum in any one day: 280800 m^3

Maximum rate per hour: 11700 m^3

Minimum discharge height: 10.5 m above ground

Parameter	Emission Limit Value
Particulate	6 kg/hr

Emission Point Reference No.: A105 – Press vapour suction stack

Location: Press House

Volume to be emitted: Maximum in any one day: 163123 m^3

Maximum rate per hour: 6797 m^3

Minimum discharge height: 10.5 m above ground

Parameter	Emission Limit Value
Particulate	50 mg/m^3 (at mass flows>0.5kg/h) 150 mg/m^3 (at mass flows<0.5kg/h)

Emission Point Reference No.: A106 – Vacuum exhaust stack

Location: Screens House

Volume to be emitted: Maximum in any one day: 15933 m^3

Maximum rate per hour: 660 m^3

Minimum discharge height: 10 m above ground

Parameter	Emission Limit Value
Particulate	50 mg/m^3 (at mass flows>0.5kg/h) 150 mg/m^3 (at mass flows<0.5kg/h)

Emission Point Reference No.: A108 – Drier/Cutter stack

Location: Firelighter production plant

Volume to be emitted: Maximum in any one day: 160128m^3

Maximum rate per hour: 6700 m^3

Minimum discharge height: 6 m above ground

Parameter	Emission Limit Value
Total Organic Carbon (as C)	170 mg/m^3

Schedule 1(ii) Monitoring of Emissions to Atmosphere

Emission Point Reference No.: B101

Parameter	Monitoring Frequency	Analysis Method/Technique
SOx	Annually	Flue gas analyser
NOx	Annually	Flue gas analyser
CO	Annually	Flue gas analyser
Particulates	Quarterly	Isokinetic/Gravimetric

Emission Point Reference No's.: A101, A102, A103, A104, A105, A106

Parameter	Monitoring Frequency	Analysis Method/Technique
Particulate	Quarterly	Isokinetic/Gravimetric

Emission Point Reference No.: A108

Parameter	Monitoring Frequency	Analysis Method/Technique
Total Organic Carbon (as C)	Quarterly	Flame ionisation detection

Schedule 2(i) Emissions to Water

Emission Point Reference No's.: All surface water outfalls from boglands within the site.

Location: As detailed in Section 11 and Attachment 11 of the IPC licence application form, and any additional locations as may be agreed under Condition 4.7

Parameter	Emission Limit Value
Suspended Solids	35 mg/l

Emission Point Reference No.: PW-102

Location: Discharge point to Ballybeg river

Parameter	Emission Limit Value
Suspended Solids	35 mg/l

Schedule 2(ii) Monitoring of Emissions to Water

Emission Point Reference No's.: As agreed under Condition 6.2

Parameter	Monitoring Frequency	Analysis Method/Technique
pH	Quarterly	Standard Methods
Flow	Quarterly	Agreed Method
Suspended Solids	Quarterly	Standard Methods
Total Phosphorus (as P)	Quarterly	Standard Methods
Ammonia (as N)	Quarterly	Standard Methods
Colour	Quarterly	Standard Methods
COD	Quarterly	Standard Methods

Emission Point Reference No: PW-102

Parameter	Monitoring Frequency	Analysis Method/Technique
pH	Weekly	Standard Methods
Flow	Weekly	Agreed Method
Suspended Solids	Weekly	Standard Methods
Total Phosphorus (as P)	Quarterly	Standard Methods
Ammonia (as N)	Quarterly	Standard Methods
Colour	Quarterly	Standard Methods
Oils, Fats, & Grease	Quarterly	Standard Methods
COD	Weekly	Standard Methods

Schedule 3(i) Hazardous Wastes for Disposal/Recovery

Waste Materials	Method of disposal/recovery [Notes 1, 2, 3]
Engine, gear & lube oil	Agreed hazardous waste recycling contractor.
Hydraulic Oils	Agreed hazardous waste recycling contractor.
Oil Filters	Agreed hazardous waste recycling/disposal contractor.
Used Batteries	Agreed hazardous waste recycling/disposal contractor.
Fluorescent lights	Agreed hazardous waste disposal contractor.
Empty paint cans	Agreed hazardous waste disposal contractor.
Anti- freeze liquid	Agreed hazardous waste disposal contractor.
Other [Note 3]	

Note 1: The licensee may treat, reuse, recycle or recover waste subject to the prior written agreement of the Agency.

Note 2: Any variation from those contractors named in the IPC Licence application, or subsequent agreements, must have the prior written agreement of the Agency. In cases where a previously agreed waste contractor is considered by the Agency not to exercise due care in respect of the transport and disposal of the licensee's waste, the Agency may at any time instruct the licensee to stop using this contractor.

Note 3: No other waste shall be disposed of/recovered on or off-site without prior notice to, and prior written agreement of the Agency.

Schedule 3(ii) Other Wastes for Disposal/Recovery

Waste Materials	Method of disposal/recovery [Notes 1, 2, 3]
Scrap Metal	Agreed waste recovery contractor.
Ash/Cinders	Agreed waste disposal contractor.
Settlement pond silt	Returned to bog.
Polythene covering	Agreed recycling disposal contractor.
Workshop & General domestic waste	Agreed waste disposal contractor.
Empty silicone sealant tubes	Agreed waste disposal contractor.
Empty Drums	On and off site reuse.
Used tyres	Agreed waste disposal contractor.
Septic tank sludge	Landspreading contractor to be agreed.
Lagoon sediments	Used for on site landscaping.
Drains pond sediments	Used for on site landscaping.
Peat screenings	On site disposal.
Timber/Pallets	Agreed waste disposal contractor.
Other [Note 4]	

Note 1: The licensee may treat, reuse, recycle or recover waste subject to the prior written agreement of the Agency.

Note 2: Any variation from those contractors named in the IPC Licence application, or subsequent agreements, must have the prior written agreement of the Agency. In cases where a previously agreed waste contractor is considered by the Agency not to exercise due care in respect of the transport and disposal of the licensees waste, the Agency may at any time instruct a licensee to stop using this contractor.

Note 3: Other method to be agreed with the Agency.

Note 4: No other waste shall be disposed of/recovered on or off-site without prior notice to, and prior written agreement of the Agency.

Schedule 4 Monitoring of Workshop/Depot Surface Water Run-off

Emission Point Reference No's.: All surface water discharges from workshops and depots associated with the licensed activity

Parameter	Monitoring Frequency	Analysis Method/Technique
Visual	Weekly	-
COD	Monthly	Standard Methods

Schedule 5 Recording and Reporting to the Agency

Completed reports shall be submitted to: The Environmental Protection Agency

Headquarters
Johnstown Castle Estate
Co Wexford
Ireland

or Any other address as may be specified by the Agency

Reports are required to be forwarded as set out below:

Recurring Reports:

Report	Reporting Frequency	Report Submission Date
Air emissions monitoring	Quarterly	Ten days after end of the quarter being reported on.
Surface Water (*Schedule 2(ii) and Schedule 4*)	Quarterly	Ten days after end of the quarter being reported on.
Complaints (where these arise)	Monthly	Ten days after end of the month being reported on.
Noise monitoring programme	----------	As may be required by the Agency.
Proposal for an energy efficient audit	----------	Within eleven months from the date of grant of licence and thereafter as may be required by the Agency.
Annual Environment Report(AER)	Annually	1 March of each year.

Annual Environmental Report Content	
• Emissions to air summary	• Environmental management programme - proposal
• Boiler AB1 combustion efficiency	• Environmental management programme - report
• Emissions to water summary	• Reported incidents summary
• Waste management report	• Bog development and operational programme
• Resource consumption summary	• Bog rehabilitation progress report
• Complaints summary	• Energy efficiency audit report summary
• Report on de-silting programme	• Dust deposition monitoring report
• Noise monitoring report (where required)	• Particulate emissions minimisation report
• Surface water discharge monitoring location programme	

Once-off Reports:

Report	Report Submission Date
Environmental management programme proposal	Within six months of the date of grant of licence.
Particulate abatement feasibility study (Condition 5.2)	Within eighteen months of the date of grant of licence.
Proposal for dust monitoring locations (Condition 5.5)	Within six months of the date of grant of licence.
Proposal to maintain particulate abatement equipment (Condition 5.5)	Within six months of the date of grant of licence.
Proposal for surface water monitoring locations (Condition 6.2)	Within three months of the date of grant of licence.
Proposal for composite sampling of surface water (Condition 6.3)	Within six months of the date of grant of licence.
Programme for fitting of silt ponds to all bog discharges (Condition 6.6)	Within six months of the date of grant of licence.
Upgrade of sedimentation pond treatment system (Condition 6.9)	Within six months of the date of grant of licence.
Proposal for screenings disposal (Condition 7.4)	Within six months of the date of grant of licence.
Bund integrity assessment (Condition 9.1.6)	Within eighteen months of the date of grant of licence.
Hydrogeological report (Condition 9.2.1)	Within twelve months of the date of grant of licence.
Bog rehabilitation programme (Condition 10.2)	Within eighteen months of the date of grant of licence.

Signed on behalf of the Agency

Padraic Larkin

_____

Director/Authorised Person

Dated this 17th day of August, 2001

Headquarters
P.O. Box 3000
Johnstown Castle Estate
County Wexford
Ireland

TECHNICAL AMENDMENT A
TO
IPPC LICENCE

Licence Register Number:	P0499-01
Licensee:	Bord na Móna Fuels Limited
Location of Facility:	Littleton Group c/o Littleton Briquette Factory Thurles County Tipperary

Reasons for the Decision

The Environmental Protection Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of Integrated Pollution Prevention and Control (IPPC) Licence Reg. No. P0499-01 granted on the 17th August 2001, as well as any amendments noted herein, any emissions from the activity will comply with and not contravene any of the requirements of Section 83(5) of the Environmental Protection Agency Acts, 1992 to 2012.

Technical Amendment

In pursuance of the powers conferred on it by Section 96(1)(c) of the Environmental Protection Agency Acts, 1992 to 2012, the Agency amends the licence, granted to Bord na Móna Fuels Limited, Littleton Group, c/o Littleton Briquette Factory, Thurles, County Tipperary.

Henceforth, the licence shall be read in conjunction with the amendments set out below.

This technical amendment is limited to the following Glossary of Terms, Conditions and Schedule:

Amendments

Amend Glossary of Terms as follows

Extractive waste	As defined in Regulation 3(2) of the Waste Management (Management of Waste from the Extractive Industries) Regulations, 2009.
Sanitary effluent	Wastewater from installation toilet, washroom and canteen facilities.
Trigger level	A parameter value, the achievement or exceedance of which requires certain actions to be taken by the licensee.
Waste facility	As defined in Regulation 3(2) of the Waste Management (Management of Waste from the Extractive Industries) Regulations 2009.

New and Amended Conditions

Amend Condition 6.2 of the licence to read as follows.

6.2 The licensee shall, by the 1st February 2013, submit for agreement by the Agency a proposal for a revision of the existing surface water discharge monitoring location programme. The revised programme shall have regard to the following:

(i) The current status of each bogland (virgin, under development, operational or worked out);
(ii) The sensitivity of the receiving water;
(iii) The relevant River Basin Management Plan;
(iv) The nature, magnitude and variability of the discharges;
(v) The reliability of the silt ponds control measures; and,
(vi) The status of the silt pond upgrade programme.

The revised surface water discharge monitoring location programme shall ensure that a representative selection of all surface water emission points from boglands within the licensed area is monitored annually and that all emission points are monitored at least once every five years. Surface water emission points shall be monitored as set out in Schedule 2(ii) *Monitoring of Emissions to Water* of this licence.

Add Condition 6.14 to include the following after Condition 6.13.

6.14 The licensee shall trend the monitoring results for total ammonia and determine any statistically significant relationship that exists between the results and the current status of each bogland (virgin, under development, operational or worked out), rainfall, silt pond control measures or other factors. The licensee shall report annually as part of

the AER on the trends and on any statistically significant relationship identified.

Add Condition 6.15 to include the following after Condition 6.14.

6.15 The licensee shall, by 1st February 2013, establish a suitable trigger level for total ammonia in surface water discharges. The licensee shall have in place a response programme to address the attainment or exceedence of the trigger level value. This response programme shall include the necessary actions to ensure there will be no emissions to surface water of environmental significance.

Add Condition 7.5 to include the following after Condition 7.4.

7.5 Extractive Waste Management

The licensee shall draw up a Waste Management Plan (to be known as an Extractive Waste Management Plan) for the minimisation, treatment, recovery and disposal of extractive waste. This Plan shall meet the requirements of Regulation 5 of the Waste Management (Management of Waste from the Extractive Industries) Regulations, 2009. The Plan shall be submitted for agreement by the Agency by the 31st December 2012. The Plan shall be reviewed at least once every five years thereafter in a manner agreeable to the Agency and amended in the event of substantial changes to the operation of a waste facility or to the waste deposited. Any amendments shall be notified to the Agency.

All extractive waste shall be managed in accordance with the Extractive Waste Management Plan. A report on the implementation of the Extractive Waste Management Plan shall be provided in the AER.

Add Condition 7.6 to include the following after Condition 7.5.

7.6 Waste Facility

(i) No new waste facility may be developed or an existing waste facility modified unless agreed by the Agency.

(ii) The licensee shall ensure that all existing waste facilities are managed and maintained to ensure their physical stability and to prevent pollution or contamination of soil, air, surface water or groundwater.

(iii) The licensee shall ensure that all new waste facilities are constructed, managed and maintained to ensure their physical stability and to prevent pollution or contamination of soil, air, surface water or groundwater.

(iv) Operational measures shall be continuously employed to prevent damage to waste facilities from personnel, plant or equipment.
(v) The licensee shall establish and maintain a system for regular monitoring and inspection of waste facilities.
(vi) All records of monitoring and inspection of waste facilities, as required under the licence, shall be maintained on-site in order to ensure the appropriate handover of information in the event of a change of operator or relevant personnel.

Add Condition 7.7 to include the following after Condition 7.6.

7.7 Excavation Voids

7.7.1 Unless otherwise agreed by the Agency, only extractive waste shall be placed in excavation voids.

7.7.2 When placing extractive waste into excavation voids for rehabilitation and construction purposes, the licensee shall, in accordance with Regulation 10 of the Waste Management (Management of Waste from the Extractive Industries) Regulations, 2009, and the Extractive Waste Management Plan:

(i) Secure the stability of the waste.
(ii) Put in place measures to prevent pollution of soil, surface water and ground water.
(iii) Carry out monitoring of the extractive waste and excavation void.

Add Condition 9.3 to include the following after Condition 9.2.

9.3 Sanitary Effluent

The waste water treatment system and any percolation area used for the treatment of sanitary effluent arising on–site, shall, by the 1st August 2013, satisfy the criteria set out in the '*Code of Practice: Waste Water Treatment and Disposal Systems Serving Single Houses*', published by the Environmental Protection Agency.

Amend Schedule 2(ii) Monitoring of Emissions to Water to read as follows:

Schedule 2(ii) Monitoring of Emissions to Water

Emission Point Reference No's.: As agreed under Condition 6.2

pH	Quarterly	Standard Methods
Flow	Quarterly	Agreed Method
Suspended Solids	Quarterly	Standard Methods
Total Solids	Quarterly	Standard Methods
Total Phosphorus (as P)	Quarterly	Standard Methods
Total Ammonia (as N)	Monthly [Note 1]	Standard Methods
Colour	Quarterly	Standard Methods
COD	Quarterly	Standard Methods

Note 1: The frequency of monitoring can be reduced with agreement by the Agency under Condition 12.5 of this licence.

This Technical Amendment shall be cited as Amendment A (in pursuance of Section 96(1)(c) of the EPA Acts 1992 to 2012) to IPPC Licence Register No. P0499-01.

Sealed by the Seal of the Agency on this the 25th day of September, 2012

PRESENT when the seal of the Agency was affixed hereto:

Mary Turner, Authorised Person

Headquarters
P.O. Box 3000
Johnstown Castle Estate
County Wexford
Ireland

TECHNICAL AMENDMENT B
TO
INTEGRATED POLLUTION CONTROL LICENCE

Licence Register Number:	P0499-01
Company Registration Number:	303301
Licensee:	Bord na Móna Fuels Limited
Location of Installation:	Littleton Group c/o Littleton Briquette Factory Thurles County Tipperary

Reasons for the Decision

The Environmental Protection Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of Licence Reg. No. P0499-01 granted on 17 August 2001, and amended on 25 September 2012 as well as any amendments noted herein, any emissions from the activity will comply with and not contravene any of the requirements of Section 83(5) of the Environmental Protection Agency Act 1992 as amended.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Site(s) at Lower River Suir SAC (002137) and River Barrow and River Nore SAC (002162).

The activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it can be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activity was not required.

This determination is based on the technical amendment request relating to altering the site boundary and does not involve changing any permitted discharges from the installation to surface water, ground waters, land or air and therefore will not impact the Natura 2000 sites referred to above.

Technical Amendment

In pursuance of the powers conferred on it by Section 96(1)(c) of the Environmental Protection Agency Act 1992 as amended, the Agency amends the licence, granted to Bord na Móna Fuels Limited for an installation located at Littleton Group c/o Littleton, Briquette Factory, Thurles, County Tipperary.

Henceforth, the licence shall be read in conjunction with Amendment A issued on 25 September 2012, and the amendments set out below.

This Technical Amendment is limited to the following Condition:

Amendments

Amended Condition

Amend Condition 1.4, of the licence to read as follows:

1.4 Any reference in this licence to 'site' shall mean the areas outlined in red on Drawing 2.2 of Attachment 2 in the IPC licence application, excluding the area outlined in red in the 'Site Layout Plan' in the Independent Closure Audit Report.

This Technical amendment shall be cited as Amendment B, to the licence.

Sealed by the Seal of the Agency on this the 22nd day of August, 2019

PRESENT when the seal of the Agency was affixed hereto

Tara Gillen

Tara Gillen, Authorised Person

Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Headquarters
P.O. Box 3000
Johnstown Castle Estate
County Wexford
Ireland

TECHNICAL AMENDMENT C
TO
INTEGRATED POLLUTION CONTROL LICENCE

Licence Register Number:	P0499-01
Company Registration Number:	303301
Licensee:	Bord na Móna Fuels Limited
Location of Installation:	Littleton Group c/o Littleton Briquette Factory Thurles County Tipperary

Reasons for the Decision

The Environmental Protection Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of Licence Reg. No. P0499-01 granted on 17 August 2001 and amended on 25 September 2012 and 22 August 2019 as well as any amendments noted herein, any emissions from the activity will comply with and not contravene any of the requirements of Section 83(5) of the Environmental Protection Agency Act 1992 as amended.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Sites at Galmoy Fen SAC (00185), The Loughans SAC (00040), Spahill and Clomantagh Hill SAC (000849), River Barrow and River Nore SAC (002162), Cullahill Mountain SAC (000831), Kilduff, Devilsbit Mountain SAC (000934) and Lower River Suir SAC (002137).

The activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it can be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activity was not required.

This determination is based on the technical amendment request relating to altering the licence boundary and does not involve changing any permitted emissions from the installation to surface water, ground waters, ground or air and therefore will not impact the European sites.

Technical Amendment

In pursuance of the powers conferred on it by Section 96(1)(c) of the Environmental Protection Agency Act 1992 as amended, the Agency amends the licence, granted to Bord na Móna Fuels Limited for an installation located at Littleton Group c/o Littleton, Briquette Factory, Thurles, County Tipperary.

Henceforth, the licence shall be read in conjunction with Amendment A issued on 25 September 2012 and Amendment B issued on 22 August, 2019, and the amendment set out below.

This Technical Amendment is limited to the following Condition:

Amendment

Amended Condition

Amend Condition 1.4, of the licence to read as follows:

1.4 Any reference in this licence to 'site' shall mean the areas shaded in orange on Drawing No. BNM-PT-21-02 scaled 1:80,000 dated 17 August 2021, excluding the area shaded in green.

For the avoidance of doubt, the area to be removed is the area outlined in red on Drawing No. BNM-PT-21-02 scaled 1:20,000 dated 17 August 2021 with a centre point grid reference of 622408 669709.

This Technical amendment shall be cited as Amendment C, to the licence.

Sealed by the Seal of the Agency on this the 17th day of September, 2021

PRESENT when the seal of the Agency was affixed hereto

Tara Gillen

Tara Gillen, Authorised Person

FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

APPENDIX 11

List of Projects Considered in the In Combination Assessment

Planning Ref.	Application Status	Applicant Surname	Applicant Forename	Development Description	Decision Date	Location	Appeal_Date	Appeal_Decision
11291	APPLICATION FINALISED	Killenaule Pharmacy		eight dwellings with associated works which include the demolition of buildings on site and a new site entrance	N/A	KILLENAULE	N/A	N/A
981046	APPLICATION FINALISED	Clare	Eileen	bathroom facilities and septic tank drainage system	N/A	CLONOURA	N/A	N/A
P314529	APPLICATION FINALISED	Ryan	Michael	slatted house, slatted tank, effluent tank and concrete yard	N/A	BOULICK	N/A	N/A
P314824	APPLICATION FINALISED	Fitzgerald	Sean	construction of a wall bounding an avenue entrance	N/A	CLONORA	N/A	N/A
2032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95382.W	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P310602	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P311524	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P311797	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P311824_	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P312946	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P314577.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P315486.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
p35344	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P35426	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P35971	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P36223A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P36773	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P396189	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W.P31408	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W.97743	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W.P31469	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W.P31482	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P311426	APPLICATION FINALISED	O'Connell	John	boundary walls and entrance	02-01-88	KILLENAULE	N/A	N/A
P311434	APPLICATION FINALISED	Lanigan	J	dwelling and septic tank	08-01-88	GORTNAHOE	N/A	N/A
P311439	APPLICATION FINALISED	O'Sullivan	Michael	dwelling house	15-01-88	THURLES	N/A	N/A
P311450	APPLICATION FINALISED	Wall	Anthony	septic tank and new floors to dwelling house	23-01-88	FENNOR	N/A	N/A
P311470	APPLICATION FINALISED	Holohan	John	slatted unit and silage layout	06-02-88	THURLES	N/A	N/A
P311431	APPLICATION FINALISED	Fitzpatrick	N/A	extension	09-02-88	KILLENAULE	N/A	N/A
P311465	APPLICATION FINALISED	Egan	Eamonn	bungalow and septic tank	13-02-88	GORTNAHOE	N/A	N/A
P311523	APPLICATION FINALISED	Lahert	William	calving boxes, slatted house, penned area and tank	21-03-88	GORTNAHOE	N/A	N/A
P311501	APPLICATION FINALISED	O'Connor	Catherine	bungalow	26-03-88	DUNGUIB	N/A	N/A
P311534	APPLICATION FINALISED	Neary	Joseph & Margaret	erection of bungalow and septic tank	02-04-88	URLINGFORD	N/A	N/A
P311511	APPLICATION FINALISED	Prout	Robert	dwelling	22-04-88	FENNOR	N/A	N/A
P311593	APPLICATION FINALISED	Ryan	Pat	extension and renovation	02-05-88	GLENGOOLE	N/A	N/A
P311606	APPLICATION FINALISED	Lanigan	J	demolition of existing entrance and gate lodge and erection of new entrance	07-05-88	GORTNAHOE	N/A	N/A
P311618	APPLICATION FINALISED	McCormack	Noel	bungalow, garage, entrance and septic tank	14-05-88	GLENGOOLE	N/A	N/A
P311631	APPLICATION FINALISED	Ivors	Mr & Mrs	dwelling	20-05-88	URLINGFORD	N/A	N/A
P311650	APPLICATION FINALISED	Hayes	Eamon	bungalow and septic tank	30-05-88	LURGOE	N/A	N/A
P311699	APPLICATION FINALISED	Kennedy	Pat	opening of quarry	01-07-88	THURLES	N/A	N/A
P311706	APPLICATION FINALISED	Bowe	John	extension	08-07-88	GORTNAHOE	N/A	N/A
P311707	APPLICATION FINALISED	Croughan	Gerard	bungalow	08-07-88	URARD	N/A	N/A
P311709	APPLICATION FINALISED	Egan	Eamon	bungalow	09-07-88	COOLE	N/A	N/A
P311727	APPLICATION FINALISED	Gothard	Barry	canopy, extension to garage (shop), store and replacement sign and underground tank	16-07-88	CROSSCANNC	N/A	N/A
P311725	APPLICATION FINALISED	Crowe	Timothy	dwelling, entrance and septic tank	17-07-88	CLONAMICKL	N/A	N/A
P311824	APPLICATION FINALISED	Gleeson Quarries Ltd	N/A	quarry development incl ancillary buildings and direction signs	07-09-88	MANSERGHIL	N/A	N/A
P311835	APPLICATION FINALISED	South Eastern Health B	N/A	septic tank and soakpit	17-09-88	BALLYSLOE	N/A	N/A

P311864	APPLICATION FINALISED	Codd	Francis Joseph	horse stables	02-10-88	KILLENAULE	N/A	N/A
P311900	APPLICATION FINALISED	Carroll	Joseph	single storey extension to rear of supermarket	28-10-88	KILLENAULE	N/A	N/A
P311931	APPLICATION FINALISED	Foley	John	agric shed	13-11-88	KILLENAULE	N/A	N/A
P311960	APPLICATION FINALISED	Mona Lisa Limited	N/A	provision of fingerpost sign and pole	02-12-88	GLENGOOLE	N/A	N/A
P311964	APPLICATION FINALISED	Maher	Brendan	bungalow, septic tank and entrance	03-12-88	LITTLEFIEL	N/A	N/A
P312003	APPLICATION FINALISED	Gleeson Quarries Ltd	N/A	erection of sign posts on existing public signposts	18-12-88	CASHEL	N/A	N/A
P312009	APPLICATION FINALISED	O'Dwyer	John	dwellinghouse	25-12-88	SPRINGHILL	N/A	N/A
P312158	APPLICATION FINALISED	Lanigan	M	extension to existing dwelling consisting of a self contained dwelling uint	07-04-89	CLONAMOND	N/A	N/A
P312172	APPLICATION FINALISED	Rochford	Edmond	silage walled slab, calf house, cubicles, easy feed system, slurry tank, slurry channel, silo apron, calving units, slatted house and retention of extension	14-04-89	RATHBEG	N/A	N/A
P312194	APPLICATION FINALISED	Beatty	Patrick	entrance	30-04-89	EARLSHILL	N/A	N/A
P312208	APPLICATION FINALISED	Hayes	Matthew	two dwellings	02-05-89	BALLYNONTY	N/A	N/A
P312209	APPLICATION FINALISED	Hayes	Matthew	bungalow, septic tank and garage	02-05-89	BALLYNONTY	N/A	N/A
P312233	APPLICATION FINALISED	Maher	Thomas	slatted house with tanks and silage base	19-05-89	MONSLATT	N/A	N/A
P312248	APPLICATION FINALISED	Kelly	Michael	bungalow	28-05-89	KILLENAULE	N/A	N/A
P312265	APPLICATION FINALISED	Morris	James	single storey dwelling	03-06-89	THURLES	N/A	N/A
P312270	APPLICATION FINALISED	Norton	Pat	bungalow	05-06-89	THURLES	N/A	N/A
P312310	APPLICATION FINALISED	McGarry	Gerard	bungalow and septic tank	27-06-89	URLINGFORD	N/A	N/A
P312315	APPLICATION FINALISED	Ryan	Michael	slatted easy feed shed, slurry tank, silo wall	01-07-89	GORTNAHOE	N/A	N/A
P312348	APPLICATION FINALISED	Kennedy	John	new bungalow and septic tank and out houses	16-07-89	RATHBEG	N/A	N/A
P312352	APPLICATION FINALISED	Tobin	Thomas	slatted house for cattle	18-07-89	BOULICK	N/A	N/A
P312480	APPLICATION FINALISED	Geoghan	Anthony	extension to dwelling	09-09-89	DUNGUIB	N/A	N/A
P312481	APPLICATION FINALISED	Lanigan	Pat	slig quarry	10-09-89	THURLES	N/A	N/A
P312545	APPLICATION FINALISED	Dunne	Sean	farm buildings	10-10-89	THURLES	N/A	N/A
P312556	APPLICATION FINALISED	O'Connell	Thomas	slatted shed	16-10-89	THURLES	N/A	N/A
P312567	APPLICATION FINALISED	King	Donal	2 housing sites	16-10-89	GORTNAHOE	N/A	N/A
P312599	APPLICATION FINALISED	Lanigan	Thomas, Michael and	extension to existing shed for calf house and effluent tank, also conversion of existing shed to calf house	03-11-89	POYNSTOWN	N/A	N/A
P312600	APPLICATION FINALISED	Lanigan	Thomas, Michael and	construct slurry channel and tank, extend existing shed and change of use of existing sheds to cubicle & easy feed system	03-11-89	GORTNAHOE	N/A	N/A
P312662	APPLICATION FINALISED	Lanigan	Seamus	slatted cattle shed	05-12-89	KNOCKBOY	N/A	N/A
P312712	APPLICATION FINALISED	Large	Christopher	slatted cattle shed	09-01-90	URARD	N/A	N/A
P312737	APPLICATION FINALISED	Gleeson Quarries Ltd	N/A	retention of signpost on existing public signpost	23-01-90	KNOCKAVARD	N/A	N/A
P312742	APPLICATION FINALISED	Fitzgerald	John W	farm sheds and silage pit	23-01-90	POYNSTOWN	N/A	N/A
P312770	APPLICATION FINALISED	Cantwell Engineer Ltd	N/A	erection of indicating signs	06-02-90	GRAIGUEPAU	N/A	N/A
P312825	APPLICATION FINALISED	Cahill	Michael	extension to shop and living area	21-03-90	GORTNAHOE	N/A	N/A
P312851	APPLICATION FINALISED	Crowe	Timothy	farm buildings	01-04-90	CLONAMICLO	N/A	N/A
P312878	APPLICATION FINALISED	Duggan	Patrick	septic tank	11-04-90	KNOCKBOY	N/A	N/A
P312910	APPLICATION FINALISED	Duggan	Patrick	extension to existing premises	25-04-90	KNOCKBOY	N/A	N/A
P312936	APPLICATION FINALISED	O'Dwyer	Brendan	garage extension to existing house	07-05-90	COOLDINE	N/A	N/A
P312960	APPLICATION FINALISED	O'Dwyer	John	slatted cattle house, slurry tank	14-05-90	OLDSTONE	N/A	N/A
P312958	APPLICATION FINALISED	Dunne	Richard	new office and reception extension to dwelling	14-05-90	GRAIGUE	N/A	N/A
P313087	APPLICATION FINALISED	Healy	Christy	bungalow and septic tank	10-07-90	BALLYNONTY	N/A	N/A
P312911	APPLICATION FINALISED	Healy	Sean	new house	10-07-90	BALLYNONTY	N/A	N/A
P313114	APPLICATION FINALISED	Simpson	James	erection of satellite dish for provision of racing coverage	17-07-90	KILLENAULE	N/A	N/A
P313118	APPLICATION FINALISED	Ryan	Tom	extension to house and garage	21-07-90	GORTNAHOE	N/A	N/A
P313182	APPLICATION FINALISED	Dunne	William	extersion alterations and renovations to house	07-08-90	URLINGFORD	N/A	N/A
P313154	APPLICATION FINALISED	Perry	William	workshop/store and concrete slab for car wash and foodstore	07-08-90	BALLINUNTY	N/A	N/A
P313155	APPLICATION FINALISED	Duggan	Mary	extension to dwelling	10-08-90	GARRYCLOUG	N/A	N/A

P313183	APPLICATION FINALISED	Carroll	Joseph	alterations and extension to living accommodation and new shop front	14-08-90	KILLENAULE	N/A	N/A
P313195	APPLICATION FINALISED	Feehan	Patrick	easy-feed silage layout slurry tank silage slab	24-08-90	KILLENAULE	N/A	N/A
P313219	APPLICATION FINALISED	Morris	Thomas	bungalow and septic tank	02-09-90	POYNSTOWN	N/A	N/A
P313019	APPLICATION FINALISED	Telecom Eireann	N/A	extension to telephone exchange to house toilet facilities	12-09-90	KILLENAULE	N/A	N/A
P313275	APPLICATION FINALISED	Lanigan	Margaret	cubicles slatted easy feed tank effluent tank and concrete yard	29-09-90	GORTNAHOE	N/A	N/A
P313316	APPLICATION FINALISED	Cooke	Richard	garage	13-10-90	KILLENAULE	N/A	N/A
P313321	APPLICATION FINALISED	Mulhern	Austin	bungalow and entrance	21-10-90	KILLENAULE	N/A	N/A
P313378	APPLICATION FINALISED	Treacy	Seamus	bungalow and septic tank	11-11-90	GLENGOOLE	N/A	N/A
P313364	APPLICATION FINALISED	McEvoy	Tom	new bungalow	16-11-90	BALYNONTY	N/A	N/A
P313375	APPLICATION FINALISED	Cormack	David	extension and alterations to bar and lounge	19-11-90	KILLENAULE	N/A	N/A
P313290	APPLICATION FINALISED	Glengoole Community	N/A	extension reconstruction and provision of septic tank	20-11-90	GLENGOOLE	N/A	N/A
P313386	APPLICATION FINALISED	Healy	Seamus	dwellinghouse and septic tank	20-11-90	BALLYNONTY	N/A	N/A
P313388	APPLICATION FINALISED	Ryan	John	2 no. dwellings	26-11-90	KILLENAULE	N/A	N/A
P313411	APPLICATION FINALISED	Fox	James	loose sheep house, wall silo extension. slatted beef and dairy unit, slatted tanks	11-12-90	GLENGOOLE	N/A	N/A
P313426	APPLICATION FINALISED	Doheny	Walter	bungalow, garage, septic tank and entrance gates	21-12-90	KILLENAULE	N/A	N/A
P313436	APPLICATION FINALISED	Hayes	Matthew	retention of stores	25-12-90	GORTNAHOE	N/A	N/A
P313445	APPLICATION FINALISED	Prendergast	Michael	dwelling, garage and septic tank	01-01-91	KILLENAULE	N/A	N/A
P313448	APPLICATION FINALISED	Maher	Julia	bungalow and septic tank	01-01-91	URLINGFORD	N/A	N/A
P313464	APPLICATION FINALISED	Fogarty	Joe	2 no. dwellings	08-01-91	KILLENAULE	N/A	N/A
P313474	APPLICATION FINALISED	Gortnahoe Community	N/A	new community centre	12-01-91	GORTNAHOE	N/A	N/A
P313517	APPLICATION FINALISED	McCormack	Noel	change existing building to a calf mart	11-02-91	KILLENAULE	N/A	N/A
P313520	APPLICATION FINALISED	Maher	Oliver	retention of existing lounge built on the side	11-02-91	URLINGFORD	N/A	N/A
P313523	APPLICATION FINALISED	Rafter	John	bungalow and septic tank	12-02-91	GLENGOOLE	N/A	N/A
P313525	APPLICATION FINALISED	AIB	N/A	replacing existing external signange with new signs	16-02-91	KILLENAULE	N/A	N/A
P313543	APPLICATION FINALISED	O'Meara	John	bungalow and septic tank	27-02-91	GLENGOOLE	N/A	N/A
P313585	APPLICATION FINALISED	Cantwell	Mr. and Mrs. S.	extension to dwelling	30-03-91	GRAIGUEPAU	N/A	N/A
P313727	APPLICATION FINALISED	Glasheen	Michael	septic tank, percolation area	06-05-91	COALBROOK	N/A	N/A
P313660	APPLICATION FINALISED	Maher	Dick	change of use of courthouse to furnityre and clothes shop	10-05-91	KILLENAULE	N/A	N/A
P313610	APPLICATION FINALISED	Hennessy	Sean	bedroom extension and conservatory	25-05-91	FENNOR	N/A	N/A
P313602	APPLICATION FINALISED	Cahill	Michael	two dwellings	07-06-91	GORTNAHOE	N/A	N/A
5114668	APPLICATION FINALISED	Dan and Philomena Ha	N/A	Erection of dwellinghouse and septic tank.	21-06-91	Ballyerk, Two	N/A	N/A
P313758	APPLICATION FINALISED	Barry	Gerard & Margaret	bungalow and septic tank	09-07-91	KILLENAULE	N/A	N/A
P313759	APPLICATION FINALISED	Lyons	Michael	dwelling	09-07-91	BOULICK	N/A	N/A
P313774	APPLICATION FINALISED	Lanigan	Nicholas	bungalow, garage, septic tank and entrance	15-07-91	BALLINCUR	N/A	N/A
5114746	APPLICATION FINALISED	Pat Blake	N/A	Build slatted house, a silage base and cover feeding area.	28-07-91	Ballyerk, Two	N/A	N/A
P313796	APPLICATION FINALISED	Kelly	Philip	slatted house	28-07-91	KILLENAULE	N/A	N/A
P313800	APPLICATION FINALISED	Morris	Thomas	bungalow and septic tank	30-07-91	POYNSTOWN	N/A	N/A
P313831	APPLICATION FINALISED	O'Connor	Patrick	raise roof of dwelling into dormer bungalow	13-08-91	SPRINGHILL	N/A	N/A
P313840	APPLICATION FINALISED	Roberts	Edward J.	change of use of domestic lounge to commercial lounge and extension of premises	23-08-91	URLINGFORD	N/A	N/A
P313782	APPLICATION FINALISED	Perry	William	canopy over petrol pumps and install new diesel pump	07-09-91	BALLYNONTY	N/A	N/A
P313882	APPLICATION FINALISED	Fennelly	Michael	slatted easy feed and concrete yard	08-09-91	BALLYNONTY	N/A	N/A
P313913	APPLICATION FINALISED	Stokes	George	extension to dwelling	25-09-91	GURTEEN	N/A	N/A
P313812	APPLICATION FINALISED	Shelly	Liam	bungalow and septic tank	05-10-91	KILLENAULE	N/A	N/A
P313934	APPLICATION FINALISED	Roberts	Edward	extension to domestic accommodation	05-10-91	URLINGFORD	N/A	N/A
P313928	APPLICATION FINALISED	Maher	Brendan	garage and fuel shed	03-11-91	LITTLEFIEL	N/A	N/A
P313982	APPLICATION FINALISED	Fogarty	Rita	single storey extension to dwelling	24-11-91	GLENGOOLE	N/A	N/A
P313961	APPLICATION FINALISED	Kerwick	Denis	permission for slatted cattle house and silage pit	30-11-91	BALLYNONTY	N/A	N/A
P314106	APPLICATION FINALISED	Comerford	Eamon	retention of garage, front boundary wall and recessed entrance	20-01-92	GLENGOOLE	N/A	N/A

P314128	APPLICATION FINALISED	Cahill	Michael	retention of 2 stores and garage	04-02-92	GORTNAHOE	N/A	N/A
P314141	APPLICATION FINALISED	Fitzgerald	John	slatted easy feed and tank	18-02-92	COALBROOK	N/A	N/A
5115196	APPLICATION FINALISED	PATRICK GRACE	N/A	PERMISSION TO RETAIN EXTENSION,ALTERATIONS & REPLACE SEPTIC TANK.	27-04-92	TURNPIKE	N/A	N/A
P314289	APPLICATION FINALISED	Pllard	Donal	3 new stables	12-05-92	COOLE	N/A	N/A
P314271	APPLICATION FINALISED	Codd	Frank	retention of tack room	17-05-92	DUNGUIB	N/A	N/A
5115226	APPLICATION FINALISED	MUINTIR-NA-TIRE	N/A	PERMISSION TO EXTEND EXISTING TOILET FACILITIES.	18-05-92	LITTLETON T	N/A	N/A
5115238	APPLICATION FINALISED	WILLIAM McKENNA	N/A	PROPOSED HOUSING SITE.	23-05-92	BALLYDAVID	N/A	N/A
5115246	APPLICATION FINALISED	LIAM DWYER	N/A	PERMISSION TO ERECT EXTENSION TO DWELLING.	25-05-92	BALLYDAVID	N/A	N/A
P314314	APPLICATION FINALISED	Fitzpatrick	Thomas	a dwelling and septic tank	25-05-92	GLENGOOLES	N/A	N/A
P314211	APPLICATION FINALISED	Peters	John	Extension and new entrance	30-05-92	BROOMHILL	N/A	N/A
P314319	APPLICATION FINALISED	Carroll	Denis	a dwelling, garage and septic tank	30-05-92	FENNOR	N/A	N/A
P314324	APPLICATION FINALISED	Gleeson	William	a domestic extension	31-05-92	GAILE	N/A	N/A
P314299	APPLICATION FINALISED	O'Brien	Michael	the erection of a stand	05-06-92	GORTNAHOE	N/A	N/A
P314338	APPLICATION FINALISED	Clancy	Anthony	a bungalow, garage and septic tank	05-06-92	KNOCKAVADA	N/A	N/A
P314156	APPLICATION FINALISED	O'Regan	Sean	a house and garage	13-06-92	DUNGUIB	N/A	N/A
P314356	APPLICATION FINALISED	Walsh	Bridget	a domestic extension	14-06-92	GORTNAHOE	N/A	N/A
5115305	APPLICATION FINALISED	MICHAEL HEALY	N/A	EXTENSION & CONSERVATORY TO EXISTING BUNGALOW	23-06-92	BALLYDAVID	N/A	N/A
P314394	APPLICATION FINALISED	Rochford	Edmund	silage pit, apron, conc yard, calf hse, dungstead,	29-06-92	RATHBEG	N/A	N/A
5115322	APPLICATION FINALISED	PHILIP & ANN RYAN	N/A	PERMISSION TO ERECT DWELLINGHOUSE,GARAGE & SEPTIC TANK TO REPLACE EXISTING HOUSE.	30-06-92	BALLYMUREE	N/A	N/A
P314409	APPLICATION FINALISED	Campion	& Mrs. Paraic	a bungalow, garage, septic tank & entrance gates	12-07-92	BUOLICK	N/A	N/A
P314430	APPLICATION FINALISED	Searson	Edward	to convert a garage to grocery shop	26-07-92	BALLINTOGH	N/A	N/A
P314527	APPLICATION FINALISED	Kelly	John	silage base, easy feed cow unit, slatted tanks, calving boxes, silo wall and slurry scrapers	09-08-92	KYLENAHONE	N/A	N/A
5115421	APPLICATION FINALISED	PHILIP & ANN RYAN	N/A	RETENTION OF GARAGE FOR DOMESTIC USE ONLY	25-08-92	BALLYBEG LI	N/A	N/A
P314528	APPLICATION FINALISED	Phelan	William P.	domestic extension	21-09-92	BALLYNONTY	N/A	N/A
5115467	APPLICATION FINALISED	PATRICK & SHARON LA	N/A	EXTENSION AND ALTERATIONS TO DWELLINGHOUSE	22-09-92	SHANBALLYDI	N/A	N/A
P314544	APPLICATION FINALISED	Quinlan	Noel	extension to dwelling house	29-09-92	KILCOOLEY	N/A	N/A
P314573	APPLICATION FINALISED	Avonmore Foods Plc	N/A	reconstruction of existing front boundary wall/ railing and entrance gates	30-09-92	KILLENAULE	N/A	N/A
5115500	APPLICATION FINALISED	LIAM CLOHESSY	N/A	DRESSING ROOMS & SHOWERS	06-10-92	BALLYERK TV	N/A	N/A
P314479	APPLICATION FINALISED	O'Shea	John	a bungalow and septic tank	29-11-92	BALLINASTI	N/A	N/A
P314655	APPLICATION FINALISED	Lanigan	Thomas,Ml & James	a calf shed and effluent tank	05-12-92	CLONAMOND	N/A	N/A
P314658	APPLICATION FINALISED	Maher	Thomas	underground tanks, section to haybarn, leanto and concrete yard	12-12-92	MONSLATT	N/A	N/A
P314642	APPLICATION FINALISED	Burke	Jim	a bungalow, garage, septic tank and entrance	28-12-92	SPRINGHILL	N/A	N/A
5115644	APPLICATION FINALISED	E ELY	N/A	ERECT BUNGALOW AND SEPTIC TANK	18-01-93	NEWHILL TW	N/A	N/A
P314730	APPLICATION FINALISED	Comerford	Eamon	a new bungalow and septic tank	03-02-93	GLENGOOLE	N/A	N/A
P314661	APPLICATION FINALISED	Burke	Eamon	domestic shed	21-02-93	GLENGOOLE	N/A	N/A
5115700	APPLICATION FINALISED	JIM BERGIN	N/A	PROVIDE FARMYARD ENTRANCE OFF PUBLIC ROAD	06-03-93	BALLYBEG LI	N/A	N/A
5115716	APPLICATION FINALISED	KEVIN DUNNE	N/A	BUNGALOW AND SEPTIC TANK	24-03-93	MOYNEARD	N/A	N/A
5115744	APPLICATION FINALISED	WM & PAT BLAKE	N/A	EXTEND DWELLING	11-04-93	BALLYERK	N/A	N/A
P314786	APPLICATION FINALISED	O'Connor	Donal	a dormer bungalow, garage, septic tank and entrance	18-04-93	SPRINGHILL	N/A	N/A
5115763	APPLICATION FINALISED	MARTIN COONEY	N/A	DWELLING HOUSE	25-04-93	BALLYDAVID	N/A	N/A
P314827	APPLICATION FINALISED	Purcell	Rd. & Patricia	new extension to side of dwelling and new garage	30-04-93	BALLYSLOE	N/A	N/A
P314176	APPLICATION FINALISED	Kelly	Michael	a dwellinghouse	01-05-93	DUNGUIB.	N/A	N/A
P314808	APPLICATION FINALISED	Stokes	Brendan & Ann	new Post Office and extension to existing dwelling	02-05-93	GORTNAHOE	N/A	N/A
P314775	APPLICATION FINALISED	Blackmore	John & Margaret	bungalow, garage and septic tank	03-05-93	KILLENAULE	N/A	N/A
P314848	APPLICATION FINALISED	Killenaule G.A.A. Club	N/A	ext. to pitch, dev. of pitch and putt course storage shed, covered stand, childrens playground,and boundary walls.	11-05-93	CROSSCANNC	N/A	N/A
P314868	APPLICATION FINALISED	Co. Tipperary SR V.E.C.	N/A	single storey extension to school	22-05-93	KILLENAULE	N/A	N/A

P314872	APPLICATION FINALISED	Fisher	& Mrs. Andrew	retention of existing septic tank	24-05-93	KILLENAULE	N/A	N/A
P314764	APPLICATION FINALISED	Mackey	Thomas	a new house	28-05-93	RATHROE	N/A	N/A
P314752	APPLICATION FINALISED	Carroll	Bill	bungalow and septic tank	12-06-93	KILLENAULE	N/A	N/A
P314902	APPLICATION FINALISED	Butler	Richard & Anbna	bungalow and septic tank	12-06-93	COALBROOK	N/A	N/A
P314908	APPLICATION FINALISED	Co. Tipperary SR V.E.C.	N/A	extension comprising art and crafts room	14-06-93	KILLENAULE	N/A	N/A
P314911	APPLICATION FINALISED	p.p.	J. O'Rourke,	extension to primary school	15-06-93	GORTNAHOE	N/A	N/A
P314927	APPLICATION FINALISED	Purcell	Seamus	2 bedroom extension and bathroom extension	22-06-93	COALBROOK	N/A	N/A
P314914	APPLICATION FINALISED	Johnson	Liam	extension	22-06-93	DERRICKNEW	N/A	N/A
5115852	APPLICATION FINALISED	GER COSTELLO	N/A	EXTENSION TO DWELLING	26-06-93	BALLYDAVID	N/A	N/A
P314753	APPLICATION FINALISED	Fogarty	William & Marian	dwelling house	02-07-93	GRAIGUEPAD	N/A	N/A
P314788	APPLICATION FINALISED	Roberts	Edward J.	conversion of store to dwelling, new septic tank, new entrance, glazed porch or conservatory built to gable of building	04-07-93	BALLYSLOE	N/A	N/A
P314949	APPLICATION FINALISED	O'Donnell	S. & M. & M.	bungalow, garage and septic tank	06-07-93	BALLINTOGH	N/A	N/A
5115879	APPLICATION FINALISED	JOHN BUTLER	N/A	EXTENSION TO REAR OF HOUSE	11-07-93	DERRYNAFLAI	N/A	N/A
P314953	APPLICATION FINALISED	Bourke	Kevin	entrance to dwelling	11-07-93	MONSLATT	N/A	N/A
P314971	APPLICATION FINALISED	Stokes	Brendan & Anne	retention of combined garage and fuel store and separate pump house	20-07-93	GORTNAHOE	N/A	N/A
5115929	APPLICATION FINALISED	SAMUEL BERRY/HELEN	N/A	ERECTION OF BUNGALOW, GARAGE, AND SEPTIC TANK	10-08-93	BALLYDAVID	N/A	N/A
P315003	APPLICATION FINALISED	Maher	Seamus & Aine	dormer bungalow, septic tank and garage	02-10-93	MONSLATT	N/A	N/A
5116020	APPLICATION FINALISED	MARY-&-ANNE MAGUII	N/A	FARM ENTRANCE	08-10-93	LITTLETON	N/A	N/A
P315080	APPLICATION FINALISED	Mulally	James	bungalow and septic tank	08-10-93	BALLINASTI	N/A	N/A
P314986	APPLICATION FINALISED	Slattery	William	retention of stables	10-10-93	COOLDINE	N/A	N/A
P315013	APPLICATION FINALISED	Moriarty	& Mrs. K.	extension in traditional type of kitchen, bathroom, and bedroom and septic tank	15-10-93	GORTNAHOE	N/A	N/A
P315026	APPLICATION FINALISED	Roberts	Bruce	dormer bungalow, garage, entrance and septic tank	23-10-93	KILLENAULE	N/A	N/A
P315061	APPLICATION FINALISED	Kenny	Richard	erection of bungalow, septic tank and entrance	05-11-93	GLENGOOLE	N/A	N/A
P315162	APPLICATION FINALISED	O'Donnell	S, M, & M	new gateway into field	05-11-93	KILLENAULE	N/A	N/A
P315163	APPLICATION FINALISED	Walsh	Bridget	new double garages, new boundary wall and widen entrance	05-11-93	GORTNAHOE	N/A	N/A
P315033	APPLICATION FINALISED	O'Conner	Patrick	bungalow, septic tank and entrance	09-11-93	CASTLEQUAR	N/A	N/A
P315184	APPLICATION FINALISED	Lawlor	John & Elizabeth	retention of change of use of former Parochial House to Nursing Home	19-11-93	KILLENAULE	N/A	N/A
P315175	APPLICATION FINALISED	Gleeson	Thomas	domestic extension	04-12-93	POYNSTOWN	N/A	N/A
P315199	APPLICATION FINALISED	Large	John	sheep house, farm roadway and entrance	06-12-93	GORTNAHOE	N/A	N/A
P315210	APPLICATION FINALISED	Cahill	Michael	ext to shop, reconstruct shed, provide additional petrol & diesel pumps & side entrance, relocate petrol pump & associated works	12-12-93	BALLYSLOE	N/A	N/A
5116100	APPLICATION FINALISED	NORA KENNEDY	N/A	RETAIN SEPTIC TANK AND SOAKPIT	19-12-93	COOLCROO, T	N/A	N/A
P315102	APPLICATION FINALISED	Hayes	John	dwelling house and septic tank	03-01-94	KILLENAULE	N/A	N/A
5116140	APPLICATION FINALISED	EAMONN HEALY	N/A	PRIVATE DWELLINGHOUSE	16-01-94	BALLYDAVID I	N/A	N/A
5116156	APPLICATION FINALISED	MICHAEL FAHEY	N/A	RETENTION & COMPLETION OF EXTENSION TO SIDE OF DWELLINGHOUSE	24-01-94	BALLYVINANE	N/A	N/A
P315297	APPLICATION FINALISED	Lanigan	Eamon	extension to dwellinghouse	05-02-94	GURTEEN	N/A	N/A
P315306	APPLICATION FINALISED	Lanigan	Michael	milking parlour, slatted tank and concrete aprons	14-02-94	POYNSTOWN	N/A	N/A
P315315	APPLICATION FINALISED	O'Shea	William	retention and completion of dwelling and provision of septic tank	15-02-94	KYLENAHONE	N/A	N/A
P315300	APPLICATION FINALISED	Cooper	Jacqueline	2-storey extension to rear and renovation and alterations to existing dwelling, new septic tank and percolation area	16-02-94	KILBRAUGH	N/A	N/A
P315323	APPLICATION FINALISED	Rochford	Edmond	bungalow and septic tank	20-02-94	GRAIGUEPAU	N/A	N/A
5116204	APPLICATION FINALISED	MARY MAGUIRE	N/A	THREE SPAN HAYBARN AND SHEEP HOUSE	22-02-94	BALLYBEG BA	N/A	N/A
P315293	APPLICATION FINALISED	Purcell	Margaret	sign for Bed & Breakfast	22-02-94	FENOR	N/A	N/A
P315362	APPLICATION FINALISED	Irish Bible School	N/A	erection of two directional fingerpost signs	23-03-94	GORTNAHOE	N/A	N/A
P315398	APPLICATION FINALISED	Tobin	Paddy	construction of a bungalow	10-04-94	KILLENAULE	N/A	N/A

P315411	APPLICATION FINALISED	Rochford	Edmund	change of house plan	14-04-94	GRAIGUEPAU	N/A	N/A
5116293	APPLICATION FINALISED	PHILIP RYAN	N/A	RETAIN SECOND ENTRANCE TO SITE	23-04-94	BALLYMUREEI	N/A	N/A
P315446	APPLICATION FINALISED	Glasheen	Michael	retention of porch, canopy, boiler house and block wall	03-05-94	NEW BIRMIN	N/A	N/A
P315455	APPLICATION FINALISED	Maher	Richard Anthony	new first floor living accommodation	07-05-94	KILLENAULE	N/A	N/A
P315369	APPLICATION FINALISED	Cantwell Engineering Lt	N/A	continuation of use of 2 no. directional signs	13-05-94	GRAIGUEPA	N/A	N/A
P315378	APPLICATION FINALISED	Norton	Sean	300 sow integrated pig unit, 1 dry sow/service hse, 1 farrowing hse, 1 first stage weaner hse, 2 second stage weaner hses & 3 finishing hses	14-05-94	RATHBEG	N/A	N/A
P315461	APPLICATION FINALISED	Dev.	Slieveardagh Rural	change of use to heritage centre, erection of toilt block and locker room and renovation existing building	24-05-94	KILLENAULE	N/A	N/A
P315486	APPLICATION FINALISED	O'Keeffe	J.J. Lyons/Marie	dwellinghouse, garage and septic tank	24-05-94	GORTNAHOE	N/A	N/A
5116383	APPLICATION FINALISED	NOEL ELY/PASCHALINA	N/A	REDUCE SITE AREA	04-06-94	NEWHILL	N/A	N/A
P315525	APPLICATION FINALISED	Fanning	Thomas	extension to existing dwellinghouse	07-06-94	MONSLATT	N/A	N/A
5116401	APPLICATION FINALISED	JOHN DEMPSEY	N/A	RETENTION OF EXTENSION TO HOUSE	17-06-94	BALLYDAVID	N/A	N/A
P315551	APPLICATION FINALISED	Dalton	Christy	bungalow and garage	20-06-94	KILLENAULE	N/A	N/A
P315508	APPLICATION FINALISED	Roberts	Edward J.	renovations, alterations and extension to old school house	21-06-94	GRAIGUEPAD	N/A	N/A
5116424	APPLICATION FINALISED	EAMON AND MARY RY/	N/A	RETAIN AND COMPLETE RESIDENCE	27-06-94	BALLYDAVID	N/A	N/A
P315600	APPLICATION FINALISED	Hourihane	Vincent	alteration to shop front	12-07-94	KILLENAULE	N/A	N/A
5116480	APPLICATION FINALISED	EDWARD LOUGHNANE	N/A	RETENTION OF BATHROOM AND BEDROOM EXTENSIONS	19-07-94	BALLYBEG	N/A	N/A
P315298	APPLICATION FINALISED	Chairperson	Thomas Ryan,	shelter and storage space	24-07-94	KILLENAULE	N/A	N/A
P315660	APPLICATION FINALISED	Maguire	Mary	domestic extension and minor alterations	06-08-94	BALLINONTY	N/A	N/A
5116502	APPLICATION FINALISED	CHRISTOPHER BRACKEI	N/A	EXTENSION TO HOUSE	07-08-94	BALLYMUREEI	N/A	N/A
P315697	APPLICATION FINALISED	Toomey	Joan	extension to provide porch and toilets to premises	19-08-94	KILCOOLEY	N/A	N/A
P315698	APPLICATION FINALISED	Maher	Donal	slatted house, slatted tanks, slatted dairy unit, slatted tank, silage base, silage apron and farm roadway	23-08-94	GRAIGUEMAN	N/A	N/A
P315712	APPLICATION FINALISED	Lahart	Nicholas	slatted house and slatted tank	29-08-94	KILBROUGH	N/A	N/A
P315730	APPLICATION FINALISED	Stapleton	Michael	roofed solid floor, easy-feed, milking parlour, dairy, effluent tank and concrete yard	06-09-94	MANTLEHILL	N/A	N/A
5116583	APPLICATION FINALISED	P J GRAHAM	N/A	HOUSE GARAGE AND SEPTIC TANK	21-09-94	BALLYBEG	N/A	N/A
P315725	APPLICATION FINALISED	Gothard	Barry	extension to front of existing dwelling	04-10-94	KILLENAULE	N/A	N/A
P315773	APPLICATION FINALISED	Foley	John	semi-detached bungalow and storage shed	11-10-94	KILLENAULE	N/A	N/A
P315774	APPLICATION FINALISED	Foley	Paddy	semi-detached bungalow and storage shed	11-10-94	KILLENAULE	N/A	N/A
P315787	APPLICATION FINALISED	Langton	Pat & Mary	extension to existing dwelling	24-10-94	GLENGOOLE	N/A	N/A
P315528	APPLICATION FINALISED	Lyons	Michael & Martyna	dwelling house	31-10-94	BOULICK	N/A	N/A
P315577	APPLICATION FINALISED	O'Keeffe	Bartholemew	indoor arena for equestrian use and two stable units	12-11-94	BALLINONTY	N/A	N/A
5116691	APPLICATION FINALISED	GERRY MCGOVERN	N/A	RETENTION OF DOMESTIC GARAGE	18-11-94	BALLYDAVID	N/A	N/A
P315861	APPLICATION FINALISED	Kenny	Margaret	dwelling extension and renovations	09-12-94	KILLEHEEN	N/A	N/A
5116753	APPLICATION FINALISED	JOSEPH DAVY	N/A	EXTENSION TO DWELLING	25-12-94	BALLYBEG	N/A	N/A
5116770	APPLICATION FINALISED	JIM BERGIN	N/A	SLATTED HOUSE AND RETENTION OF HAYBARN AND LEAN-TO	03-01-95	BALLYBEG	N/A	N/A
P315906	APPLICATION FINALISED	Crowe	Timothy	slatted accommodation for cows and extension to silage space and retention of hay shed and loose housing,	03-01-95	GORTNAHOE	N/A	N/A
P315957	APPLICATION FINALISED	O'Connell	Desmond Burke/A	erection of dormer bungalow, garage, septic tank and entrance	12-02-95	DERRICKNEW	N/A	N/A
P315976	APPLICATION FINALISED	Collins	Michael	extension to dwelling house and conversion to attic to living space,	14-02-95	DERRYVILLA	N/A	N/A
P315953	APPLICATION FINALISED	Troy	Padraig	slatted house for cows and accommodation for calves	15-02-95	KILLAHEEN	N/A	N/A
P315979	APPLICATION FINALISED	Kiely	John & Denis	sheep house and concrete apron,	18-02-95	GLENGOOLE	N/A	N/A
5116949	APPLICATION FINALISED	Mr Patrick Blake,	N/A	Slatted house, silage slab, isolation facilities, stables and cover holding yards	12-04-95	Ballyerk, Two	N/A	N/A
9567	APPLICATION FINALISED	Lyons	Michael & Martina	change of house plan,	15-04-95	THE CRABB	N/A	N/A
9588	APPLICATION FINALISED	Moloney	Michael & Eileen	two storey house, garage, entrance and septic tank	23-04-95	GRAYSTOWN	N/A	N/A
P315928	APPLICATION FINALISED	Maher	Michael	bungalow and septic tank,	30-04-95	CASTLEQUAR	N/A	N/A

95116	APPLICATION FINALISED	Doheny	John	slatted house, slatted tank, extension to silage, base, extension to apron and concrete apron,	08-05-95	GRAIGUEMAN	N/A	N/A
5117066	APPLICATION FINALISED	JOSEPH MORRIS	N/A	RETAIN PORCH TO FRONT OF HOUSE AND ERECT EXTENSION TO REAR	28-05-95	LISKEVEEN LIT	N/A	N/A
5117069	APPLICATION FINALISED	PATRICK J ELY	N/A	2 STOREY HOUSE AND GARAGE AND SEPTIC TANK	30-05-95	BALLYDAVID L	N/A	N/A
95190	APPLICATION FINALISED	Lahart	Maire	extension to dwelling house to provide two bedrooms	09-06-95	LURGOE	N/A	N/A
95220	APPLICATION FINALISED	Wilson	Thomas & Philomena	new entrance and road frontage fence	16-06-95	RATHBEG	N/A	N/A
9576	APPLICATION FINALISED	Williams	Reg Boardman & M	erection of bungalow, septic tank, garage/boiler house, entrance wall, boundary fencing and preserve existing cottage	19-06-95	LURGOE	N/A	N/A
5117130	APPLICATION FINALISED	EILEEN CROKE	N/A	BUILDING AN EXTENSION AND REPLACE OLD ENTRANCE AT 5 BALLYBEG	23-06-95	BALLYBEG	N/A	N/A
5117136	APPLICATION FINALISED	Centenary Co-Op	N/A	Permission for extension to existing hardware & farm requisites shop + stores.	27-06-95	Ballydavid & E	N/A	N/A
95235	APPLICATION FINALISED	Fogarty	William	extension to dwelling	27-06-95	MANSERGHSH	N/A	N/A
95239	APPLICATION FINALISED	Fitzgerald	Michael	bungalow and septic tank	27-06-95	CURRAHEEN	N/A	N/A
95109	APPLICATION FINALISED	Cahill	Mary	two storey house, garage, entrance, boundary wall and septic tank,	03-07-95	GORTNAHOE	N/A	N/A
95270	APPLICATION FINALISED	Kelly	Philip & Mary	extension to dwelling,	10-07-95	KILLENAULE	N/A	N/A
5117170	APPLICATION FINALISED	John Cummins	N/A	Slatted house & loose house for cows	10-07-95	Blackcastle	N/A	N/A
95282	APPLICATION FINALISED	Mangan	John	2 storey dwelling and septic tank,	11-07-95	BALLINCURR	N/A	N/A
95300	APPLICATION FINALISED	Tobin	Philip	domestic shed,	22-07-95	GLENGOOLE	N/A	N/A
P315885	APPLICATION FINALISED	Walsh	Laurence	retention and completion of residence, garage, septic tank, entrance way and ancillary works	30-07-95	LICKFINN	N/A	N/A
95333	APPLICATION FINALISED	Pembroke	Kevin	3-bedroom bungalow, septic tank and percolation area	01-08-95	RATHBEG	N/A	N/A
95335	APPLICATION FINALISED	Kennedy	Noel	bungalow and septic tank	01-08-95	GLENGOOLE	N/A	N/A
5117240	APPLICATION FINALISED	Anne Graham,	N/A	Permission for bungalow and septic tank	08-08-95	Ballybeg, Littl	N/A	N/A
P315363	APPLICATION FINALISED	Lanigan	Pat	retention of slig quarry	20-08-95	KILBRENNAL	N/A	N/A
95370	APPLICATION FINALISED	Jenkins	Tom & Rita	extension to existing house	22-08-95	EARLS HILL	N/A	N/A
95403	APPLICATION FINALISED	O'Meara	Danny & Majella	dormer bungalow, garage, entrance and septic tank,	13-09-95	GORTNAHOE	N/A	N/A
95410	APPLICATION FINALISED	Kerwick	Liam Ryan & Joan	bungalow, garage and septic tank,	13-09-95	EARLSHILL	N/A	N/A
95427	APPLICATION FINALISED	Co. Tipperary SR V.E.C.	N/A	3 no. demountable prefabricated classrooms,	19-09-95	KILLENAULE	N/A	N/A
95428	APPLICATION FINALISED	Co. Tipperary SR V.E.C.	N/A	2 no. demountable prefabricated classrooms, in a single building,	19-09-95	KILLENAULE	N/A	N/A
5117325	APPLICATION FINALISED	CENTENARY CO-OP	N/A	PERMISSION TO BUILD 488 SQ. M SINGLE STOREY EXTENSION TO SHOP/STORE	20-09-95	CENTENARY C	N/A	N/A
95418	APPLICATION FINALISED	Norton	Pascal	convert existing garage into two bedrooms and ensuite and extend bedroom and ensuite,	15-10-95	URLINGFORD	N/A	N/A
95455	APPLICATION FINALISED	Kennedy	Mary	slatted shed with aprons and widened entrance gate	16-10-95	BALLYNONTY	N/A	N/A
95491	APPLICATION FINALISED	Lanigan	Patrick	retention of 2 garages,	22-10-95	KILLENAULE	N/A	N/A
95494	APPLICATION FINALISED	Fitzpatrick	Thomas	2 dwellinghouses and septic tanks,	24-10-95	GLENGOOLE	N/A	N/A
5117399	APPLICATION FINALISED	William & Lucia O'Brien	N/A	EXTENSION TO DWELLINGHOUSE	28-10-95	SHANBALLY D	N/A	N/A
95505	APPLICATION FINALISED	Fanning	Martin	bungalow, entrance, garage, septic tank and percolation area,	30-10-95	KILLENAULE	N/A	N/A
95508	APPLICATION FINALISED	Barnaville	Paul & Sharon	bungalow, septic tank and percolation area,	31-10-95	FENNOR	N/A	N/A
95519	APPLICATION FINALISED	Gortnahoe Community	N/A	construction of extension to Community Hall,	05-11-95	GORTNAHOE	N/A	N/A
95395	APPLICATION FINALISED	Respond Voluntary Hou	N/A	18 dwelling units, community building and all associated site works,	14-11-95	KILLENAULE	N/A	N/A
5117435	APPLICATION FINALISED	Paul Hughes	N/A	Permission for extension	19-11-95	Ballydavid, Lit	N/A	N/A
95421	APPLICATION FINALISED	Joy	Matthew & Veronica	dormer bungalow, garage, septic tank and entrance,	19-11-95	COOLDINE	N/A	N/A
95556	APPLICATION FINALISED	Healy	Michael	single storey extension to rear of existing dwelling	20-11-95	KILLENAULE	N/A	N/A
5117451	APPLICATION FINALISED	Edward & Ann Slattery	N/A	Permission to extend existing dwellinghouse and covert attic space and retention of garage	28-11-95	Rathcunikeen	N/A	N/A
95538	APPLICATION FINALISED	Carey	John & Stasia	extension to existing dwelling and erection of a shed	09-12-95	BALLINONTY	N/A	N/A

95598	APPLICATION FINALISED	Purcell	Liam	extension to existing dwelling,	17-12-95	URLINGFORD	N/A	N/A
5117497	APPLICATION FINALISED	Donald & Deirdre Kearr	N/A	Permission for extension & retention of septic tank & shed	22-12-95	Ballybeg, Littl	N/A	N/A
95575	APPLICATION FINALISED	M.M.D.S. Television Ltd	N/A	9m pole, TV beam bender unit to retransmit M.M.D.S. TV signals & 9m receive antenna pole. Ancillary equipment and works,	08-01-96	GLENGOOLE	N/A	N/A
95574	APPLICATION FINALISED	M.M.D.S. Television Ltd	N/A	retention of 7m pole, TV beam bender unit to retransmit M.M.D.S. TV signals & 9m receive antenna pole. Ancillary equipment & works,	09-01-96	KILLENAULE	N/A	N/A
5117543	APPLICATION FINALISED	Harry Ryan	N/A	Erection of field gate	12-01-96	Ballybeg, Littl	N/A	N/A
5117549	APPLICATION FINALISED	John Fahey,	N/A	Permission for extension to house	15-01-96	Derryhogan, L	N/A	N/A
95664	APPLICATION FINALISED	Tierney	Dermot	sheep house,	19-01-96	BALLYNONTY	N/A	N/A
5117596	APPLICATION FINALISED	Jim Bergin,	N/A	Permission for bungalow and septic tank.	03-02-96	Ballybeg, Littl	N/A	N/A
5117614	APPLICATION FINALISED	Ml. & Aileen Dempsey,	N/A	Permission to retain conversion of attic, store and utility	10-02-96	Ballydavid, Lit	N/A	N/A
5117627	APPLICATION FINALISED	Joseph & Ita Clohessy	N/A	Outline Permission for house site	14-02-96	Ballybeg, Littl	N/A	N/A
5117630	APPLICATION FINALISED	Michael Walsh	N/A	Permission to demolish existing structure and erect dwellinghouse	14-02-96	Heathview Hc	N/A	N/A
95723	APPLICATION FINALISED	Lyons	John & Anne	bungalow, domestic garage and septic tank,	21-02-96	URLINGFORD	N/A	N/A
5117656	APPLICATION FINALISED	Patrick Heffernan,	N/A	Permission for bungalow and septic tank	01-03-96	Ballybeg, Littl	N/A	N/A
5117687	APPLICATION FINALISED	Michael & Liam Clohess	N/A	Permission to redevelop existing garage and service station	29-03-96	BALLYDAVID T	N/A	N/A
9644	APPLICATION FINALISED	Slattery	William	alterations and extension to dwelling and provide septic tank,	01-04-96	KILLENAULE	N/A	N/A
9671	APPLICATION FINALISED	Ryan	Joseph	extension of dwelling house,	14-04-96	BALLYNONTY	N/A	N/A
5117730	APPLICATION FINALISED	Thomas Maher,	N/A	Permission to open a Limestone Quarry to include entrance, access road, site office, septic tank, well, pump wash water lagoon and fencing.	18-04-96	Castletown, M	N/A	N/A
9690	APPLICATION FINALISED	Campion	Martin	two storey dwellinghouse and septic tank,	20-04-96	URLINGFORD	N/A	N/A
96100	APPLICATION FINALISED	Guinan	Paul & Elizabeth	bungalow, garage, septic tank, percolation area & demolish existing dwelling,	22-04-96	KILLENAULE	N/A	N/A
96104	APPLICATION FINALISED	Slattery	Andrew	bungalow, entrance and septic tank,	25-04-96	KILLENAULE	N/A	N/A
96107	APPLICATION FINALISED	Phelan	Michael	new silo pit and slatted beef unit,	26-04-96	URLINGFORD	N/A	N/A
5117749	APPLICATION FINALISED	Edward Buckley,	N/A	Permission to erect a shed for the storage of vehicles	28-04-96	Liskeveen, Litt	N/A	N/A
95711	APPLICATION FINALISED	Lanigan	Pat	stone tile cutting plant,	05-05-96	KILLENAULE	N/A	N/A
5117788	APPLICATION FINALISED	Richard Morris	N/A	Permission for extension to dwellinghouse and domestic garage.	11-05-96	3 St. Bridgets	N/A	N/A
96153	APPLICATION FINALISED	Fitzgerald	John	demolish existing dwelling and construct bungalow,	13-05-96	COALBROOK	N/A	N/A
5117809	APPLICATION FINALISED	Joe Clohessy & S. O'Dov	N/A	Permission for bungalow, septic tank	21-05-96	Ballydavid, Lit	N/A	N/A
96176	APPLICATION FINALISED	Gleeson	Mary McCahey & T.	bungalow and septic tank,	21-05-96	GORTNAHOE	N/A	N/A
96180	APPLICATION FINALISED	Stephens	John	extend and renovate dwelling,	26-05-96	KILLENAULE	N/A	N/A
9674	APPLICATION FINALISED	Manton	Caroline	dwelling, garage and septic tank	26-05-96	FENOR HILL	N/A	N/A
9695	APPLICATION FINALISED	Morgan	Patrick	conversion and change of use of existing utility room to take-away & covering existing yard to provide storage & queuing facility	01-06-96	KILLENAULE	N/A	N/A
96186	APPLICATION FINALISED	Nolan	Liam & Margaret	bungalow and entrance,	08-06-96	GORTNAHOE	N/A	N/A
96205	APPLICATION FINALISED	Codd	Frank	4 stables for horses	10-06-96	DUNGUIB	N/A	N/A
5117869	APPLICATION FINALISED	J.J.O'Sullivan,	N/A	Permission for bungalow, garage, septic tank and entrance	11-06-96	Ballydavid, Th	N/A	N/A
5117868	APPLICATION FINALISED	Benny O'Dwyer,	N/A	Permission to extend warehouse and install loading lays	11-06-96	Ballymoreen,	N/A	N/A
96177	APPLICATION FINALISED	Campion	Martin	construct store, change position petrol pumps, co struct new canopy with new forecourt, paving & ass site works,	11-06-96	GORTNAHOE	N/A	N/A
96249	APPLICATION FINALISED	Langton	Pat & Mary	garage for private use,	24-06-96	GLENGOOLE	N/A	N/A
96268	APPLICATION FINALISED	Lyons	John J & Marie	extension and garage to rear of existng dwelling,	01-07-96	GORTNAHOE	N/A	N/A
5117925	APPLICATION FINALISED	Ann St. John	N/A	Permission to retain extension and septic tank	06-07-96	Ballybeg, Littl	N/A	N/A
5117941	APPLICATION FINALISED	Edward Doherty	N/A	Permission for extension	09-07-96	Laharden, Tw	N/A	N/A
5117951	APPLICATION FINALISED	Anthony Merrigan	N/A	permission for retention of attic conversion	16-07-96	Ballybeg Little	N/A	N/A
96324	APPLICATION FINALISED	Roberts	Edward James	retention of pub sign,	22-07-96	GRAIGUEPAU	N/A	N/A

5117994	APPLICATION FINALISED	Joseph & Ita Clohessy	N/A	Permission for retention of extension to dwelling	30-07-96	18 McDonagh	N/A	N/A
5118000	APPLICATION FINALISED	Philip Ryan	N/A	Permission for erection of private garage	03-08-96	Ballymureen I	N/A	N/A
96346	APPLICATION FINALISED	O'Rourke	Daniel	permission for three bedroomed bungalow and septic tank,	03-08-96	EARLSHILL	N/A	N/A
96353	APPLICATION FINALISED	Walsh	Gerard	three bedroom house, garage and septic tank,	04-08-96	GORTNAHOE	N/A	N/A
96377	APPLICATION FINALISED	Fitzgerald	H Grant & Sean	bungalow, entrance and septic tank,	12-08-96	COALBROOK	N/A	N/A
5118031	APPLICATION FINALISED	Joseph & Ita Clohessy,	N/A	Permission for bungalow, garage, septic tank and drainage system and new entrance.	16-08-96	Ballynamona,	N/A	N/A
5118076	APPLICATION FINALISED	M. Shortall	N/A	Permission for two-storey extension	10-09-96	Ballynamona	N/A	N/A
96422	APPLICATION FINALISED	Fitzgerald	Liam & Fidelma	conversion of existing garage to two bedrooms and build separate garage,	18-09-96	KILLENAULE	N/A	N/A
5118205	APPLICATION FINALISED	Liam Fox	N/A	Loose house and effluent tank	11-11-96	Derryhogan Li	N/A	N/A
96559	APPLICATION FINALISED	Langian	Pat	phase 2 of stone tile cutting plant, offices, toilet and septic tank,	18-11-96	KILBRENNAL	N/A	N/A
5118233	APPLICATION FINALISED	Mary Martin	N/A	Convert living room in existing dwellinghouse to a hairdressing salon	26-11-96	Ballybeg, Littl	N/A	N/A
96626	APPLICATION FINALISED	Ryan	Raymond	retention of extension to dwellinghouse,	01-12-96	RATHBEG	N/A	N/A
96635	APPLICATION FINALISED	O'Brien	David & Suzanne	extension to dwelling and build new garage,	08-12-96	GORTNAHOE	N/A	N/A
96639	APPLICATION FINALISED	Pearson	Andrew & Joan	change of use from old school house to dwellinghouse,	13-12-96	CLONIMICLI	N/A	N/A
96645	APPLICATION FINALISED	Graham	James & Mary	extension to dwellinghouse,	16-12-96	BALLYNONTY	N/A	N/A
5118291	APPLICATION FINALISED	Harry Martin,	N/A	Single housing site	03-01-97	Ballybeg.	N/A	N/A
5118336	APPLICATION FINALISED	Michael and Mary Lane	N/A	Extension to dwelling and retention of utility room and garage	21-01-97	Ballydavid Litt	N/A	N/A
96711	APPLICATION FINALISED	Roche	Kevin	housing site,	04-02-97	COOLE	N/A	N/A
96730	APPLICATION FINALISED	Connolly	Patrick	three bedroomed bungalow, septic tank and percolation area,	04-02-97	FENOR	N/A	N/A
96760	APPLICATION FINALISED	Fogarty	Michael & Kim	bungalow, garage, septic tank and percolation area	22-02-97	GORTNAHOE	N/A	N/A
96774	APPLICATION FINALISED	Kenny	John & Maria	dwelling, garage, septic tank and percolation area	22-02-97	GLENGOOLE	N/A	N/A
96602	APPLICATION FINALISED	McCormack	Richard	3 no. housing sites,	28-02-97	DUNGUIB	N/A	N/A
P314523	APPLICATION FINALISED	O'Connor	Sean & Monica	a bungalow, entrance and septic tank	02-03-97	CURRAHEEND	N/A	N/A
9713	APPLICATION FINALISED	Quealy	James	bungalow, septic tank and entrance,	12-03-97	CURRAHEEND	N/A	N/A
5118434	APPLICATION FINALISED	Patrick Fitzpatrick	N/A	Extension to shop and to dwellinghouse	14-03-97	Ballybeg Little	N/A	N/A
976	APPLICATION FINALISED	Rhatigan	Hugh	retention of keg store to rear of public house,	15-03-97	KILLENAULE	N/A	N/A
96724	APPLICATION FINALISED	Egan	Michael	storeroom with a score board,	16-03-97	GORTNAHOE	N/A	N/A
9718	APPLICATION FINALISED	Meagher	Liam	a medical centre and outline permission for dwelling,	20-03-97	KILLENAULE	17-04-97	W
9721	APPLICATION FINALISED	MMDS Television Ltd.	N/A	2 no. wall mounted beam bender,broadcast antennae,one wall mounted receive antenna & ancillary related works,	20-03-97	MELLISSON	N/A	N/A
9730	APPLICATION FINALISED	Fennelly	Michael & P.	dormer bungalow	21-03-97	LANESPARK	N/A	N/A
9732	APPLICATION FINALISED	McCormack	Mary	new entrance to existing dwelling,	22-03-97	CASTLEQUAR	N/A	N/A
5118474	APPLICATION FINALISED	James Ryan	N/A	Extension to dwellinghouse	02-04-97	2 St Kevins Pa	N/A	N/A
9791	APPLICATION FINALISED	Ryan	Pat	extension to kitchen and dining area,	12-04-97	GLENGOOLE	N/A	N/A
5118532	APPLICATION FINALISED	Michael and Nora Ryan	N/A	conservatory kitchenette and entrance	27-04-97	Rathcunikeen	N/A	N/A
97147	APPLICATION FINALISED	Lanigan	Martin	retention of existing storage shed,	10-05-97	CLONAMOND	N/A	N/A
97175	APPLICATION FINALISED	Lahert	Mary	dwelling, septic tank system and entrance,	13-05-97	CROSSOGUES	N/A	N/A
5118570	APPLICATION FINALISED	William Ryan	N/A	Extension to dwelling and widen existing entrance	17-05-97	Ballybeg Little	N/A	N/A
97200	APPLICATION FINALISED	C.Heaney	David Gleeson &	residence, entrance and septic tank,	19-05-97	BALLINTOGH	N/A	N/A
97237	APPLICATION FINALISED	Bird	Denis	extension to dwelling,	02-06-97	GORTEENRAI	N/A	N/A
97210	APPLICATION FINALISED	Thurles Credit Union Lt	N/A	a sign board and change of use to office use,	03-06-97	KILLENAULE	N/A	N/A
97252	APPLICATION FINALISED	Cantwell	Simon & Ber	expansion and alterations to existing dwelling house,	09-06-97	GRAIGUPADE	N/A	N/A
5118647	APPLICATION FINALISED	Pat & Breda O'Sullivan,	N/A	Two storey dwelling, garage, septic tank and entrance	09-06-97	Garranroe, M	N/A	N/A
97281	APPLICATION FINALISED	Comerford	Shemus	two storey dwelling, septic tank, percolation area and entrance,	17-06-97	FENNOR	N/A	N/A
97336	APPLICATION FINALISED	Sweeney	Michael & E.	a bungalow, domestic garage and entrance and demolish an existing stable,	07-07-97	KILLENAULE	N/A	N/A
97214	APPLICATION FINALISED	Ellis	Jacqui	3 bedroom bungalow,	08-07-97	BURNCOURT	N/A	N/A
97299	APPLICATION FINALISED	Ruth	Fintan	bungalow, septic tank and entrance,	19-07-97	FENNOR	N/A	N/A

97329	APPLICATION FINALISED	Lanigan	Seamus	a new entrance at Coole, Gortnahoe, and permission for a effluent tank, calving house,	28-07-97	KNOCKBOY	N/A	N/A
97427	APPLICATION FINALISED	O'Gorman	James & Mary	porch and alterations to dwelling,	05-08-97	CASTLEQUAR	N/A	N/A
97498	APPLICATION FINALISED	Fitzgerald	Seamus	dwelling and septic tank	06-09-97	KILLENAULE	N/A	N/A
97404	APPLICATION FINALISED	Dunne	William	silo pit, slatted beef unit,reconstruct existing shed to easy feeding dairy system, slurry pit & machinery shed,	06-09-97	GRAIGUEPAU	N/A	N/A
97497	APPLICATION FINALISED	Barrett	Noelle	dwelling extension	07-09-97	KILLENAULE	N/A	N/A
97345	APPLICATION FINALISED	Norton	Tom	a two storey dwelling, entrance, spetic tank and percolation area,	10-09-97	GRAIGUEPAD	28-08-97	R
97620	APPLICATION FINALISED	Roche	Kevin	dwelling, septic tank and entrance	21-10-97	COOLE	N/A	N/A
97411	APPLICATION FINALISED	McCormack	John	dwellinghouse,	04-11-97	DUNGUIB HO	N/A	N/A
97655	APPLICATION FINALISED	Healy	Sean & Ann	construction of dormer type roof and other alterations to existing dwelling	08-11-97	BALLYNONTY	N/A	N/A
97671	APPLICATION FINALISED	Annette Duggan	Barry Philips &	Permission to construct bungalow and garage at Rathbeg, Gortnahoe,	18-11-97	RATHBEG	N/A	N/A
97676	APPLICATION FINALISED	Spellacy	David & Mary	constructing a dormer bungalow, garage, entrance, septic tank and associated siteworks	18-11-97	SALLYBOG	N/A	N/A
97647	APPLICATION FINALISED	Roche	Michael	conservatory to the gable of existing dwelling and retention of existing buildings at the rear of dwelling	07-12-97	FENNOR	30-12-97	C
97716	APPLICATION FINALISED	Nolan	Michael	extension to dwellinghouse	09-12-97	BALLINASTICK	N/A	N/A
97718	APPLICATION FINALISED	Meagher	Dr L	change to elevational treatment to medical centre	09-12-97	KILLENAULE	N/A	N/A
5119130	APPLICATION FINALISED	Wm. O'Brien & Lucia Cr	N/A	two-storey extension & reconstruction of existing house & provision of domestic garage	23-12-97	Shanballyduff	N/A	N/A
97793	APPLICATION FINALISED	Nolan	Willie	construction of a dwelling and septic tank	12-01-98	BALLYNASTICI	N/A	N/A
97762	APPLICATION FINALISED	Rochford	Ellen	erection of dwelling house	13-01-98	KILLENAULE	N/A	N/A
97810	APPLICATION FINALISED	Devaney	Breda & Anthony	construction of bungalow and septic tank	20-01-98	DERRYVELLA	N/A	N/A
97819	APPLICATION FINALISED	Maher	Donal	construction of new milking parlour and slatted collecting yard	23-01-98	GRAIGUEMAN	N/A	N/A
5119225	APPLICATION FINALISED	Tommy Ryan	N/A	Retain commercial garage extension to dwelling and domestic stores	11-02-98	Ballybeg Little	N/A	N/A
5119226	APPLICATION FINALISED	D Commins	N/A	retention of garage	11-02-98	Ballydavid Litt	N/A	N/A
5119272	APPLICATION FINALISED	Centenary Co-Op Crean	N/A	Erection of new grain store, drier building, storage silos, interlinking conveyors, dust collection house & site boundary fencing	05-03-98	Manselstown,	N/A	N/A
97841	APPLICATION FINALISED	Dwyer	Eamonn & Anne	extension to dwelling	13-03-98	GRAIGUE	N/A	N/A
9829	APPLICATION FINALISED	McCormack	Noel	dwellinghouse, entrance and septic tank	25-03-98	GLENGOOLE	N/A	N/A
9836	APPLICATION FINALISED	Hogan	Marie Dunne & Gerar	bungalow, septic tank, entrance and garage	03-04-98	KILLENAULE	N/A	N/A
9873	APPLICATION FINALISED	Laffan	Kevin	bungalow, entrance and septic tank	05-04-98	GORTNAHOE	N/A	N/A
5119351	APPLICATION FINALISED	Patrick Shelly	N/A	Retain hallway garage and store	08-04-98	Lahardan Twc	N/A	N/A
9887	APPLICATION FINALISED	Lahert	John	construction of two-storey dwelling	12-04-98	CROSSOGUES	N/A	N/A
9889	APPLICATION FINALISED	Hanrahan	Brian	construction of dormer dwelling, garage, septic tank and entrance	12-04-98	KNOCKAVADA	N/A	N/A
98102	APPLICATION FINALISED	Harding	Sean	bungalow, garage, entrance and septic tank	19-04-98	BOULICK	N/A	N/A
98116	APPLICATION FINALISED	Butler	Richard & Anna	private garage	24-04-98	BALLINASTICK	N/A	N/A
98130	APPLICATION FINALISED	Roberts	Eddie J	retention of toilets to existing premises	26-04-98	GRAIGUEPAU	N/A	N/A
98144	APPLICATION FINALISED	Bourke	Kevin	extension to dwelling	04-05-98	MONSLATT	N/A	N/A
98173	APPLICATION FINALISED	Kennedy	William	slatted house for cattle with bedded area	17-05-98	LICKFINN	N/A	N/A
98199	APPLICATION FINALISED	Ryan	Patrick	erection of bungalow, septic tank, percolation area and site entrance	23-05-98	DERRYVILLA	N/A	N/A
98200	APPLICATION FINALISED	McCormack	Liam	retention of diesel pump and commercial garage	24-05-98	POYNSTOWN	N/A	N/A
98201	APPLICATION FINALISED	Treacy	Seamus	construction of domestic garage	24-05-98	MELLISON	N/A	N/A
98245	APPLICATION FINALISED	Bowe	Thomas	construction of dwellinghouse, garage and septic	08-06-98	GORTNAHOE	N/A	N/A

98240	APPLICATION FINALISED	Walsh	Noel	bungalow, septic tank and entrance	16-06-98	SHANGARRY	N/A	N/A
98273	APPLICATION FINALISED	Broderick	Thomas & Emelda	bedroom extension with en-suite to existing bungalow	20-06-98	FENNOR	N/A	N/A
98289	APPLICATION FINALISED	McCarthy	Michael and Susan	construction of an extension to dwelling and construction of a new entrance and permission to change frontage to incorporate a window	23-06-98	BALLYNONTY	N/A	N/A
5119682	APPLICATION FINALISED	Helen and JJ O Sullivan	N/A	dormer bungalow entrance and septic tank	07-07-98	Ballydavid Litt	N/A	N/A
98328	APPLICATION FINALISED	Hanrahan	Brian	construction of dormer dwelling, garage, septic tank and entrance	07-07-98	KNOCKAVADA	N/A	N/A
98329	APPLICATION FINALISED	Cormack	Davy	2 storey dwelling	07-07-98	KILLENAULE	N/A	N/A
98352	APPLICATION FINALISED	O'Dwyer	John	demolition and reconstruction of extension to rear of premises and installation of shop front	14-07-98	KILLENAULE	N/A	N/A
98340	APPLICATION FINALISED	Walsh	Matthew	demolition of existing buildings and erection of a coffee shop with toilet and parking facilities	20-07-98	KILLENAULE	N/A	N/A
98214	APPLICATION FINALISED	Stokes	Brendan & Anne	retention of existing septic tank system on site	24-07-98	SALLYBOG	N/A	N/A
98416	APPLICATION FINALISED	Shankar	Rita	two dwellings, two percolation areas, two septic tanks and two entrances	04-08-98	COOLDINE	N/A	N/A
98427	APPLICATION FINALISED	Glasheen	Michael	bungalow, entrance, septic tank and garage	09-08-98	BALLINASTICK	N/A	N/A
98440	APPLICATION FINALISED	Power	Eithne Gleeson & Kevi	two-storey dwelling with site entrance and septic tank system	11-08-98	COOLE	N/A	N/A
98455	APPLICATION FINALISED	Hayes	Matthew	construction of 14 no. semi detached houses and services	17-08-98	BALLYNONTY	N/A	N/A
98477	APPLICATION FINALISED	Board of Management	N/A	new prefab classroom unit	23-08-98	GURTEEN	N/A	N/A
98501	APPLICATION FINALISED	Comerford	Seamus	erection of two storey dwelling, septic tank and entrance	29-08-98	FENNOR	N/A	N/A
98316	APPLICATION FINALISED	Roberts	Kathleen & Edward	building two storey dwelling, garage, septic tank and entrance	02-09-98	GORTNAHOE	N/A	N/A
98510	APPLICATION FINALISED	O'Meara	Danny	retention of existing dwelling, entrance and septic tank	02-09-98	SALLYBOG	N/A	N/A
98517	APPLICATION FINALISED	Lanigan	Seamus & Cora	construction of two storey dwelling, garage, septic tank and entrance	05-09-98	KNOCKBOY	N/A	N/A
98528	APPLICATION FINALISED	Ryan	Michael	one site	09-09-98	GORTNAHOE	N/A	N/A
98527	APPLICATION FINALISED	Ruttle	Michelle	construction of extension to dwelling	09-09-98	KILLENAULE	N/A	N/A
98536	APPLICATION FINALISED	Healy	Annette	construction of a porch to front of dwelling	13-09-98	CASTLEQUAR	N/A	N/A
5119885	APPLICATION FINALISED	Matthew Purcell,	N/A	dormer bungalow with ancillary sheds & garages	15-09-98	Liskeveen Roa	N/A	N/A
5119891	APPLICATION FINALISED	Michael & Catriona Col	N/A	construct extension to house	16-09-98	15, Church Vi	N/A	N/A
5119974	APPLICATION FINALISED	Edward Loughnane	N/A	extension and demolish old bathroom	09-10-98	Ballybeg Little	N/A	N/A
98573	APPLICATION FINALISED	O'Keeffe	Fr. John	to convert annexe into a lunch hall	13-10-98	NEW BERMIN	N/A	N/A
98683	APPLICATION FINALISED	Scanlon	Michael and Siobhean	bungalow, septic tank, entrance and associated site works	27-10-98	COOLDINE	N/A	N/A
98700	APPLICATION FINALISED	Carroll	Joseph	erection of a dwellinghouse, garage and associated site works	01-11-98	DUNGUIB	N/A	N/A
98716	APPLICATION FINALISED	Bourke	Kieran	dwelling and septic tank	09-11-98	DUNGUIB	N/A	N/A
98757	APPLICATION FINALISED	Johnson	Edward	dwelling house with entrance and septic tank	23-11-98	GLENGOOLE	N/A	N/A
98744	APPLICATION FINALISED	Slattery	Kevin	erection of a dwellinghouse with garage, entrance and septic tank	24-11-98	SALLYBOG	N/A	N/A
98768	APPLICATION FINALISED	Prendergast	Eleanor Maher and Ni	dwelling, garage, entrance and septic tank	29-11-98	MONSLATT	N/A	N/A
98782	APPLICATION FINALISED	Killenaule Sports Comp	N/A	extension for squash club dressingrooms	06-12-98	KILLENAULE	N/A	N/A
98688	APPLICATION FINALISED	Hayes	John	4 dwellings, 4 septic tanks and entrance	28-12-98	KILLENAULE	N/A	N/A
98842	APPLICATION FINALISED	Lahert	Patrick & Margaret	construction of extension to dwellinghouse	28-12-98	KILLENAULE	N/A	N/A
5120270	APPLICATION FINALISED	Albert Croke	N/A	Bungalow garage septic tank and entrance	08-01-99	Derryhogan Li	N/A	N/A
98888	APPLICATION FINALISED	Kelly	Oliver	extension to rear of existing dwelling	11-01-99	KNOCKAVARD	N/A	N/A
98826	APPLICATION FINALISED	Fennelly	Patrick & Judith	open agricultural entrance	12-01-99	CROSSCANNO	N/A	N/A
98902	APPLICATION FINALISED	Barnaville	John & Christine	construction of new conservatory to existing dwelling and new garage	16-01-99	URARD	N/A	N/A
98911	APPLICATION FINALISED	Wilson	Thomas	extension to dwelling	19-01-99	GORTNAHOE	N/A	N/A
98965	APPLICATION FINALISED	Maher	Dick	two storey dormer dwelling	03-02-99	KILLENAULE	N/A	N/A

5120384	APPLICATION FINALISED	Borris/St Kevins FC	N/A	(1) Dressingrooms, toilets, stores & Committee room, (2) playing fields & car park area; (3) widen existing entrance and (3) provision of septic tank	10-02-99	Newhill, Two-	N/A	N/A
5120386	APPLICATION FINALISED	John Lahart,	N/A	two housing sites, septic tanks and entrances	14-02-99	Ballybeg, Littl	N/A	N/A
98994	APPLICATION FINALISED	Harding	Pat	construction of dwelling, garage, entrance, septic tank and entrance	15-02-99	LICKFINN	N/A	N/A
5120395	APPLICATION FINALISED	Liam & Bridie Dwyer,	N/A	extend dwelling	17-02-99	Ballydavid, Lit	N/A	N/A
9911	APPLICATION FINALISED	Houlihan	Jim	reconstruction to front elevation	01-03-99	KILLENAULE	N/A	N/A
5120448	APPLICATION FINALISED	Paul Hughes,	N/A	Change use of existing garage to use as workshop & sales depot	03-03-99	Ballydavid, Lit	N/A	N/A
5120449	APPLICATION FINALISED	Paul Hughes,	N/A	Provide new entrance ro replace existing	03-03-99	Ballydavid, Lit	N/A	N/A
98727	APPLICATION FINALISED	Phelan	Thomas	construction of 2 no. dwellings, each with separate septic tank and percolation area and 1 no. double entrance	07-03-99	FENNOR	N/A	N/A
992	APPLICATION FINALISED	O'Connell	Michael & Maura	erection of a bungalow and entrance	07-03-99	KILLENAULE	N/A	N/A
5120468	APPLICATION FINALISED	Liam Kearney	N/A	Dormer bungalow, entrance, septic tank and associated site works	14-03-99	Ballybeg, Littl	N/A	N/A
995	APPLICATION FINALISED	Comerford	Shemus	erection of a domestic garage to side of dwelling	17-03-99	FENNOR	N/A	N/A
9964	APPLICATION FINALISED	Healy	Seamus	retention of kitchen, patio and access to same	28-03-99	KILLENAULE	N/A	N/A
9967	APPLICATION FINALISED	Hayes	Brendan	bungalow, septic tank system and garage	28-03-99	KILLENAULE	N/A	N/A
9969	APPLICATION FINALISED	Duggan	Mary	extension and reconstruction to dwelling	28-03-99	FENNOR	N/A	N/A
98983	APPLICATION FINALISED	McCormack	Mary	twenty dwelling houses, garages and associated site works	31-03-99	KILLENAULE	N/A	N/A
9952	APPLICATION FINALISED	Meagher	Dr. Lucia Gannon and	erection of a house	07-04-99	KILLENAULE	N/A	N/A
5120556	APPLICATION FINALISED	Richard & Margaret Mi	N/A	bungalow, septic tank & percolation area, domestic garage & all necessary site works & entrance	08-04-99	Ballydavid, Lit	N/A	N/A
98950	APPLICATION FINALISED	Cummins	Laurence	construction of bungalow with puraflow liquid effluent treatment system and entrance	08-04-99	FENNOR	N/A	N/A
9998	APPLICATION FINALISED	Purcell	Brid	dwelling, garage, septic tank and entrance	08-04-99	LURGOE	N/A	N/A
99113	APPLICATION FINALISED	O'Keeffe	Jimmy	demolition of existing kitchen and bathroom extension and construction of new extension	11-04-99	COOLE	N/A	N/A
99120	APPLICATION FINALISED	Ryan	Michael	bungalow, garage, entrance and septic tank	11-04-99	COOLQUILL	N/A	N/A
9983	APPLICATION FINALISED	Rochford	Ellen	lock up garage	14-04-99	PIKE STREET, I	N/A	N/A
99139	APPLICATION FINALISED	Foley	Patrick	one house site	17-04-99	KILLENAULE	N/A	N/A
5120654	APPLICATION FINALISED	Mrs. Anne Daly,	N/A	House, septic tank and percolation area	04-05-99	Cooleeney, M	N/A	N/A
99239	APPLICATION FINALISED	Lawlor	Lilly	two stables and store	11-05-99	KILLENAULE	N/A	N/A
99273	APPLICATION FINALISED	Bourke	Jim	domestic garage and retention of bungalow and porch in present position	18-05-99	SPRINGHILL	N/A	N/A
5120711	APPLICATION FINALISED	Michael & Mary Power	N/A	Housing site with entrance & septic tank waste system	21-05-99	Clooncleagh, '	N/A	N/A
5120719	APPLICATION FINALISED	Seamus & Alice Corbett	N/A	Extension to dwelling	22-05-99	7 St. Brigid's T	N/A	N/A
5120728	APPLICATION FINALISED	James McLoughney & P	N/A	Bungalow type dwelling, septic tank & entrance	24-05-99	Coldfields, Th	N/A	N/A
98963	APPLICATION FINALISED	Maher	Dick	convertion of existing commercial premises to a restaurant, parking facility and associated site works	28-05-99	KILLENAULE	N/A	N/A
99302	APPLICATION FINALISED	Carroll	Joseph	dwellinghouse, garage and associated site works	28-05-99	KILLENAULE	N/A	N/A
5120761	APPLICATION FINALISED	John & Catherine Laher	N/A	Single storey dwelling bungalow, septic tank, new driveway entrance & associated site works	05-06-99	Ballybeg, Littl	N/A	N/A
5120779	APPLICATION FINALISED	Thomas O' Dwyer	N/A	To extend dwellings at rear, and shop at front	06-06-99	12 Mc Donagl	N/A	N/A
9917	APPLICATION FINALISED	Booth	Robert	extension of out-buildings for extra stables and kennels and a new roof over the existing buildings in conjunction with the proposed extension	06-06-99	EARLSHELL	05-07-99	C
99334	APPLICATION FINALISED	Burke	Eamonn	bungalow with septic tank and percolation area	06-06-99	COOLDINE	N/A	N/A
9992	APPLICATION FINALISED	Norton	Sean	proposed extension to 3 no. houses on site and retention of 1 no. house on site, retention of modifications and extensions of 7 no. houses	07-06-99	RATHBEG	N/A	N/A

99287	APPLICATION FINALISED	Gleeson	Christina Gleeson and	two storey dwelling, septic tank and entrance	08-06-99	BALLINTOGHE	N/A	N/A
99359	APPLICATION FINALISED	O'Mahoney	John and Adele	extension to dwelling	08-06-99	BALLYNASTICI	N/A	N/A
99241	APPLICATION FINALISED	Boland	Dick & Rita	bungalow and entrance, agricultural storage shed and septic tank	18-06-99	KILLENAULE	N/A	N/A
99433	APPLICATION FINALISED	Curran	B McNamara & J	bungalow, storage shed, septic tank and entrance	22-06-99	RATHBEG	N/A	N/A
99435	APPLICATION FINALISED	Ryan	Liam & Joan	development of attic and fit dormer windows to dwelling	22-06-99	EARLSHILL	N/A	N/A
5120875	APPLICATION FINALISED	Fergus Moore	N/A	Dwelling, garage, entrance & septic tank.	29-06-99	Killoran, Moyı	N/A	N/A
5120906	APPLICATION FINALISED	Sean & Elizabeth Ryan	N/A	Two-storey dwelling with entrance, garage, septic tank & associated works.	06-07-99	Parkstown, Hı	N/A	N/A
99484	APPLICATION FINALISED	Bartley	Michael & Monica	dormer bungalow, garage, entrance and septic tank	06-07-99	GRAIGUEPAU	N/A	N/A
99338	APPLICATION FINALISED	Miskella	Joe	bungalow, entrance and septic tank	17-07-99	COOLE, GORT	N/A	N/A
99562	APPLICATION FINALISED	Foley	Patrick	dwelling and entrance	20-07-99	BOHERLUG	N/A	N/A
5120983	APPLICATION FINALISED	Gordon & Treacy Ryan	N/A	Two storey house, new entrance, septic tank & associated works.	24-07-99	Parkstown, Hı	N/A	N/A
99573	APPLICATION FINALISED	Rigney	Jeremiah	bungalow, septic tank and entrance	25-07-99	MARDYKE	N/A	N/A
99584	APPLICATION FINALISED	Boland	Ann Marie McGuire &	single storey dwelling, domestic garage, entrance and septic tank waste system	27-07-99	GLENGOOLE S	N/A	N/A
99610	APPLICATION FINALISED	Brennan	Sinead	dwelling house, garage, septic tank system and entrance	02-08-99	DERRYVELLA	N/A	N/A
99640	APPLICATION FINALISED	Norton	Sean	construction of new open silage pit with conversion of existing three bay straw bedded shed to slatted beef unit incorporating two bay extension to slatted shed	09-08-99	RATHBEG	N/A	N/A
99645	APPLICATION FINALISED	Kelly	Michael	dwelling, garage, entrance and septic tank	10-08-99	DUNGUIB	N/A	N/A
99647	APPLICATION FINALISED	Kelly	Michael	dwelling, entrance and septic tank	10-08-99	DUNGUIB	N/A	N/A
98815	APPLICATION FINALISED	Cooper-Joyce	Louise	rear entrance to existing house	20-08-99	KILBRENNAL	N/A	N/A
99414	APPLICATION FINALISED	Clancy	Sean & Mary	two houses	21-08-99	GLENGOOLE M	N/A	N/A
99683	APPLICATION FINALISED	Kelly	John	extension to cubicle house which includes milking parlour dairy and holding areas, to build hayshed and provision of new entrance and access road for animals	23-08-99	KNOCKABRITT	N/A	N/A
99847	APPLICATION FINALISED	Boland	Barry	extension and reconstruction of dwelling, installation of septic tank and construction of entrance	26-08-99	KNOCKAVADA	N/A	N/A
99712	APPLICATION FINALISED	Ryan	Mary & Laurance	construction of a two-storey dwelling, garage, septic tank, entrance	27-08-99	BUOLICK	N/A	N/A
99466	APPLICATION FINALISED	Shankar	Rita	1 no. dwellings, entrances and percolation areas	29-08-99	COOLDINE	N/A	N/A
99731	APPLICATION FINALISED	Campion	John	dwelling, garage, entrance and septic tank	01-09-99	COOLE	N/A	N/A
99428	APPLICATION FINALISED	Carroll	Redmond	erection of three dwellinghouses with septic tanks, puraflo systems and associated site works	06-09-99	KILLENAULE	N/A	N/A
99762	APPLICATION FINALISED	Healy	Seamus & Michelle	erection of a dwelling, garage, septic tank system and entrance	08-09-99	KILBRANNEL	N/A	N/A
5121167	APPLICATION FINALISED	Patrick Ryan	N/A	25 no. detached 2 storey dwellings, new road, entrance and associated site works	11-09-99	Ballybeg (New	N/A	N/A
5121230	APPLICATION FINALISED	Joseph Kearney	N/A	Dwelling, site entrance, septic tank, garage and stables	27-09-99	Galbooly Little	N/A	N/A
5121256	APPLICATION FINALISED	Eugene Walsh,	N/A	Housing site with entrance and septic tank system	02-10-99	Manselstown,	N/A	N/A
99508	APPLICATION FINALISED	Campion	Martin	demolition of derelict dwelling and construction of new dwelling with septic tank and percolation area	03-10-99	FENNOR	N/A	N/A
99778	APPLICATION FINALISED	Waugh	Jimmy	extension to bar and car parking facilities	03-10-99	KILCOOLEY AE	N/A	N/A
99865	APPLICATION FINALISED	White	Edward & Mary	extension to dwelling	04-10-99	LITTLEFIELD	N/A	N/A
5121288	APPLICATION FINALISED	Anthony & Jennifer Gra	N/A	To construct a house, septic tank & and entrance.	10-10-99	Ballybeg, Little	N/A	N/A
99919	APPLICATION FINALISED	English	Gerard	retention as built, alterations and extensions to dwelling and also permission for retention of garage, entrance and site works at	19-10-99	CLONOURA	N/A	N/A
99917	APPLICATION FINALISED	Blackmore	Robin & Heather	extension of dwellinghouse, erection of storage shed and retention of rear entrance	19-10-99	KILLENAULE	N/A	N/A
99859	APPLICATION FINALISED	Fennelly	Mary	construction of bungalow, entrance and septic tank	23-10-99	LANESPARK	N/A	N/A
5121386	APPLICATION FINALISED	Mal Lanigan	N/A	Dormer bungalow and reconstruct existing entrance	31-10-99	Borris, Two-M	N/A	N/A

5121394	APPLICATION FINALISED	J. J. and Linda Kearney	N/A	extension to dwelling	01-11-99	No 17 Church	N/A	N/A
99990	APPLICATION FINALISED	Phelan	Siobhan Tobin & Richa	dwelling, garage, entrance and septic tank	09-11-99	GRAIGAMAN	N/A	N/A
99989	APPLICATION FINALISED	Houlihan	Frank & Josephine	extension to dwelling and construction of entrance wall	09-11-99	MELLISON	N/A	N/A
5121454	APPLICATION FINALISED	Benny Quinn	N/A	Extend house	16-11-99	Ballydavid, Lit	N/A	N/A
991021	APPLICATION FINALISED	Harding	Pat	alterations to existing dwelling and construction of an extension to dwelling	20-11-99	LICKFINN	N/A	N/A
5121494	APPLICATION FINALISED	Bernadette Masterson	N/A	Construct an extension	29-11-99	9 St. Bridgets	N/A	N/A
5121500	APPLICATION FINALISED	Thomas & Rachel Meag	N/A	Construct two storey dwelling and septic tank	30-11-99	Ballymoreen,	N/A	N/A
5121501	APPLICATION FINALISED	Oliver Maxwell & Olivia	N/A	Construct bungalow with entrance, septic tank and associated site works	30-11-99	Parkstown, H	N/A	N/A
991090	APPLICATION FINALISED	Maguire	Pat & Angela	demolition of existing dwelling and for construction of dwelling, septic tank system including associated site works	07-12-99	BALLYNONTY	N/A	N/A
5121553	APPLICATION FINALISED	Pierce Duggan	N/A	construct 35 houses, connecting to existing sewer and water new road entrance and associated site works	17-12-99	Two-Mile-Bor	N/A	N/A
991136	APPLICATION FINALISED	Heffernan	Denis & Sadie	retention of extension and septic tank	18-12-99	GLENGOOLE	N/A	N/A
991109	APPLICATION FINALISED	Slattery	Mary	proposed attic conversion to dwelling	25-12-99	COOLDINE	N/A	N/A
991171	APPLICATION FINALISED	O'Meara	John	extension to dwellinghouse	26-12-99	POYNSTOWN	N/A	N/A
99807	APPLICATION FINALISED	Warren	Joe & Ann	refurbishment and extension of existing public house and all ancillary works	26-12-99	BALLINUNTY	N/A	N/A
5121585	APPLICATION FINALISED	Timothy Flynn	N/A	Dwellinghouse, garage, septic tank and entrance	27-12-99	Garrenroe, Th	N/A	N/A
991030	APPLICATION FINALISED	O'Dwyer	Joseph & Philomena	erection of a dwelling house with entrance septic tank and garage	01-01-00	CROSSCANNC	N/A	N/A
991203	APPLICATION FINALISED	Hogan	Gerard	two house sites	03-01-00	CLONAMICKL	N/A	N/A
5121628	APPLICATION FINALISED	William and Elizabeth C	N/A	extension to rear of dwelling	04-01-00	16 Churchvie	N/A	N/A
991215	APPLICATION FINALISED	Holohan	John	extension and renovation of dwelling	04-01-00	FOILACAMIN	N/A	N/A
991235	APPLICATION FINALISED	Quinlan	Nicholas & Brid	construction of dwelling, domestic garage, entrance and septic tank	11-01-00	CROSSOGES	N/A	N/A
5121671	APPLICATION FINALISED	Donal O'Mahony,	N/A	house, entrance and septic tank	16-01-00	Piercestown,	N/A	N/A
991259	APPLICATION FINALISED	Hayes	John	carrying out site works to include provision of an access road, removing and recessing boundary fence, provision of site services and lighting	18-01-00	KILLENAULE	N/A	N/A
5121693	APPLICATION FINALISED	Christina Maher and Gr	N/A	Two-storey dwellinghouse, sewerage treatment and entrance	22-01-00	Borris, Two-M	N/A	N/A
991295	APPLICATION FINALISED	Kirby	Mr. & Mrs	extension of single-storey cottage, new septic tank, site entrance and associated site works	25-01-00	RATHBEG	N/A	N/A
991289	APPLICATION FINALISED	Doheny	Breda Butler & Seamu	dwelling, domestic garage, entrance and septic tank	25-01-00	GRAIGAMAN	N/A	N/A
991317	APPLICATION FINALISED	Tipperary VEC	N/A	construction of a free standing PE Hall with ancillary accommodation and associated external works	01-02-00	KNOCKEENSH	N/A	N/A
991325	APPLICATION FINALISED	Fitzgerald	Anna	dwelling, garage, entrance and septic tank	02-02-00	BALLYNASTICI	N/A	N/A
5121744	APPLICATION FINALISED	Surestone Construction	N/A	15 no. two storey houses, garages, entrance and associated site works	02-02-00	Borris, Two-M	N/A	N/A
991288	APPLICATION FINALISED	Cormack	Kathleen	retention of dwelling in its present position (planning permission 98/329) and entrance from adjoining housing scheme	03-02-00	KILLENAULE	N/A	N/A
991343	APPLICATION FINALISED	Brennan	James & Bridget	construction of dormer dwelling, garage, entrance, septic tank and percolation area	07-02-00	GLENGOOLE	N/A	N/A
991354	APPLICATION FINALISED	Nolan	Michael	retention of domestic garage, utility room and conversion of garage to bedroom	09-02-00	MELLISSON	N/A	N/A
99871	APPLICATION FINALISED	Walsh	Laurence	bungalow-type house and entrance	09-02-00	KILLENAULE	N/A	N/A
991410	APPLICATION FINALISED	McCormack	Mary	erection of dwellinghouse, garage and entrance	20-02-00	KILLENAULE	14-03-00	C
991409	APPLICATION FINALISED	McCormack	Mary	erection of dwelling house, garage, septic tank system and entrance	20-02-00	CASTLEQUAR	14-03-00	R
991408	APPLICATION FINALISED	McCormack	Mary	opening a new field gate and passageway on lands	20-02-00	KILLENAULE	14-03-00	C

991440	APPLICATION FINALISED	Fitzgerald	Thomas	retention of garage, storage building	22-02-00	EARLSHILL	N/A	N/A
991439	APPLICATION FINALISED	Lyons	John	building dwelling, domestic garage, entrance and septic tank	22-02-00	CASTLEQUAR	N/A	N/A
991431	APPLICATION FINALISED	Bord na Mona Fuels Ltc	N/A	retention of extension for fire lighter manufacturer and storage and bund area	22-02-00	LANESPARK	N/A	N/A
991091	APPLICATION FINALISED	Heffernan	Brid Langton & Denis	dormer bungalow, septic tank, entrance and workshop	28-02-00	GLENGOOLE S	N/A	N/A
991112	APPLICATION FINALISED	Gortnahoe Community	N/A	retention of rear store to hall and full planning permission for construction of new extension comprising of stage extension, new dressing room and toilets including modifications to the existing community hall	06-03-00	GORTNAHOE	N/A	N/A
14	APPLICATION FINALISED	O'Donnell	Michael	erection of one dwellinghouse, garage, septic tank system and entrance	07-03-00	BALLINTOGHE	N/A	N/A
13	APPLICATION FINALISED	O'Donnell	Michael	erection of one dwellinghouse, garage, septic tank with puraflo system and entrance	12-03-00	BALLINTOGHE	10-04-00	R
5121872	APPLICATION FINALISED	John Foley and Norma I	N/A	Two-storey dwellinghouse with garage, entrance, septic tank, percolation and associated site works	12-03-00	Parkstown, Hc	N/A	N/A
5121910	APPLICATION FINALISED	Michael Kennedy	N/A	Construction of two-storey dwellinghouse, separate garage, site entrance and septic tank system - granted 5/1/01	25-03-00	Ballybeg, Ball	N/A	N/A
991065	APPLICATION FINALISED	Healy	Michael	housing site, entrance and septic tank waste system	26-03-00	LANESPARK	N/A	N/A
991243	APPLICATION FINALISED	Comerford	Philip	erection of dwellinghouse and construction of septic tank	02-04-00	FENNOR	N/A	N/A
5121959	APPLICATION FINALISED	Philip and Teresa Ryan	N/A	Bungalow, garage and entrance	08-04-00	Ballymoreen,	N/A	N/A
5121978	APPLICATION FINALISED	Martin Barnaville and A	N/A	Dwellinghouse, entrance and septic tank	10-04-00	Longfordpass	N/A	N/A
5121993	APPLICATION FINALISED	Edward Morrissey	N/A	Two-storey dwellinghouse with garage, septic tank, percolation area and entrance	14-04-00	Coolcroo, Twc	N/A	N/A
991271	APPLICATION FINALISED	Neary	Michael	dwelling, domestic garage, entrance, septic tank and associated works	15-04-00	EARLSHILL	N/A	N/A
991270	APPLICATION FINALISED	Neary	Michael	erection of dwelling, domestic garage, entrance, septic tank and associated works	15-04-00	EARLSHILL	N/A	N/A
991269	APPLICATION FINALISED	Neary	Michael	erection of dwelling, garage, entrance and septic tank	15-04-00	EARLSHILL	N/A	N/A
123	APPLICATION FINALISED	McNamara	John	erection of a dormer bungalow with garage, septic tank and entrance	02-05-00	GORTNAHOE	N/A	N/A
204	APPLICATION FINALISED	Ryan	Micheal	an easy feed unit	05-05-00	COOLQUILL	N/A	N/A
5122093	APPLICATION FINALISED	Noel Cullen	N/A	Bungalow, entrance and septic tank	06-05-00	Coldfields, Th	N/A	N/A
5122100	APPLICATION FINALISED	Michael Leahy	N/A	Extend house	07-05-00	Cooleeney, M	N/A	N/A
34	APPLICATION FINALISED	Heffernan	Denis & Sadie	a bungalow, entrance and effluent treatment system	19-05-00	BALLYNONTY	N/A	N/A
273	APPLICATION FINALISED	Maher	Brendan	extension to dwelling	21-05-00	LITTLEFIELD	N/A	N/A
991239	APPLICATION FINALISED	Dunne	Philip & Nora	change of existing entrance and construction of new entrance	21-05-00	DUNGUIB	N/A	N/A
283	APPLICATION FINALISED	Dooley	Aidan & Sheelagh	erection of dwellinghouse, entrance gate, garage and septic tank	22-05-00	RATHBEG	N/A	N/A
285	APPLICATION FINALISED	O'Donnell	Michael	erection of two dwelling houses, garages, septic tanks and entrance	22-05-00	BALLINTOGHE	N/A	N/A
293	APPLICATION FINALISED	Clancy	Sean & Mary	construction of a timber framed dwelling, entrance, septic tank and percolation area	23-05-00	GLENGOOLE	N/A	N/A
297	APPLICATION FINALISED	Gleeson Steel & Engine	N/A	retention of assembly workshop, offices and ancillary works as constructed	23-05-00	KNOCKBOY	N/A	N/A
214	APPLICATION FINALISED	Breen	Edward	construction of 3 bedroom bungalow, garage, entrance, septic tank system and percolation area	24-05-00	GRAIGUEPADI	N/A	N/A
5122209	APPLICATION FINALISED	Thomas Meagher	N/A	Two-storey house, garage and septic tank	28-05-00	Ballymureen,	N/A	N/A
332	APPLICATION FINALISED	Ryan	Graine O'Shea & Eddy	dwelling, entrance, domestic garage and septic tank	30-05-00	COOLQUILL	N/A	N/A
338	APPLICATION FINALISED	Fitzpatrick	Tom	erection of dwelling, garage, septic tank and entrance	02-06-00	GLENGOOLE M	N/A	N/A
353	APPLICATION FINALISED	Nolan	Thomas & Anne-Marie	construction of bungalow, domestic garage, splayed entrance with septic tank and percolation area	05-06-00	GRAIGUEPAU	N/A	N/A
5122299	APPLICATION FINALISED	Timothy Flynn	N/A	Dwellinghouse, garage, septic tank and entrance	12-06-00	Garrenroe, Th	N/A	N/A

349	APPLICATION FINALISED	Purcell	S	construction of bungalow, entrance, septic tank and percolation area	17-06-00	CLONAMICKL	N/A	N/A
79	APPLICATION FINALISED	Murphy	Aidan	retention of a garage and the construction of an entrance	19-06-00	RATHROE	N/A	N/A
410	APPLICATION FINALISED	Healy	Michael	bungalow, entrance, garage, septic tank and ancillary site works	19-06-00	LANESPARK	N/A	N/A
374	APPLICATION FINALISED	Hayes	Denise Troy & Brenda	construction of a two-storey dwelling, separate garage, site entrance and septic tank system	26-06-00	CROSSCANNC	30-06-00	W
441	APPLICATION FINALISED	Loughnane	Caroline Graham & Al	construction of dwelling, domestic garage, entrance and septic tank system	27-06-00	LANESPARK	N/A	N/A
488	APPLICATION FINALISED	Laffan	Kevin	dwelling, entrance and puraflo effluent treatment system	04-07-00	GORTNAHOE	N/A	N/A
354	APPLICATION FINALISED	Croughan	Patrick G & Jean	a dwellinghouse, septic tank, percolation area and associated site works	08-07-00	URARD	N/A	N/A
519	APPLICATION FINALISED	Campion	Martin	dwellinghouse, garage and septic tank together with demolition of derelict house (prev. ref. no. 99/508)	15-07-00	FENNOR	N/A	N/A
535	APPLICATION FINALISED	O'Keefe	Tom	three dwellinghouses, garages, puraflo effluent treatment systems and all associated site works (prev. ref. no. 99/428)	17-07-00	KNOCKAVARD	N/A	N/A
542	APPLICATION FINALISED	O'Keefe	Tom	site development works including roads and underground services for three sites (prev. ref. no. 99/428)	18-07-00	KNOCKAVARD	N/A	N/A
5122469	APPLICATION FINALISED	Philip Ryan	N/A	Build extension to existing dwelling and retention of domestic garage	18-07-00	Ballyerk, Two	N/A	N/A
5122466	APPLICATION FINALISED	Josephine Fox	N/A	Build dwelling, domestic garage, entrance and septic tank	18-07-00	Derryhogan, L	N/A	N/A
5122462	APPLICATION FINALISED	John Lanigan		Erect 2 no. housing sites	18-07-00	LONGFORDPA	N/A	N/A
5122511	APPLICATION FINALISED	Jenny Ely	N/A	3 bedroom bungalow, septic tank and entrance	24-07-00	Ballybeg, Littl	N/A	N/A
568	APPLICATION FINALISED	Neary	Michael	dwelling, domestic garage, entrance, septic tank and associated works	24-07-00	EARLSHILL	N/A	N/A
584	APPLICATION FINALISED	Bartley	Michael	four sites	25-07-00	GRAIGUEPAU	N/A	N/A
5122538	APPLICATION FINALISED	Jerry Kinane	N/A	3 dwelling sites, septic tanks, percolation areas and entrances	29-07-00	Derryhogan, L	N/A	N/A
625	APPLICATION FINALISED	Kelly	Triona Maher & David	dwelling, domestic garage, entrance and septic tank system	01-08-00	RATHBEG	N/A	N/A
692	APPLICATION FINALISED	Benn	Elliot & Charlotte	demolition of habitable dwelling, construction of new two-storey dwellinghouse with septic tank and percolation area and modifications to existing entrance	18-08-00	URAND	N/A	N/A
732	APPLICATION FINALISED	Lanigan	Seamus	erection of a dwelling, entrance and septic tank system	28-08-00	BALLYKERRIN	N/A	N/A
5122698	APPLICATION FINALISED	Timothy Flynn	N/A	Build dwellinghouse, garage, entrance and septic tank	28-08-00	Garrenroe, Th	N/A	N/A
5122737	APPLICATION FINALISED	Alan Dunphy	N/A	Conservatory and extension to dwellinghouse and garage	06-09-00	Borris, Two-M	N/A	N/A
5122733	APPLICATION FINALISED	Michael O'Gorman	N/A	Housing site, entrance and septic tank	06-09-00	Garrenroe, Th	N/A	N/A
5122771	APPLICATION FINALISED	Ms Mary Gannon	N/A	Application for Outline Permission for detached house, garage, septic tank and percolation system and to construct a spur road to give access to the proposed site and to lands to the rear	12-09-00	Moyne Templ	N/A	N/A
805	APPLICATION FINALISED	Blackmore	Thomas & Alison	erection of a dwelling, domestic garage, entrance and septic tank	13-09-00	BALLYNASTICI	N/A	N/A
808	APPLICATION FINALISED	Maguire	Pat & Angela	construction of a dwelling, entrance, garage and septic tank system	16-09-00	TULLAQUANE	N/A	N/A
5122770	APPLICATION FINALISED	Ray & Phyllis O'Gorman	N/A	Bungalow, garage, front entrance and septic tank	16-09-00	Clonkeagh, Tv	N/A	N/A
810	APPLICATION FINALISED	Hanly	Michael & Frances	erection of a bungalow, septic tank and entrance	16-09-00	BALLINTOHER	N/A	N/A
5122779	APPLICATION FINALISED	Gerard Taylor	N/A	dormer dwelling, entrance, septic tank and percolation area	17-09-00	Cooleeney, M	N/A	N/A
838	APPLICATION FINALISED	Gleeson	Anita Gothard & Mart	erection of a bungalow, domestic garage, entrance, private well and septic tank system	20-09-00	GRAIGUEPADI	N/A	N/A
890	APPLICATION FINALISED	Fogarty	Tom	construction of a dwelling, garage and entrance	03-10-00	CROSSCANNC	N/A	N/A
934	APPLICATION FINALISED	McCormack	John	retention of alterations to dwelling	17-10-00	DUNGUIB	N/A	N/A
935	APPLICATION FINALISED	Quinlan	Noel	construction of 2 houses, entrances, private wells and effluent treatment systems	17-10-00	KILCOOLY	N/A	N/A
5122902	APPLICATION FINALISED	Denis and Brigid Kenne	N/A	Retain extension to side and back of existing dwellinghouse.	17-10-00	Skehane, Two	N/A	N/A
5122926	APPLICATION FINALISED	Eamon Barraville	N/A	Retention of garage.	24-10-00	Fanning Park,	N/A	N/A

593	APPLICATION FINALISED	Kelly	Joan & Jeremiah	dwelling, entrance and septic tank system	29-10-00	KNOCKILTERR	N/A	N/A
991138	APPLICATION FINALISED	Cloonan	M	demolition of derelict dwelling and to construct new dwelling with associated site works	31-10-00	KILLENAULE	N/A	N/A
5122973	APPLICATION FINALISED	Mary Stokes	N/A	One housing site plus entrance and septic tank.	04-11-00	Grawn, Two-r	N/A	N/A
5122976	APPLICATION FINALISED	Surestone Construction	N/A	Change of house type D to C on site no. 5 under previously no. PLC/21744.	06-11-00	Two-Mile-Bor	N/A	N/A
992	APPLICATION FINALISED	Kennedy	Noel	extension to existing cattle shed with a two bay lean-to-shed and for retention for a concrete slurry effluent storage tank	07-11-00	GLENGOOLE I	N/A	N/A
5122993	APPLICATION FINALISED	Pat & Breda O'Sullivan.	N/A	erect two-storey dwelling , garage, septic tank and entrance.	12-11-00	Garranroe, M	N/A	N/A
938	APPLICATION FINALISED	Webester	George	extension and amendments to existing dwelling house	14-11-00	GORTNAHOE	N/A	N/A
570	APPLICATION FINALISED	Lanigan	Patrick	new workshop	14-11-00	KILBRENNAL	N/A	N/A
5123017	APPLICATION FINALISED	Surestone Construction	N/A	Permission for construction of a dwelling house and garage and amendments to site layout under previously approved planning permissions no. PLC/ 21744 .	18-11-00	Two-Mile-Bo	N/A	N/A
5123042	APPLICATION FINALISED	Kevin Darmody	N/A	Extend Premises and new entrance , construct 2 no. signage boards to entrances and associated site works	25-11-00	Two-Mile-Bor	N/A	N/A
1060	APPLICATION FINALISED	Lanigan	Patrick	erection of a dwelling garage, entrance and septic tank system	26-11-00	KILBRANNEL	N/A	N/A
5123064	APPLICATION FINALISED	Pat Hayes & Anne Cum	N/A	private dwelling, garage, septic tank and front entrance	01-12-00	Manselstown,	N/A	N/A
5123065	APPLICATION FINALISED	Margaret Cantwell,	N/A	dwelling, entrance and septic tank	01-12-00	Noard, Two-M	N/A	N/A
1103	APPLICATION FINALISED	Guilfoyle	William & Monica	erection of dwelling, entrance, domestic garage and septic tank system	05-12-00	FENNOR	N/A	N/A
783	APPLICATION FINALISED	O'Grady	Judy	erection of three dwelling sites, entrance, biocycle treatment systems or similar, irrigation areas and associated site development works	24-12-00	KILBRANNEL	N/A	N/A
1200	APPLICATION FINALISED	O'Connell	Donal	a garage, utility and store	02-01-01	BRIDGEBROO	N/A	N/A
1213	APPLICATION FINALISED	Hayes	Eamon & Mary	construction of domestic store, utility area and double carport	02-01-01	LURGOE	N/A	N/A
1225	APPLICATION FINALISED	Burke	Desmond	two dwellinghouses with garages, entrances and septic tanks	08-01-01	DERRICKNEW	N/A	N/A
489	APPLICATION FINALISED	Nolan	S Slattery & Michael	construction of dwelling, domestic garage, entrance and effluent treatment system	09-01-01	KILBRANNEL	N/A	N/A
1234	APPLICATION FINALISED	Sheehan	Claire	construction of dwelling, domestic garage, entrance and effluent treatment system	09-01-01	BALLYNASTICI	N/A	N/A
5123237	APPLICATION FINALISED	Liam Kennedy,	N/A	Retain commercial sales area, café, septic tank	12-01-01	Ballydavid	N/A	N/A
5123247	APPLICATION FINALISED	Surestone Construction	N/A	13 two storey and 2 single storey dwellings, garages, entrance and associated site works	14-01-01	Borris, Two-M	N/A	N/A
5123274	DECISION MADE	Edward Ryan & Jennifer	N/A	to construct a dormer style dwelling, garage, entrance, septic tank and associated site works	23-01-01	Manselstown,	N/A	N/A
1273	APPLICATION FINALISED	Healy	Helen Cooke & Paul	construction of a dormer bungalow, septic tank, percolation area, new entrance and 4 No. stables	23-01-01	BALLINUNTY	18-01-01	R
5123306	APPLICATION FINALISED	Patrick Connolly	N/A	Dwellinghouse, garage, septic tank and entrance	29-01-01	Manselstown,	N/A	N/A
1309	APPLICATION FINALISED	Carroll	Patrick & Ann	extension to existing dwelling and provision of new pitched roof over existing flat roof	03-02-01	KILLENAULE	N/A	N/A
5123330	APPLICATION FINALISED	William Hennessy,	N/A	Dwellinghouse, septic tank and entrance	03-02-01	Monaraheen,	N/A	N/A
5123337	NEW APPLICATION	Patrick Coman	N/A	Slatted shed and loose shed	05-02-01	Coldfields, Th	N/A	N/A
1317	APPLICATION FINALISED	Peters	John & Alice	construction of a new entrance, front boundary wall, extension and renovations to existing dwelling and for retention of garage	06-02-01	BROOMHILL	N/A	N/A
1328	APPLICATION FINALISED	Moloney	Christopher & Kathlee	extension to dwelling, construction of domestic garage and entrance	07-02-01	BOULICK	N/A	N/A
5123361	APPLICATION FINALISED	Patrick Stokes	N/A	Two-storey dwellinghouse	10-02-01	Garraun, Two	N/A	N/A
5123397	APPLICATION FINALISED	Kieran and Marie Phillip	N/A	Bungalow, entrance, septic tank and associated site works and permission for garage	20-02-01	Curraheen, H	N/A	N/A

5123424	APPLICATION FINALISED	Brian and Christine Roc	N/A	Two-storey extension to side and single storey extension and alterations to rear of dwelling and upgrade existing septic tank to domestic waste water treatment system	21-02-01	Clooncleagh, ˙	N/A	N/A
1410	APPLICATION FINALISED	Cahill	Richard & Brigid	dwelling, entrance, effluent treatment system	21-02-01	GORTNAHOO	N/A	N/A
827	APPLICATION FINALISED	Watercourse Properties		erection of 9 service sites, 14 No. semi-detached houses, 10 No. town-houses and 6 No. semi detached bungalows	01-03-01	RIVER STREET	N/A	N/A
5123464	APPLICATION FINALISED	Stephen David Corbett	N/A	Retain house reconstruction, extension, septic tank and entrance	17-03-01	Cooleeney, M	N/A	N/A
5123463	APPLICATION FINALISED	Eamonn & Mary Ryan,	N/A	building for stroage and display of motor vehicles	18-03-01	Ballymoreen,	N/A	N/A
5123485	APPLICATION FINALISED	Cora Maher Hackett	N/A	Two-storey dwelling with garage, septic tank, entrance and asscoiated site works	23-03-01	Borris, Two-M	N/A	N/A
5123515	APPLICATION FINALISED	James and Mary Telfor	N/A	Dwelling, entrance and septic tank	01-04-01	Ballybeg, Thu	N/A	N/A
5123514	APPLICATION FINALISED	James and Mary Telfor	N/A	Demolish existing dwelling, build new dwelling, domestic garage and septic tank	01-04-01	Ballybeg, Littl	N/A	N/A
5123521	APPLICATION FINALISED	Liam and Patricia Troy	N/A	Development of first floor including provision of dormer windows to front of dwelling	04-04-01	Clooncleagh, ˙	N/A	N/A
5123518	DECISION MADE	Ed. Morrissey	N/A	Two-storey dwellinghouse, septic tank, domestic garage and entrance	04-04-01	Coolcroo, Tw	N/A	N/A
5123546	APPLICATION FINALISED	Richard Ryan	N/A	Dwellinghouse, garage, septic tank and front entrance	08-04-01	Coldfields, Tw	N/A	N/A
5123545	APPLICATION FINALISED	Richard Ryan	N/A	Dwellinghouse, garage, septic tank and front entrance	08-04-01	Coldfields, Tw	N/A	N/A
1115	APPLICATION FINALISED	Pollard	Thomas	two dwellings, entrances and septic tank systems	08-04-01	LICK FINN	N/A	N/A
5123554	APPLICATION FINALISED	Rory O'Dwyer	N/A	Dormer dwellinghouse and domestic garage and to provide entrance and septic tank system	11-04-01	Athlumman, T	N/A	N/A
5123553	DECISION MADE	Kevin Fallon	N/A	House, entrance, bore well and septic tank	11-04-01	Coldfields, Th	N/A	N/A
5123559	APPLICATION FINALISED	Thomas Flynn	N/A	Dwelling site, septic tank and entrance	13-04-01	Garrenroe, M	N/A	N/A
1347	APPLICATION FINALISED	Holohan	Margaret	construction of dwelling, domestic garage, entrance and septic tank	18-04-01	GLENGOOLE M	N/A	N/A
5123509	APPLICATION FINALISED	Maurice Leahy	N/A	Change plan of dwellinghouse and permission for garage and greyhound compound	27-04-01	Rathnamanna	N/A	N/A
1230	APPLICATION FINALISED	Byrne	Marina Hall & Declan	erection of dwellinghouse with garage, entrance and septic tank	30-04-01	KILNAHONE	N/A	N/A
5123641	NEW APPLICATION	Kara Lawlor and Willian	N/A	Construct new single storey dwelling with septic tank and site entrance	30-04-01	Boolabeha, M	N/A	N/A
5123707	APPLICATION FINALISED	Jason Keogh	N/A	Dormer bungalow, garage, septic tank and entrance	13-05-01	Coldfields, Th	N/A	N/A
5123704	NEW APPLICATION	Edward Ryan and Jenni	N/A	Dormer style dwellinghouse, garage, entrance, septic tank and associated site works	13-05-01	Garranroe, Th	N/A	N/A
5123714	NEW APPLICATION	Jim O'Grady	N/A	new milking parlour-dairy complete with slatted tank and new entrance	14-05-01	Cooleeney, M	N/A	N/A
166	APPLICATION FINALISED	Norton	John	erect domestic shed for parking vehicles	22-05-01	POYNSTOWN	N/A	N/A
99389	APPLICATION FINALISED	Lyons	Julia	retention of domestic garage and entrance wall	22-05-01	CURRAHEEND	N/A	N/A
126	APPLICATION FINALISED	Pollard & Helen Carew	Matthew	two storey dwelling, garage, front entrance and septic tank	22-05-01	COOLE	N/A	N/A
5123754	DECISION MADE	Philip Cussen	N/A	two-storey house with new entrance, septic tank and percolation area	25-05-01	Athlummon, T	N/A	N/A
1348	APPLICATION FINALISED	Moore	Sean & Jill	construction of dwelling, domestic garage, entrance and septic tank system.	25-05-01	GRAIGUEPAU	N/A	N/A
1324	APPLICATION FINALISED	Campion Jnr	Robbie	construction of a bungalow, septic tank and percolation area and entrance	25-05-01	CROSCANNO	N/A	N/A
5123757	APPLICATION FINALISED	Dominic and Josephine	N/A	Dormer bungalow, septic tank, percolation area with new entrance wall with garage to rear	27-05-01	Garranroe, M	N/A	N/A
5123775	NEW APPLICATION	Sean Corcoran	N/A	Change use from licensed premises known as "The Pike Inn" to dormer style dwelling including additional ground floor windows on southern gable and boundary wall to front	01-06-01	Leigh, Two-M	N/A	N/A

1355	APPLICATION FINALISED	Graham	James & Mary	construction of a dwelling, entrance, septic tank with puraflo treatment unit	29-06-01	LANESPARK	N/A	N/A
5123939	APPLICATION FINALISED	Thomas Gleeson	N/A	Septic tank	03-07-01	Curraheen, H	N/A	N/A
1243	APPLICATION FINALISED	Foley	Patrick	retention of domestic garage and conservatory as constructed	03-07-01	KILLENAULE	N/A	N/A
1321	APPLICATION FINALISED	Coady	Gerard	replacement dwelling, entrance and septic tank system	08-07-01	RATHBEG	N/A	N/A
5124001	APPLICATION FINALISED	T. O'Dywer	N/A	Cottage style dwellinghouse, garge, effluent treatment plant etc.	20-07-01	Castletown, M	N/A	N/A
5124005	APPLICATION FINALISED	Jim and Aisling Ryan	N/A	Two-storey dwellinghouse, garage and entrance	20-07-01	Borris, Two-M	N/A	N/A
1563	APPLICATION FINALISED	Tipp (S.R)Vocational Ed	N/A	retention, alteration and extension to existing free-standing changing rooms	23-07-01	KNOCKAVAD/	N/A	N/A
5124011	APPLICATION FINALISED	Patricia Ryan/Damien M	N/A	Dwellinghouse, septic tank and entrance	23-07-01	Garrenroe, Th	N/A	N/A
5124033	APPLICATION FINALISED	Joan O'Keefe	N/A	refurbishment of existing shop & construction of single storey extenson to rear of same	27-07-01	Parkstown, H	N/A	N/A
5124062	APPLICATION FINALISED	Dan Bourke and Trish K	N/A	Dwellinghouse, septic tank, percolation area and entrance	05-08-01	Moyne Templ	N/A	N/A
1346	APPLICATION FINALISED	Bartley	Michael	dwelling, entrance, septic tank and Puraflo treatment unit	07-08-01	GRAIGUEPAU	N/A	N/A
1546	APPLICATION FINALISED	Campion	Loughlin	retention of animal storage building and slatted tank and to build additional animal storage building, feeding passage and slatted tank	10-08-01	GORTNAHOE	N/A	N/A
5124091	APPLICATION FINALISED	John Cass,	N/A	Construct a domestic extension to dwelling and to construct an additional site entrance	12-08-01	Rahinch, Little	N/A	N/A
157	APPLICATION FINALISED	Kelly (Junior)	Michael	Dwelling, entrance and septic tank	02-09-01	KILLENAULE	N/A	N/A
1525	APPLICATION FINALISED	O'Shea	Noel & Mary	erection of a bungalow, septic tank, percolation area and entrance	04-09-01	GLENGOOLE S	N/A	N/A
5124212	DECISION MADE	Ed Morrissey	N/A	Dormer type dwelling, domestic garage, septic tank, drainage system and entrance	15-09-01	Coolcroo, Thu	N/A	N/A
1744	APPLICATION FINALISED	Kelly	Joan	dwelling, entrance, septic tank system and associated site works	24-09-01	KNOCKILTERR	N/A	N/A
5124284	APPLICATION FINALISED	Mary and Gerard Keane	N/A	Extension to rear of existing house, extension of existing roof and provision of dormer windows to front of roof	30-09-01	Borris, Two-M	N/A	N/A
1795	APPLICATION FINALISED	Corbett	J O'Rourke & Michael	construction of dwelling, domestic garage, entrance and septic tank	06-10-01	POYNSTOWN	N/A	N/A
1549	APPLICATION FINALISED	Gleeson	Michael	construction of a two-storey dwelling with attached garage, a combined site entrance and a septic tank system	07-10-01	FOILACAMIN	N/A	N/A
1439	APPLICATION FINALISED	Gleeson	Edward	construction of a two-storey dwelling with attached garage, a combined site entrance and a septic tank system	07-10-01	FOILACAMIN	N/A	N/A
1865	APPLICATION FINALISED	Rochford	Pat	private residence, septic tank and ancillary site works	08-10-01	FENNOR	30-10-01	R
5124317	APPLICATION FINALISED	Aoife and Dermot Cam	N/A	two-storey dwellinghouse, entrance and septic tank drainage system	09-10-01	Garrenroe, Th	N/A	N/A
1898	APPLICATION FINALISED	Kerwick	Padraig	extension and renovations to dwelling and to construct new entrance	11-10-01	GLENGOOLE S	N/A	N/A
1886	APPLICATION FINALISED	Large	John	construction of new 3 bay hay and straw double storage shed and outdoor handling facilities for 300 no. sheep flock	12-10-01	GORTNAHOE	N/A	N/A
5124327	APPLICATION FINALISED	Tom and Ita Ryan	N/A	Dwellinghouse, garage, septic tank and entrance	12-10-01	Garrenroe, Th	N/A	N/A
5124328	DECISION MADE	John Stapleton	N/A	Printing services building, septic tank system and amendments to existing site entrance	12-10-01	Curraheen, H	N/A	N/A
1609	APPLICATION FINALISED	Hogan	Dymphna	bungalow, septic tank and new entrance	15-10-01	CLONAMICKL	N/A	N/A
1555	APPLICATION FINALISED	Dunne	Seamus	construction of a out building	16-10-01	BUOLICK	N/A	N/A
5124334	NEW APPLICATION	Mark and Mairead Sha	N/A	Two-storey dwelling with entrance, septic tanks and permission to construct double garage and associated site works	16-10-01	Curraheen, H	N/A	N/A
5124346	APPLICATION FINALISED	Board of Management	N/A	Prefabricated Classrooms	19-10-01	Borris, Two-M	N/A	N/A
5124354	NEW APPLICATION	Gearoid Ryan	N/A	Dwellinghouse, septic tank, entrance and associated works	20-10-01	Ballydavid, Lit	N/A	N/A
5124367	NEW APPLICATION	Mark Ryan	N/A	dwellinghouse, garage, septic tank and entrance	22-10-01	Monaraheen,	N/A	N/A
5124368	NEW APPLICATION	David Ryan & Mary Lan	N/A	dwellinghouse, garage, septic tank and entrance	22-10-01	Monaraheen,	N/A	N/A

1584	APPLICATION FINALISED	O'Reilly	Michael	demolishing of existing single storey dwelling and build new dormer dwelling	23-10-01	GLENGOOLE S	N/A	N/A
5124374	NEW APPLICATION	Josephine McCormack,	N/A	dwelling site, septic tank and entrance	26-10-01	Moynetemple	N/A	N/A
1146	APPLICATION FINALISED	Ryan	Robert	one dwelling	27-10-01	FENNOR	N/A	N/A
1519	APPLICATION FINALISED	Barnaville	S. Heffernan & Michae	a two-storey dwelling, garage, septic tank and entrance	05-11-01	GORTNAHOO	N/A	N/A
1862	APPLICATION FINALISED	Pollard	John & Josephine Ryar	dwelling house, septic tank and percolation area	06-11-01	COOLE	N/A	N/A
1961	APPLICATION FINALISED	O'Connell	Alice	four detached bungalows with garages and septic tank systems	06-11-01	MONSLATT	N/A	N/A
5124415	APPLICATION FINALISED	Philip Hayes	N/A	extend front of house	06-11-01	Rahealty, Thu	N/A	N/A
1696	APPLICATION FINALISED	Prendergast	Declan	erection of bungalow, garage, effluent treatment system and entrance	12-11-01	BALLINTOGHE	N/A	N/A
1925	APPLICATION FINALISED	Lanigan	Eamon	re-development of milking parlour	16-11-01	GORTEEN LOV	N/A	N/A
1754	APPLICATION FINALISED	Bolger	Denise Tuohy & Micha	dormer dwelling, site entrance and effluent treatment system	18-11-01	BALLINTOGHE	N/A	N/A
5124472	DECISION MADE	Eircom PLC	N/A	Single storey welfare facility	04-12-01	Ballymoreen,	N/A	N/A
11079	APPLICATION FINALISED	Dalton	John	conservatory to front of existing dwelling	11-12-01	EARLSHILL	N/A	N/A
1859	APPLICATION FINALISED	Gleeson	Breda Ryan & Thomas	a dwelling, domestic garage, entrance and effluent treatment system	14-12-01	COOLE	N/A	N/A
5124528	APPLICATION FINALISED	Centenary Co-Op Crean	N/A	New store for fertilizer	18-12-01	Manseltown,	N/A	N/A
5124529	APPLICATION FINALISED	Denis and Sandra Byrne	N/A	Two-storey dwellinghouse, domestic garage, entrance and septic tank waste system	18-12-01	Garrenroe, Th	N/A	N/A
1788	APPLICATION FINALISED	Fennelly	Dermot	two storey dwelling, septic tank and percolation area	22-12-01	CRAB	N/A	N/A
1883	APPLICATION FINALISED	O'Connell	Alice	a dormer bungalow with garage and septic tank system	25-12-01	MONSLATT	16-01-02	R
5124552	APPLICATION FINALISED	Philip Cussen	N/A	Two-storey house with entrance and septic tank	25-12-01	Athlummon, T	N/A	N/A
5124564	APPLICATION FINALISED	Ailbe Hayden,	N/A	2-Storey dwelling, garage, septic tank & entrance.	31-12-01	Cooleeney, M	N/A	N/A
5124577	APPLICATION FINALISED	Richard Michael Buckle	N/A	dormer dwellinghouse, septic tank and entrance	04-01-02	Garranroe, Th	N/A	N/A
1738	APPLICATION FINALISED	Lanigan	Patrick	new entrance, customer car park and palisade road side fence	11-01-02	KILBRENNEL	N/A	N/A
11197	APPLICATION FINALISED	Ryan	Edward & Mary	change of house plan consisting of dormer bungalow, garage, septic tank, percolation area and entrance	14-01-02	GORTNAHOE	N/A	N/A
11199	APPLICATION FINALISED	Johnson	Tom & Gretta	extension of bedroom/bathroom to existing dwelling	27-01-02	DERRICKNEW	N/A	N/A
11233	APPLICATION FINALISED	Purcell	Alice & Liam	an extension to existing silage pit & construction of side wall to existing silage pit extension to existing cattle slatted shed to include easy feed & cubicle accommodation with adjoining cattle handling & crush facilities	28-01-02	URARD	N/A	N/A
11040	APPLICATION FINALISED	Ryan	Majella & John	dwelling, domestic garage, entrance and septic tank system	03-02-02	CRAB	N/A	N/A
5124766	APPLICATION FINALISED	W. McDonagh	N/A	Two-storey house, garage, septic tank, percolation area and new entrance	07-02-02	Galbooly, Thu	N/A	N/A
11226	APPLICATION FINALISED	Morris	Sean	a dwelling, entrance & effluent treatment system	09-02-02	POYNTSTOWN	N/A	N/A
11305	APPLICATION FINALISED	Maher	Seamus	change of use of existing domestic garage to workshop and for retention of extension to domestic garage to form workshop	19-02-02	MONSLATT	N/A	N/A
5124744	APPLICATION FINALISED	Thomas Maher and Ma	N/A	Dormer dwelling,garage, site entrance and septic tank system.	19-02-02	Cloncleigh, Tv	N/A	N/A
5124820	APPLICATION FINALISED	David Ryan & Mary Lan	N/A	Build dormer dwelling, garage, septic tank and entrance.	27-02-02	Monaraheen,	N/A	N/A
5124819	APPLICATION FINALISED	James Fanning	N/A	To provide septic tank to serve existing house and to demolish existing septic tank.	27-02-02	Coldfileds, Th	N/A	N/A
5124735	APPLICATION FINALISED	Seamus Maher,	N/A	Erection of a bungalow, septic tank & entrance.	27-02-02	Ballydavid, Lit	N/A	N/A
11125	APPLICATION FINALISED	Harding	Larry & Martina	dwelling, domestic garage, entrance and effluent treatment system	03-03-02	GLENGOOLE N	N/A	N/A
2510230	APPLICATION FINALISED	Cantwell	Margaret	Dwelling, septic tank and entrance.	06-03-02	NOARD	N/A	N/A
5124822	APPLICATION FINALISED	John Joe & Joan O'Keef	N/A	Alterations to previous p. ref. PLC/24033. Const. of single-storey ext. now n/e of the existing shop building and fronting onto the main Dublin/Cork road and omission of prev. proposed ext. to rear.	07-03-02	O'Keeffes Sho	N/A	N/A

11144	APPLICATION FINALISED	Healy	Helen Cooke and Paul	3 bedroom dormer bungalow, associated site works, entrance, 8 stables and puraflo waste water disposal system	07-03-02	BALLYNUNTY	N/A	N/A
1959	APPLICATION FINALISED	Glanbia Foods Plc Soutl	N/A	a grain store and all associated site work	09-03-02	KILLENAULE	N/A	N/A
211	APPLICATION FINALISED	Kerwick	Geraldine & Padraig	two-storey dwelling, domestic garage, entrance and septic tank	10-03-02	GLENGOOLE S	N/A	N/A
238	APPLICATION FINALISED	Kerwick	Noreen Vaughan & De	extension and renovations to existing dwelling	24-03-02	EARLSHILL	N/A	N/A
5124907	APPLICATION FINALISED	John Lanigan	N/A	Two storey extension to dwelling and to demolish part of farmyard shed	27-03-02	Leigh, Two-M	N/A	N/A
5124813	APPLICATION FINALISED	Dan & Phil Hayes	N/A	2 storey dwelling house, garage, septic tank and associated site works.	03-04-02	Ballyerk, Two-	N/A	N/A
5124905	APPLICATION FINALISED	Ken & Jennifer Costello	N/A	Two storey dwelling with entrance, garage, septic tank and asscociated site works	05-04-02	Curraheen, H	N/A	N/A
5124943	APPLICATION FINALISED	Jon Stapleton	N/A	to construct a domestic garage and domestic storage shed facility	12-04-02	Curraheen, H	N/A	N/A
5124935	APPLICATION FINALISED	Brd. Of Man. Scoil Chac	N/A	to erect temporary classroom accommodation including all associated works.	12-04-02	Ballybeg, Littl	N/A	N/A
5124915	APPLICATION FINALISED	Tom and Aileen Healy	N/A	to extend a dwelling house & permission to retain an existing extension.	12-04-02	Blackcastle, T	N/A	N/A
25	APPLICATION FINALISED	Fogarty	E.	retention of dwellinghouse	13-04-02	FENNER	N/A	N/A
5124929	APPLICATION FINALISED	Michael & Rita King	N/A	(a) Planning approval to build bungalow, entrance and septic tank. (b) Planning permision to build garage cum fuel storage shed.	17-04-02	Cooleeney, M	N/A	N/A
2141	APPLICATION FINALISED	Moloney	Christopher & Kathlee	retention of high pitch roof to dwelling	21-04-02	BUOLICK	N/A	N/A
5124897	APPLICATION FINALISED	Marion Maher Lambe,	N/A	build dormer bungalow, install a bio-clear effluent treatment plant, percolation drains, boundaries and entrance	02-05-02	Clover Lane, E	N/A	N/A
5124064	APPLICATION FINALISED	Moyne Voluntary Hous	N/A	4 social houses, septic tanks, puraflo system and road development	02-05-02	Moyne Village	N/A	N/A
5124742	APPLICATION FINALISED	Thomas & Kathleen Rya	N/A	Bungalow, garage, septic tank, percolation area & permission to retain a widen existing entrance.	03-05-02	Ballydavid, Lit	N/A	N/A
2175	APPLICATION FINALISED	Maher	Joseph	construction of a new rear extension to the existing dwelling, including alterations and renovations with all associated site works	06-05-02	FENNOR	N/A	N/A
2199	APPLICATION FINALISED	McCourt	Siobhan Cooke & Tony	building a dwelling, domestic garage, entrance, effluent treatment system	07-05-02	BALLINTOGHE	N/A	N/A
11260	DECISION MADE	Healy	Katrina Bulfin & John	construction of a dwelling, entrance, garage/store and septic tank system including associated site works	14-05-02	KILLENAULE	N/A	N/A
2258	APPLICATION FINALISED	Nolan	Michael	retention of self-contained dwelling unit as constructed	05-06-02	BALLYNASTICI	N/A	N/A
2510010	APPLICATION FINALISED	Hayes	Liam & Pauline	Dwelling, entrance and septic tank.	06-06-02	MANSELSTOV	N/A	N/A
2336	APPLICATION FINALISED	Campion	Pat & Sadie	retention of a garage adjacent to house	11-06-02	GRAIGUEPAN	N/A	N/A
5125017	APPLICATION FINALISED	James & Mary Telford,	N/A	Dwelling, entrance and septic tank.	12-06-02	Ballybeg, Littl	N/A	N/A
2342	APPLICATION FINALISED	Collins	John & Mary	the erection of a dormer bungalow, garage, bio-clear septic treatment plant, entrance and re-location of existing agricultural field gate	14-06-02	GARRYCLOGH	N/A	N/A
2401	APPLICATION FINALISED	Dalton	Joan & Christopher	the construction of a conservatory to dwelling	24-06-02	CASHEL ROAD	N/A	N/A
295	APPLICATION FINALISED	Woodhouse	Mary & John	bungalow and effluent treatment system	24-06-02	MELLISON	N/A	N/A
245	APPLICATION FINALISED	Kenny	Richard	construction of 3 bedroomed dormer dwelling, domestic garage, entrance, with puraflo liquid effluent treatment system with all associated site works	26-06-02	BUOLICK	N/A	N/A
5124680	APPLICATION FINALISED	Colm Ryan and Claire B	N/A	Dwelling, garage, septic tank and entrance.	27-06-02	Borris, Two- M	N/A	N/A
2419	APPLICATION FINALISED	Ryan	John	the construction of a slatted shed	02-07-02	GORTNAHOE	N/A	N/A
210	APPLICATION FINALISED	Ryan	Rina & P.J	dwelling, domestic garage, entrance and septic tank	03-07-02	RATHBEG	N/A	N/A
2463	APPLICATION FINALISED	O'Dwyer	Philomena & Joseph	construction of a dormer bungalow, garage, septic tank system and entrance	03-07-02	DUNGUIB	N/A	N/A

2510145	APPLICATION FINALISED	O' Brien	Rodger	extension to existing dwelling house and retension of existing garage	09-07-02	BALLYNAMON	N/A	N/A
2510117	DECISION MADE	Morrissey	Ed.	2 storey dwellinghouse with domestic garage, to alter existing entrance and connect to existing foul sewer.	14-07-02	BALLYDAVID L	N/A	N/A
2503	APPLICATION FINALISED	Coady	Gerard	demolition of existing dwelling and retention of replacement of dwelling for which permission has already been granted under Ref. 00/1321	15-07-02	KNOCKBRIT	N/A	N/A
2468	APPLICATION FINALISED	Kerwick	Geraldine & Padraig	building a two-storey dwelling, domestic garage, entrance and septic tank	01-08-02	GLENGOOLE S	N/A	N/A
2510229	APPLICATION FINALISED	Stapleton	Liam	construct a two-storey extension to house with septic tank, percolation drains and new site entrance	06-08-02	LISKEVEEN, LI	N/A	N/A
2614	APPLICATION FINALISED	Beatty	James Ryan & Margo	building of a dormer dwelling, domestic garage, entrance, septic tank with puraflo treatment unit	08-08-02	BALLINTOGHE	N/A	N/A
2203	APPLICATION FINALISED	Codd	Frank	a dwelling, entrance, septic tank with Puraflo treatment unit	10-08-02	KILLENAULE	09-09-02	R
2623	APPLICATION FINALISED	Brennan	Declan	consequent on the grant of outline permission 01/744 for the erection of a bungalow, garage, entrance,septic tank and associated works	11-08-02	KNOCKILTERR	N/A	N/A
2510242	APPLICATION FINALISED	Hayes	Philip	build two storey extension to dwelling	12-08-02	RAHEALTY, TH	N/A	N/A
5125051	DECISION MADE	John O'Keeffe & Maire	N/A	Single storey house, entrance and septic tank.	16-08-02	Leigh, Two-M	N/A	N/A
11016	APPLICATION FINALISED	Fogarty	Sean	35 dwelling units, roads, services, sewer connection, 2 new site entrances and associated site works	19-08-02	GORTNAHOE	N/A	N/A
5124573	DECISION MADE	Biotic NJ Ltd.	N/A	Old peoples Nursing/Rest Home incorporating main building &10 self contained disabled cottage units, plus sewerage treatment plant, new entrance and access road, plus all associated site works	23-08-02	Rathnanna &	N/A	N/A
2510233	DECISION MADE	Tait	Paul	dwelling, garage, septic tank, entrance and well	25-08-02	COLDFIELDS,	N/A	N/A
2510250	APPLICATION FINALISED	Maher	Kenneth	Alteration to a side elevation.	29-08-02	PARKSTOWN	N/A	N/A
2510287	APPLICATION FINALISED	Clohessy	Michael & Rita	retain attic conversion to 2 no. bedrooms at dwelling	04-09-02	BALLYDAVID,	N/A	N/A
2510263	DECISION MADE	Deirdre Troy	Michael Healy &	Single storey dwelling, garage, front entrance wall, private well, percolation area and septic tank.	05-09-02	ATHLUMMON	N/A	N/A
11285	APPLICATION FINALISED	Kerwick	Padraig	slatted house and ancillary works	08-09-02	GLENGOOLE S	24-09-02	C
2761	APPLICATION FINALISED	Kerwick	Denis	to construct a slurry storage tank and extension to existing cattle shed	10-09-02	EARLSHILL	N/A	N/A
2510167	APPLICATION FINALISED	Ryan	John	Bungalow with entrance and all ancillary site works and full permission for garage	11-09-02	GARRAUN, TV	N/A	N/A
2510286	APPLICATION FINALISED	Declan Leahy	Ann Quigley	a dwelling house and associated site works including septic tank and entrance	11-09-02	MOYNETEMP	N/A	N/A
2510345	APPLICATION FINALISED	Thomas Maher	Ann Walsh	2- storey dwelling, domestic garage, entrance and septic tank	11-09-02	CASTLETOWN	N/A	N/A
2765	APPLICATION FINALISED	O Keeffe	Tadhg Gleeson & Jack	demolition of existing buildings and the construction of 10 bungalows, entrance, access road and associated site works	16-09-02	KILLENAULE	N/A	N/A
2510094	DECISION MADE	Stokes	Marian	2 storey dwellinghouse, site entrance and sewage disposal system.	23-09-02	GARRAUN TW	N/A	N/A
2510368	APPLICATION FINALISED	Browne	Kevin	Two-storey house on site, provision of on site septic tank and to enter site via existing recessed entrance and private driveway	03-10-02	BALLYBEG, LIT	N/A	N/A
2830	APPLICATION FINALISED	Woodhouse	John & Mary	bungalow entrance and effluent treatment system	07-10-02	MELLISSON	N/A	N/A
2415	DECISION MADE	Lanigan	Patrick & Christine	the erection of a two-storey house, garage, entrance, enclosed yard, effluent treatment system and front boundary fence	07-10-02	KILBRENNAL	N/A	N/A
2849	APPLICATION FINALISED	Burke	Kathleen Broderick &	dwelling, domestic garage, entrance, septic tank and puraflo treatment unit	10-10-02	URARD	N/A	N/A
2510385	APPLICATION FINALISED	Maher-Hackett	Cora	two storey house, garage, new entrance, septic tank, percolation and all associated site works	13-10-02	BORRIS, TWO	N/A	N/A

2510395	APPLICATION FINALISED	Cullagh	Fiona	2-storey dwellinghouse, septic tank, new site entrance plus all associated site works.	13-10-02	DERRYHOGAN	N/A	N/A
2510199	APPLICATION FINALISED	Flynn	Thomas	Dwellinghouse, garage and septic tank	28-10-02	GARRANROE,	N/A	N/A
2510454	APPLICATION FINALISED	Edel Hickey	Joseph Leahy &	erect single storey dwelling, septic tank, percolation area, an entrance and all associated site works	30-10-02	MOYNETEMP	N/A	N/A
2510458	APPLICATION FINALISED	Clohessy	Michael & Rita	build extension to dwelling	31-10-02	BALLYDAVID,	N/A	N/A
2913	APPLICATION FINALISED	O'Donovan	Timothy	to erect a bungalow, domestic garage, entrance and septic tank	31-10-02	CLONAMICKL	20-11-02	C
2510470	APPLICATION FINALISED	O'Halloran	Pat	change of house type on foot of existing planning ref: PLC/21678	03-11-02	PIERCETOWN	N/A	N/A
2510483	APPLICATION FINALISED	Doyle	Tim and Claire	Demolish existing two-storey dwellinghouse, erect new two-storey dwellnghouse, relocate septic tank and revise existing entrance/piers	07-11-02	MOYNEARD T	N/A	N/A
2510365	APPLICATION FINALISED	Murphy	Triona	Housing site, garage, septic tank and entrance	10-11-02	DRUMGOWEI	N/A	N/A
2949	APPLICATION FINALISED	Ryan	Margo Beatty & James	dwelling, domestic garage, entrance, septic tank with puraflo treatment unit	10-11-02	BALLINTOGHE	N/A	N/A
2966	APPLICATION FINALISED	Bras	Jorge & Josephine	to build dwellng, domestic garage, entrance and septic tank	14-11-02	GLENGOOLE M	N/A	N/A
2511	APPLICATION FINALISED	Leahy	Doreen Kiely & Kevin	the construction of a dwelling, domestic garage, entrance and effluent treatment system	14-11-02	GLENGOOLE S	N/A	N/A
2510522	APPLICATION FINALISED	Heffernan	Michael & Mary	Conversion of existing garage to bedroom and construction of new detached garage with associated site works.	20-11-02	MONARAHEE	N/A	N/A
2510552	APPLICATION FINALISED	Bernadette Carey	Michael Reddan &	dormer bungalow, entrance, garage, septic tank and percolation area	28-11-02	COOLEENEY	N/A	N/A
2510550	APPLICATION FINALISED	Walsh	Patrick	domestic garage	28-11-02	BOOLABEHA	N/A	N/A
2510545	APPLICATION FINALISED	Walsh	Patrick	Dwelling, entrance and septic tank. Outline Permission No. PLC/21220.	28-11-02	BOOLABEHA I	N/A	N/A
2510593	APPLICATION FINALISED	Margaret Forristal	Michael John Maher a	Dwellinghouse, domestic garage, entrance and septic tank	12-12-02	KILMAKILL, M	N/A	N/A
2510588	APPLICATION FINALISED	McGovern	Kenny & Catherine	(1) two storey extension; (2) convert existing garage to livingroom with bedroom over.	12-12-02	CLONCLEIGH	N/A	N/A
2510600	APPLICATION FINALISED	Elaine Kelly	Joseph Bolger and	Dwellinghouse, garage, entrance, effluent treatment system and associated site services	15-12-02	BORRIS, TWO	N/A	N/A
2510547	APPLICATION FINALISED	O'Meara	John & Eleanor	house with right-of-way and entrance	26-12-02	BORRIS, TWO	N/A	N/A
2510363	APPLICATION FINALISED	Minchin (Jnr)	Michael	Two-storey house, garage, entrance, septic tank and percolation area	27-12-02	DRUMGOWEI	N/A	N/A
2510503	APPLICATION FINALISED	Corcoran	Sean	Provide roadway, lay sewer, watermain, underground electric and telephone services and erect two-storey dwelling.	30-12-02	BORRIS TWO-	N/A	N/A
2510440	APPLICATION FINALISED	Dalton	Adam	Two - Storey dwelling, site entrance and septic tank drainage system	30-12-02	CURRAHEEN,	N/A	N/A
2510654	APPLICATION FINALISED	Maeve Kearney	Mal Lanigan &	Two-storey dwelling with garage, entrance, septic tank and all associated site works.	01-01-03	CLOONCLEAG	N/A	N/A
21139	DECISION MADE	Wall	Joseph Maher & Olivia	dwelling, domestic garage, entrance and septic tank	02-01-03	URARD	N/A	N/A
2510663	APPLICATION FINALISED	Byrne	Bridget	Dormer bungalow, double garage, septic tank, percolation area, private well and entrance wall.	02-01-03	ATHLUMMON	N/A	N/A
2375	APPLICATION FINALISED	Stevenage Managemen	N/A	development of extension to newsagents shop consisting of demolition of sheds to rear and part demolition of first floor dwelling, alterations to existing shop with new shop front and new access to overhead dwelling, single-storey supermarket to the	05-01-03	KILLENAULE	N/A	N/A
21172	DECISION MADE	McMonagle	Sean & Fiona	dwellinghouse, garage, site entrance, septic tank and percolation area	16-01-03	GLENGOOLE S	N/A	N/A
21171	DECISION MADE	O'Dwyer	John	a dwelling with septic tank and percolation area and new entrance	16-01-03	FENNOR	N/A	N/A
11109	APPLICATION FINALISED	Grant	Patrick	dwelling, entrance and septic tank	17-01-03	URARD	10-02-03	R

2510736	APPLICATION FINALISED	O'Shaughnessy	Michael	Bunglow, septic tank, percolation area and entrance wall	23-01-03	BOULABEHA,	N/A	N/A
21218	APPLICATION FINALISED	Cunningham	Mike	a two storey extension to the west elevation of dwelling	27-01-03	KILLENAULE	N/A	N/A
2510766	APPLICATION FINALISED	Leanne Hunter	Fergus Ryan and	Bungalow, septic tank, percolation area and entrance wall	30-01-03	BALLYBEG, BA	N/A	N/A
21304	APPLICATION FINALISED	Foreshaw	David	erection of conservatory to rear of dwelling, construction of three stables, tack room, hay and straw stores	13-02-03	GLENGOOLE	N/A	N/A
21332	APPLICATION FINALISED	Maguire	Stephen & Helen	construction of a two-storey dwelling-house, garage, septic tank and percolation area	16-02-03	KNOCKAVARD	N/A	N/A
21309	APPLICATION FINALISED	O'Brien	David	construction of a new sun lounge constructed to the rear of existing dwelling and with associated site works	16-02-03	GORTNAHOE	N/A	N/A
2510620	APPLICATION FINALISED	Healy	Martin	Housing site with entrance and septic tank.	24-02-03	COOLCROO TV	N/A	N/A
3510001	APPLICATION FINALISED	Hayes	John & Marie	Alterations and renovations to existing bungalow, provision of additional living space, construction of second storey extension and associated works.	26-02-03	BORRIS TWO-	N/A	N/A
2510701	APPLICATION FINALISED	Power	William and Patricia	Single storey dwelling, septic tank with percolation, entrance, garage and all associated site works	05-03-03	CLOONCLEAG	N/A	N/A
2510397	APPLICATION FINALISED	Quinlan	T.J.	Housing site, septic tank and entrance.	06-03-03	COOLCROO TV	N/A	N/A
3510018	APPLICATION FINALISED	Murphy	Triona	Dormer bungalow, garage, septic tank and entrance. Outline Permission No. 02/51/0365.	11-03-03	DRUMGOWEI	N/A	N/A
21099	APPLICATION FINALISED	Maher	Gerard	a dwelling, domestic garage, entrance and effluent treatment system	20-03-03	SALLYBOG	N/A	N/A
5124551	APPLICATION FINALISED	Patrick Shelly	N/A	Single storey dwelling house plus garage, new entrance, septic tank and all associated site works.	20-03-03	Laharden Low	02-04-03	M
340	APPLICATION FINALISED	Rafter	Sylvie & Josephine	single storey dwelling, effluent treatment system and entrance	20-03-03	DERRYVELLA	N/A	N/A
3510041	APPLICATION FINALISED	Mid Tipperary Co-Op Lt	N/A	5 no. dwellings each with entrance, septic tank and liquid effluent treatment system and also to build access road, footpaths, entrance on to the public road and carry out all asscoiated site works	20-03-03	MOYNETEMP	N/A	N/A
3510039	APPLICATION FINALISED	Kearney	Raymond and Mary	Two-storey house, septic tank and percolation area, new entrance, drilling of own well, garage and stables plus all associated site works	20-03-03	GARRAUN, TV	N/A	N/A
2510479	APPLICATION FINALISED	Maher	Mark and Esther	Dormer style dwelling, septic tank and percolation area with alterations to existing entrance	23-03-03	NEWTOWN, L	N/A	N/A
352	APPLICATION FINALISED	Barry	Daniel	to erect a two-storey dormer house, septic tank and percolation and new entrance with associated site works	24-03-03	EARLSHILL	N/A	N/A
353	APPLICATION FINALISED	Walsh	Moira	a single-storey hipped roof extension to side of existing dwelling	24-03-03	KNOCKABRIT	N/A	N/A
370	APPLICATION FINALISED	Dunne	Christopher	to construct a bungalow dwelling, garage, entrance with septic tank and all associated site works	27-03-03	BOULICK	N/A	N/A
364	APPLICATION FINALISED	Roche	Kevin	retention to domestic garage to the rear of site with all associated site works	27-03-03	COOLE TD	N/A	N/A
369	APPLICATION FINALISED	McCormack	John	entrance to dwelling	27-03-03	DUNGUIB	N/A	N/A
2510830	APPLICATION FINALISED	Mervyn O'Mahoney	Mariena Cantwell &	Dormer dwelling, garage, entrance and treatment plant system and all ancillary site works.	27-03-03	NOARD TWO-	N/A	N/A
35	APPLICATION FINALISED	Guilfoyle	Laurence & Marie	(a) vary of conditions 1, 2 and 3 (b) change of house and garage plans from bungalow to two storey dwelling and garage/storage shed and (c) change position of proposed house to that previously granted under ref. no. 98/102	06-04-03	BOULICK	N/A	N/A
3510098	APPLICATION FINALISED	Callanan	James & Irene	Retention of single storey extension at rear of dwelling and permission to build a single storey extension to side of existing dwelling and re-roofing of existing dwelling.	07-04-03	LONGFORDPA	N/A	N/A
3166	APPLICATION FINALISED	Raleigh	Patrick	to retain veterinary surgery, offices stores and ancillary works	17-04-03	GLENGOOLE S	N/A	N/A

3165	APPLICATION FINALISED	Hogan	Susan Ryan & Brendar	a dwelling, domestic garage, entrance and effluent treatment system	17-04-03	CLONOURA	N/A	N/A
3174	APPLICATION FINALISED	Kerwick	John	development of silage base and apron	20-04-03	GLENGOOLE S	N/A	N/A
3510134	APPLICATION FINALISED	Downey	Pat and Fiona	Bungalow, septic tank, entrance and garage (Outline permission ref. PLC/21772)	20-04-03	MANSELSTOV	N/A	N/A
3510088	APPLICATION FINALISED	Bourke	John	Housing site with entrance and septic tank.	01-05-03	LAHARDEN UI	N/A	N/A
3510083	APPLICATION FINALISED	Walsh	Michael and Bernadet	Two-storey house, garage, septic tank to S. R. 6 and 3 no. stables	06-05-03	CLOONCLEAG	N/A	N/A
3510216	APPLICATION FINALISED	Callanan	Edward	to build extension to dwelling to the front, rear and east side. Also to retain extension to the west side, to provide window to its front elevation and for its use as part of the dwelling	08-05-03	BLACKCASTLE	N/A	N/A
3510264	APPLICATION FINALISED	Hennessy	Patrick & Sheila	Retain use of yard attached to dwelling for bus/minibus parking and widen existing second entrance gate to same.	20-05-03	BALLYBEG UP	N/A	N/A
3510279	APPLICATION FINALISED	Fleming	Seamus & Elizabeth	to construct a bay window to the front of dwelling	21-05-03	BALLYBEG UP	N/A	N/A
3510274	APPLICATION FINALISED	Kearney	Joseph	two-storey house, site entrance, septic tank, garage, stables and associated site works	27-05-03	GALBOOLY LI1	N/A	N/A
3358	APPLICATION FINALISED	Barnaville	Stephen	construction of a four-bedroomed dormer dwelling, domestic garage, access entrance, septic tank and percolation area	29-05-03	URARD	N/A	N/A
3129	APPLICATION FINALISED	Maher	Breda Hyland & T.J.	dwelling, domestic garage, entrance, effluent treatment system	04-06-03	MONSLATT	N/A	N/A
3213	APPLICATION FINALISED	Kelly	Gemma O'Driscoll & D	construction of dwelling house, including a garage, septic tank and percolation area, complete with entrance onto public roadway and all associated site works	05-06-03	TULLEQUANE	N/A	N/A
3223	APPLICATION FINALISED	Tobin	Patrick & Eleanor	construction of dwelling, domestic garage, entrance and septic tank	08-06-03	KILLENAULE	N/A	N/A
3225	APPLICATION FINALISED	Woodhouse	John & Mary	a dwelling, domestic garage, entrance and septic tank	08-06-03	GORTEEN UPI	N/A	N/A
3252	APPLICATION FINALISED	Gilmurray	Hugh & Anastatia	a dwelling, domestic garage, entrance and septic tank	08-06-03	GORTEEN UPI	N/A	N/A
3510378	APPLICATION FINALISED	Foy	Thomas & Catherine	Develop attic space in dwelling to include 3 bedrooms, bathroom, four dormer windows to front elevation, 5 velux windows to rear elevation	10-06-03	COOLEENY, M	N/A	N/A
3257	APPLICATION FINALISED	Glengoole Developmen		6 no. dwellngs each with garage, to build entrance off the public road, an access road and entrances off the access road to the sites, to provide a foul sewer collection and treatment system to serve all six sites and carry out all associated site works	16-06-03	GLENGOOLE M	N/A	N/A
3510395	APPLICATION FINALISED	Higgins	John & Catherine	two-storey dormer dwelling, septic tank, bored well, site entrance and all associated site works	17-06-03	NEW HILL, TW	N/A	N/A
3448	APPLICATION FINALISED	Fitzgerald	Richard G	construction of a single storey dwelling with detached garage with septic tank/percolation area	18-06-03	KNOCKALONG	N/A	N/A
3461	APPLICATION FINALISED	Maher	Joseph	to build a dwelling, domestic garage, entrance and septic tank	19-06-03	CURRAHEEND	N/A	N/A
3510412	APPLICATION FINALISED	Marie Dowling	William O'Dwyer &	Dwelling, domestic garage, entrance and septic tank.	19-06-03	BALLYBEG UP	N/A	N/A
3510222	APPLICATION FINALISED	McEvoy	Michael & Joanne	Dwellinghouse, domestic garage, septic tank system, entrance to site, loose livestock shed with storage area for feed, isolation shed, dungstead, effluent tank and yard for handling facilities.	22-06-03	BALLYBEG UP	N/A	N/A
3510184	APPLICATION FINALISED	Cantwell	Teresa	Dormer bungalow, garage, entrance, septic tank and associated site works.	23-06-03	LISDONOWLE	N/A	N/A
3224	APPLICATION FINALISED	Foley	Patrick	2, two-storey dwellings and associated site works	26-06-03	KILLENAULE	N/A	N/A
3495	APPLICATION FINALISED	Healy	William	erection of a four-bedroom dormer dwelling with entrance and garage to rear and a waste treatment system (biocyle or similar unit)	30-06-03	TULLAQUANE	N/A	N/A
3494	APPLICATION FINALISED	Healy	Brendan	erection of a four-bedroom bungalow dwelling with entrance waste treatment system (biocyle or similar unit)	30-06-03	TULLAQUANE	N/A	N/A
390	APPLICATION FINALISED	Ryan	Michael	a 60,000 gallon water reservoir with all associated site works	02-07-03	FENNOR	N/A	N/A

3514	APPLICATION FINALISED	Sugrue	Ann Maria	dwelling house, entrance, garage and effluent treatment system together with associated site works	03-07-03	GRAIGUE LOV	N/A	N/A
3541	APPLICATION FINALISED	Meagher	Dr Liam	attic conversion for store and office, extension for stairwell to rear and associated site works at existing medical centre	09-07-03	KILLENAULE	N/A	N/A
3571	APPLICATION FINALISED	Hogan	Liam	to build dwelling, domestic garage, entrance and septic tank	16-07-03	GRAIGUEPAD	N/A	N/A
3594	APPLICATION FINALISED	Slattery	Martin & Denise	to build a single storey extension to side of existing dwelling, carry out internal alterations, new garage and associated site works	20-07-03	GLENGOOLE N	N/A	N/A
3510386	APPLICATION FINALISED	Power	William & Patricia	single storey dwelling, septic tank with percolation area, entrance, garage and all associated site works (Outline permission ref. no. PLC/02/51/0701)	22-07-03	CLONCLEIGH,	N/A	N/A
3510581	APPLICATION FINALISED	Horse & Jockey Handba	Board of Managemen	Extension for additional facility to existing building with all ancillary site works.	24-07-03	CURRAHEEN,	N/A	N/A
3652	APPLICATION FINALISED	Millennium Family Resc		(a) change use from dwelling, veterinary surgery, offices and stores to playshool/childcare centre, offices, meeting rooms activitiy rooms and stores; (b) build new toilets	29-07-03	GLENGOOLE S	N/A	N/A
3664	APPLICATION FINALISED	Mangan	John & Carmel	to build extension to dwelling	31-07-03	BALLINCURY	N/A	N/A
3697	APPLICATION FINALISED	Ryan	John	construction of a dwelling, garage, entrance with approved treatment plant system and all associated site works	07-08-03	KNOCKABRITT	N/A	N/A
3510624	APPLICATION FINALISED	King	Michael	Retain domestic garage cum fuel storage building.	07-08-03	COOLEENY, M	N/A	N/A
3712	APPLICATION FINALISED	McGarry	Gerard	an extension to bungalow	10-08-03	INCHOROURK	N/A	N/A
3510629	APPLICATION FINALISED	Meagher	Vincent	Dwellinghouse, garage, septic tank and entrance.	11-08-03	MAUNSELSTO	N/A	N/A
3715	APPLICATION FINALISED	Comerford	Shemus	retention of existing workshop with all assocaited site works	12-08-03	FENNOR	N/A	N/A
3595	APPLICATION FINALISED	Lanigan	Eamon	to construct an easy-feed wintering unit incorporating slurry tanks with slats laid on for livestock	19-08-03	GORTEEN LOV	N/A	N/A
3510687	APPLICATION FINALISED	Shelly	Larry and Mary	Two-storey dwelling, garage and entrance	21-08-03	BALLYDAVID,	N/A	N/A
3782	APPLICATION FINALISED	Glengoole Community I	N/A	change of use from agricultural land to sports field and amenity area	27-08-03	GLENGOOLE N	N/A	N/A
3510722	APPLICATION FINALISED	Breen	Joseph	two-storey dwelling house, new domestic store/car port, access entrance, with septic tank and percolation area	28-08-03	LONGFORDPA	N/A	N/A
3510727	APPLICATION FINALISED	Kearney	Donal	retain alteration to site boundary granted under plc/17497	01-09-03	BALLYBEG UP	N/A	N/A
3510512	APPLICATION FINALISED	O'Brien	Mary	Dormer bungalow dwellinghouse, garage, septic tank system and entrance on Site D	01-09-03	DRUMGOWEI	N/A	N/A
3510738	APPLICATION FINALISED	Kearney	Liam	retain imported fill material for new yard used to provide parking of vehicles, retain new rear boundary wall, and retain altered site boundary as granted under plc/20468	01-09-03	BALLYBEG UP	N/A	N/A
3510565	APPLICATION FINALISED	Mulcahy	Tom and Marie	Two-storey dwelling, large domestic garage, bored well on site, double site entrance and effluent treatment system	01-09-03	LISKEVEEN, LI	N/A	N/A
3510753	APPLICATION FINALISED	Co-Op Ltd.	Mid-Tipperary	6 no. dwellings, build access road with entrances off to each of the dwelling sites, build main entrances, build foul sewer collection and treatment system to serve the 6 dwellings and carry out all associated site works	04-09-03	MOYNETEMP	N/A	N/A
3510544	APPLICATION FINALISED	Kennedy	Denis and Brigid	House site with connection to public sewer and to enter site via existing recessed entrance and farm driveway	08-09-03	SKEHANA, BO	N/A	N/A
3868	APPLICATION FINALISED	Fogarty	Michael	conservatory extension and permission for a change of use of the attic space to living accommodation	14-09-03	GORTNAHOE	N/A	N/A
3701	APPLICATION FINALISED	McGarry	Gerard	retention of domestic garage erected on bungalow site	15-09-03	INCHOROURK	N/A	N/A
3879	APPLICATION FINALISED	Campion	Martin	to retain the unauthorised portions of existing workshop together with entrance and associated site works	15-09-03	GORTNAHOE	N/A	N/A
3891	APPLICATION FINALISED	Bourke	Kieran	domestic garage cum fuel storage building	18-09-03	DUNGUIB	N/A	N/A

3510558	APPLICATION FINALISED	Jacob	John	Dwellinghouse, provide on site septic tank system and entrance to site.	18-09-03	MOYNETEMP	N/A	N/A
3510831	APPLICATION FINALISED	Athletic Club	Moyne	erect 6 no. 6 metre poles with 2 no. 150 watt lamps on each pole.	22-09-03	MOYNETEMP	N/A	N/A
3510835	APPLICATION FINALISED	Scanlon	John & Noreen	retain attic converstion to storage area	24-09-03	BORRIS, TWO	N/A	N/A
3919	APPLICATION FINALISED	Healy	Michael	2 new extensions; 1 to the west and 1 to the east of existing dwelling house	29-09-03	BALLINUNTY	N/A	N/A
3931	APPLICATION FINALISED	Cregg	Frank & Carmel	a new rear extension to the existing dwelling, including alterations and renovations to the existing dwelling	01-10-03	GORTNAHOE	N/A	N/A
3510868	APPLICATION FINALISED	Hennessy	P.J. & Maura	erect a single storey extension to the side of main dwelling house and a change of use of currently disused outhouses to provide living accommodation and all associated works	06-10-03	RATHMANNA	N/A	N/A
3510900	APPLICATION FINALISED	Doyle	Tim & Claire	two storey dwellinghouse, septic tank, entrance and associated site works	19-10-03	MOYNETEMP	N/A	N/A
31016	APPLICATION FINALISED	Dunne	Richard	extension to the west of the existing premises comprising of new office with toilet and tea station	23-10-03	GRAIGUEPAD	N/A	N/A
3510959	APPLICATION FINALISED	John Mackey	Michelle Loughnane &	dwelling, garage, septic tank and entrance	30-10-03	PARKSTOWN,	N/A	N/A
3510948	APPLICATION FINALISED	Doherty	Eamonn	Dormer bungalow, septic tank, percolation area and entrance wall.	30-10-03	LAHARDEN UI	N/A	N/A
3510976	APPLICATION FINALISED	Kelly	Noel	bungalow style house, entrance, connection to water supply & all associated site works	05-11-03	TWO-MILE-BC	N/A	N/A
3510983	APPLICATION FINALISED	Catherine McNamara	Kieran Britton/	Dormer bungalow, garage, septic tank, entrance and associated ground works.	06-11-03	MOYNARD, M	N/A	N/A
3510766	APPLICATION FINALISED	(Ireland) Ltd.	O2 Communications	30 m high telecommunications support structure with associated equipment enclosed in secure compound	10-11-03	LEIGH, TWO-M	03-12-03	M
3510414	APPLICATION FINALISED	Lyons	Liam & Siobhan	Dormer dwelling, garage, well, entrance and septic tank.	12-11-03	COLDFIELDS,	N/A	N/A
3983	APPLICATION FINALISED	Ryan	Vincent & Breda	change of house plans and garage plans for outline with approval, ref. nos. 00/285 and 01/696	12-11-03	BALLINTOGHE	N/A	N/A
3511001	APPLICATION FINALISED	Lisheen Mining Ltd	Anglo American	erect a 61.5m high mast of galvanised tubular steel construction to measure and record wind speed and direction at the existing Mine site	13-11-03	KILLORAN, M(	N/A	N/A
31106	APPLICATION FINALISED	Kenny	John & Maria	for retention of development consisting of single storey store/stables	16-11-03	GLENGOOLE M	N/A	N/A
3510172	APPLICATION FINALISED	Gleeson	Richard	retain unauthorised development comprising (a) storage area, (b) equipment store/battery charging & filling area (c) change of use of dwelling to office area	18-11-03	SHANBALLYDI	N/A	N/A
3510169	APPLICATION FINALISED	Gleeson	Richard	to construct commercial storage area, associated site works and to re-locate septic tank	18-11-03	SHANBALLYDI	N/A	N/A
31118	APPLICATION FINALISED	Maher	Paul Swift & Ann Mari	to build dwelling, domestic garage, entrance and septic tank	19-11-03	MONSLATT	N/A	N/A
3511011	APPLICATION FINALISED	O'Brien	Gerard & Margaret	bungalow, septic tank, entrance and associated site works	23-11-03	CURRAHEEN,	N/A	N/A
3511056	APPLICATION FINALISED	McKelvey	Noel & Michelle	two-storey dwelling, garage, septic tank and entrance	27-11-03	PIERCETOWN,	N/A	N/A
3510829	APPLICATION FINALISED	Morrissey	Ed	log home dwelling, bio-cycle waste treatment system and percolation area.	01-12-03	COOLCROO, T	N/A	N/A
3511072	APPLICATION FINALISED	Morrissey	John	Dormer dwelling, septic tank waste treatment system and asociated ground works.	04-12-03	NOARD, TWO	N/A	N/A
3511080	APPLICATION FINALISED	Lanigan	Liam	extension to front and extension to rear of bungalow style house and all associated site works	04-12-03	BORRIS, TWO	N/A	N/A
3511085	APPLICATION FINALISED	Maher	M	retain alterations to layout, external finish and position of dwelling house, including the provision of a sun room on ground floor	07-12-03	BORRIS, TWO	N/A	N/A

3511087	APPLICATION FINALISED	Ryan	Thomas & Eva	to retain unauthorised development of attic conversion containing three bedrooms and WC and retention of converted garage to diningroom and utility room	08-12-03	MOYNETEMP	N/A	N/A
3511114	APPLICATION FINALISED	Catherine Fennelly	Eamon Phelan &	build dwelling, domestic garage cum fuel storage building, entrance and septic tank	11-12-03	COOLEENY, M	N/A	N/A
3981	APPLICATION FINALISED	Lisnamrock National Sc	Board of Management	To construct single storey extension to side of existing school, comprising classroom, resource room, toilets, Biofilter SAM5 sewage treatment plant and associated site works	14-12-03	CURRAHEEND	N/A	N/A
31223	APPLICATION FINALISED	Dunne	William	to construct a dwelling and site entrance, with septic tank and puraflo waste water treatment system	16-12-03	GRAIGUEPAD	N/A	N/A
3511103	APPLICATION FINALISED	Shelley	P	single storey dwelling, garage, septic tank, site entrance and associated site works	16-12-03	LAHARDEN UI	N/A	N/A
31234	APPLICATION FINALISED	Altoe Construction Ltd		a development of 31 units comprising of (a) 14 no. two storey detached houses, (b) 3 no. terraced two storey houses in one terrace, (c) 8 no. single storey semi-detached houses, (d) 6 no. two storey semi detached houses with access directly off public road, (e) discharging surface water to local watercourse and all associated site works (f) connection of houses to existing main sewerage system and water mains	18-12-03	CASTLEQUAR	N/A	N/A
3511174	APPLICATION FINALISED	Hanrahan	Ted & Gernette	single storey house, septic tank, new entrance and associated site works	08-01-04	RATHMANNA	N/A	N/A
3511189	APPLICATION FINALISED	Stapleton	Cyril	dwelling, garage, septic tank and entrance	09-01-04	CURRAHEEN,	N/A	N/A
3511201	APPLICATION FINALISED	Cummins	Patrick	dwelling, garage, effluent treatment system and entrance	10-01-04	GARRANROE,	N/A	N/A
3511193	APPLICATION FINALISED	Ryan	Ann Marie	two- storey dwelling wtih entrance, garage, effluent treatment system and all associated site works	10-01-04	COLDFIELDS,	N/A	N/A
31325	APPLICATION FINALISED	Corbett	Andy & Statia	dwelling, domestic garage, entrance and septic tank	17-01-04	LICKFINN	N/A	N/A
31371	APPLICATION FINALISED	Corcoran	Maria & Edwin	dwelling, domestic garage, entrance and septic tank (Outline Planning Ref 00/568)	20-01-04	EARLSHILL	N/A	N/A
31347	APPLICATION FINALISED	Edwards	Janett & Michael	to extend cottage	22-01-04	KNOCKALONG	N/A	N/A
3511044	APPLICATION FINALISED	Burke	Aidan & Carmel	two-storey dwelling, garage, new site entrance and road, septic tank and all associated site works	22-01-04	NOARD, TWO	N/A	N/A
3511250	APPLICATION FINALISED	Ryan	Edward	Dwelling, garage, septic tank and entrance.	23-01-04	GARRANROE,	N/A	N/A
3510467	APPLICATION FINALISED	Dunne	Noel	two-storey dwellinghouse, entrance and septic tank drainage system	27-01-04	GARRANROE,	N/A	N/A
31231	APPLICATION FINALISED	Butler	William & Christine	to construct a two-storey dwelling, entrance, septic tank, percolation area and associated site works	28-01-04	LANESPARK	N/A	N/A
3511286	APPLICATION FINALISED	Ryan	Martin and Marian	Extension of existing house and erection of granny flat	30-01-04	MOYNETEMP	N/A	N/A
3511303	APPLICATION FINALISED	Boilson	Andrew	Dwelling house, entrance, connection to water supply, septic tank and all associated site works.	31-01-04	KYLENOE, HO	N/A	N/A
31435	APPLICATION FINALISED	Phelan	Thomas	2 no. dwellings, each with separate septic tank and percolation area and 1 no. double entrance (Outline Permission Ref. No. 98/727)	02-02-04	FENNOR	N/A	N/A
31250	APPLICATION FINALISED	Fennelly	Helena	construct a dormer bungalow garage, septic tank, percolation area and combined entrance with neighbouring site	04-02-04	CRAB	N/A	N/A
31434	APPLICATION FINALISED	Doheny	Seamus	construction of a new two-storey dwelling house, domestic garage, access entrance with septic tank and puraflo waste water treatment system	05-02-04	GRAIGUEPAU	N/A	N/A
3510584	APPLICATION FINALISED	O'Gorman	Michael & Catherine	Bungalow, entrance, garage, septic tank and percolation area	05-02-04	NOARD, TWO	N/A	N/A

3511349	APPLICATION FINALISED	Power	James & Brenda	(a) Erection of dwelling house; (b) Erection of garage/general purpose shed; (c) Installation of waste treatment works; (d) Associated works.	07-02-04	SHANACLOON	N/A	N/A
3511422	APPLICATION FINALISED	Downey	Stephen & Rosemary	Bungalow, site entrance, bored well on site and effluent treatment system contrary to details submitted with original grant of permission ref. no. 03510565	10-02-04	LISKEVEEN, LI	N/A	N/A
3511473	APPLICATION FINALISED	Ryan	Pat & Mairead	Demolish existing single storey dwelling and to build two-storey dwelling in its location	12-02-04	BORRIS, TWO	N/A	N/A
3511471	APPLICATION FINALISED	Maguire	Sean & Catherine	Two storey dwelling, garage, entrance and septic tank	12-02-04	GALBOOLA, LI	N/A	N/A
3511463	APPLICATION FINALISED	Donnelly	Thomas	dormer dwelling, garage, entrance with septic tank and all associated site works	12-02-04	NOARD, TWO	N/A	N/A
31334	APPLICATION FINALISED	Fennelly	James Kieran	a dwellinghouse, garage, septic tank, percolation area and combined entrance with neighbouring site	17-02-04	CRAB	16-03-04	R
3511452	APPLICATION FINALISED	Cleary	Eleanor	house, septic tank and entrance (Outline No. PLC/21223)	18-02-04	BOOLABEHA,	N/A	N/A
31553	APPLICATION FINALISED	Wilson	Thomas & Philomena	single storey extension as utility room, connecting to existing services of dwelling and all associated site works	21-02-04	RATHBEG	N/A	N/A
31564	APPLICATION FINALISED	Hayes	Philip & Anne	extend and refurbish existing dwelling including the construction of a pitched roof with first floor accommodation	21-02-04	KILLENAULE	N/A	N/A
3510870	APPLICATION FINALISED	Byrne	Denis	Dwelling, domestic garage, entrance and septic tank	24-02-04	LONGFORDPA	N/A	N/A
3511548	APPLICATION FINALISED	Walsh	Michael and Bernadet	Two-storey house, domestic garage, septic tank and percolation area to SR 6 1991, togerther with new entrance, site boundaries and all associated site works (Outline permission Ref. 0351/0083)	26-02-04	CLONCLEIGH,	N/A	N/A
3511557	APPLICATION FINALISED	Kiely	Vincent	Dwellinghouse, septic tank, percolation area and entrance	28-02-04	BOULABEHA,	N/A	N/A
4510005	APPLICATION FINALISED	O'Brien	Mary	Bungalow dwelling, seperate garage, entrance, septic tank and all ancillary site works	29-02-04	DRUMGOWEI	N/A	N/A
4510078	APPLICATION FINALISED	Doyle	Thomas	one and a half storey dormer dwelling, entrance, septic tank with percolation area, connection to existing private water supply and associated site works	07-03-04	KILMAKILL, M	N/A	N/A
3510644	APPLICATION FINALISED	Egan	Thomas	Hotel extension comprising (a) two storey block of eighteen bedrooms, meeting rooms; (b) conference centre, lobby, courtyard garden etc. (c) leisure/health and beauty suite; (d) toilets and ancillary facilities; (e) associated car parking.	08-03-04	HORSE & JOCI	N/A	N/A
3511269	APPLICATION FINALISED	Harold Twomey	Orla Kerwick &	dormer dwelling with garage, entrance and associated site works	08-03-04	BORRIS, TWO	N/A	N/A
4510151	APPLICATION FINALISED	John Mackey	Michelle Loughnane &	dwelling, garage, propriatory effluent treatment system and entrance (outline No. 03/51/0959)	09-03-04	PARKSTOWN,	N/A	N/A
4510150	APPLICATION FINALISED	Kennedy	Denis & Brigid	dwelling and entrance via existing recessed entrance and farm driveway (outline No. 03/51/0544)	09-03-04	SKEHANE, TW	N/A	N/A
3511434	APPLICATION FINALISED	Kelly	Liam & Elizabeth	Two storey dwelling with garage attached, entrance and septic tank	09-03-04	GARRANROE,	N/A	N/A
454	APPLICATION FINALISED	Heffernan	Denis & Sadie	a conservatory to the side of an existing dwelling	17-03-04	BALLYNONTY	N/A	N/A
4510197	APPLICATION FINALISED	Cleary	Regina	dwelling house, septic tank and entrance	21-03-04	BOOLABEHA,	N/A	N/A
4510198	APPLICATION FINALISED	Kearney	Georgina	dwelling house, garage, entrance, effluent treatment system and associated site services	21-03-04	GALBOOLY LI1	N/A	N/A
3511465	APPLICATION FINALISED	Ivan Bell	Yvonne Shaw &	dormer dwelling, entrance and septic tank and to relocate existing septic tank serving adjacent dwelling	22-03-04	CURRAHEEN,	N/A	N/A
4510194	APPLICATION FINALISED	Walshe	Eugene	single storey dwelling with entrance and septic tank system	22-03-04	MAUNSELSTO	N/A	N/A
3511381	APPLICATION FINALISED	Corcoran	John & Mary	two-storey dwelling house and garage	23-03-04	TWO-MILE-BC	N/A	N/A
4510230	APPLICATION FINALISED	GAA Club	Moycarkey Borris	Develop playing field, running track, access road, car park area, to provide flood lighting and to divert and pipe open drain	25-03-04	BALLYDAVID,	N/A	N/A

4510236	APPLICATION FINALISED	Bini	Umberto and Mary	Change of house type and change of site layout on previously approved 02/51/0199 - erect two-storey dwellinghouse, garage, septic tank and entrance	29-03-04	GARRANROE,	N/A	N/A
31311	APPLICATION FINALISED	Stapleton	William	a dwelling house, garage, entrance and effluent treatment system	31-03-04	MILLISSON	N/A	N/A
3860	APPLICATION FINALISED	McGuire	Stephen & Helen	demolish existing house and construct a two storey dwelling house, garage, treatment plant, percolation area and associated site works	01-04-04	KNOCKAVADE	N/A	N/A
4510045	APPLICATION FINALISED	Kelly	Seamus & Margaret	dwelling house, septic tank and percolation area, garage, bored well, entrance and associated site works	01-04-04	GALBOOLA, LI	N/A	N/A
4510298	APPLICATION FINALISED	Richard Whelan	Ann Marie Maher &	dormer style dwelling house, garage, septic tank and entrance	11-04-04	COOLCROO, T	N/A	N/A
31255	APPLICATION FINALISED	Bourke	Kevin	to demolish existing structure comprising of workshop/stores/toilets and office, the repositioning of both underground tanks and petrol pumps. To construct a filling station shop unit including toilets, store rooms and office and permission for the construction of a car repair workshop comprising of 3 no. bay service areas, offices and toilets to the rear of existing structure, the development also include the provision of on-site parking, car wash and a new vehicular entrance (for oil deliveries only), located 26 metres to the north of existing workshop and all associated site development works	13-04-04	KNOCKAVADA	N/A	N/A
31373	APPLICATION FINALISED	Glengoole Developmen		ref. no. 03/257 to develop site works (for 6 no dwelling sites) consisting of an access road, entrances off access road to each site, to provide a foul sewer collection and treatment system to serve all six sites and all associated site works	14-04-04	GLENGOOLE I	N/A	N/A
4204	APPLICATION FINALISED	Laffan	Kevin	an easy feed wintering unit incorporating slurry tanks with slats laid on	14-04-04	GORTNAHOO	N/A	N/A
4510321	APPLICATION FINALISED	Harrison	Ann	domestic garage cum fuel store	15-04-04	NEWTOWN, L	N/A	N/A
4510347	APPLICATION FINALISED	Cantwell	Teresa	dormer bungalow, domestic garage, entrance, septic tank and associated site works	21-04-04	LISDONOWLE	N/A	N/A
4252	APPLICATION FINALISED	Purcell	Anthony	to retain dwelling, domestic garage, entrance and septic tank	22-04-04	LURGOE	N/A	N/A
4259	APPLICATION FINALISED	O'Reilly	Patrick & Mary	extension to existing dwelling at front and rear	25-04-04	CLONORA	N/A	N/A
4262	APPLICATION FINALISED	Campion	Martin	to open slurry tank with protective fencing and provide flow channel from existing slurry tank to proposed open tank, soiled water tank in assembly yard to join with soiled water channel from exit of parlour, also cattle crush	25-04-04	GRAIGUEPAU	N/A	N/A
4108	APPLICATION FINALISED	Cooper Joyce	Louise	to retain (a) porch to front of dwelling; (b) extensions to rear; (c) conversion of garage to sittingroom	27-04-04	KILBRANNEL	N/A	N/A
4510382	APPLICATION FINALISED	Maher	M	Extension to side of dwelling incorporating gallery floor and to alter existing window style	28-04-04	BORRIS, TWO	N/A	N/A
4510403	APPLICATION FINALISED	Tom Power	Rachel Byrne &	dwellinghouse and associated site works, including septic tank and entrance	03-05-04	NOARD, TWO	N/A	N/A
4510406	APPLICATION FINALISED	Treacy	Sean	Single storey dwelling and car port with septic tank, percolation area and asociated site works	03-05-04	BALLYBEG, LIT	N/A	N/A
4510248	APPLICATION FINALISED	Ryan	Paddy & Breda	dormer type bungalow, septic tank, percolation area, private well, garage, farm building to rear and entrance wall	04-05-04	COLDFIELDS,	N/A	N/A
4301	APPLICATION FINALISED	Morris	Thomas	an out-building consisting of double garage shed and general storage area for domestic use only	05-05-04	POYNSTOWN	N/A	N/A
4510165	APPLICATION FINALISED	Martha Flanagan	Jamie Mockler &	Bungalow dwelling, detached garage, new entrance with septic tank and percolation area and all associated site works	06-05-04	MOYNARD, M	N/A	N/A
31559	APPLICATION FINALISED	Hogan	Gerard	dwelling, domestic garage, entrance and septic tank	13-05-04	GRAIGUEPAD	N/A	N/A

4106	APPLICATION FINALISED	Booth	Robert	dwelling, domestic garage, three stables, agricultural shed, entrance, septic tank with puraflo treatment unit	18-05-04	KILCOOLEY AE	09-06-04	R
4511667	APPLICATION FINALISED	Anglo American Lisheer		extension to existing mine and construction of 3 No. ventilation shafts, two of which have evases and the third a hoist house. An EIS has been submitted with this application.	18-05-04	BALLYERK, DE	15-06-05	M
4368	APPLICATION FINALISED	Glengoole National Sch		extension including 1 classroom, 1 disabled toilet, entrance hall and office, amendment to entrance gates for disabled ramp and all associated site works	19-05-04	GLENGOOLE N	N/A	N/A
4376	APPLICATION FINALISED	Hanrahan	Brian & Rose	to retain development of the first floor of dwelling	20-05-04	KNOCKAVADA	N/A	N/A
4377	APPLICATION FINALISED	Maher	Joseph & Joanne	to retain (a) porch to front of dwelling, (b) garage and fuel storage building as constructed	20-05-04	BALLYNASTICI	N/A	N/A
4379	APPLICATION FINALISED	Moore	Thomas	extension and ancillary works to dwelling	20-05-04	URARD	N/A	N/A
4510530	APPLICATION FINALISED	Lanphier	John	Septic tank and percolation area	23-05-04	CURRAHEEN,	N/A	N/A
4510570	APPLICATION FINALISED	Blake	Patrick	2 No. slatted tanks, to extend a slatted tank and to build a milking parlour, collecting yard and wash water storage tank	31-05-04	BALLYERK, TW	N/A	N/A
4453	APPLICATION FINALISED	Hassett	Catherine	a single storey extension to side of existing house	02-06-04	BALLINTOGHE	N/A	N/A
4473	APPLICATION FINALISED	Kelly	Edward	dwelling house, garage, septic tank and entrance	08-06-04	GURTEEN UPF	N/A	N/A
4474	APPLICATION FINALISED	Kelly	Liam	dwelling house, garage, septic tank and entrance	08-06-04	GURTEEN UPF	N/A	N/A
4491	APPLICATION FINALISED	Ivors	Catherine Ryan & Jose	two-storey private dwelling and septic tank together with all associated site works	10-06-04	CROSSCANNC	N/A	N/A
4472	APPLICATION FINALISED	Harding	Pat	2 no. dwellings, entrances and sewage treatment units	13-06-04	LICKFINN	N/A	N/A
4532	APPLICATION FINALISED	McMonagle	Sean & Fiona	(Outline Ref: 03/257) for a single storey dwelling, garage and entrance	16-06-04	GLENGOOLE N	N/A	N/A
4533	APPLICATION FINALISED	O'Reilly	Eileen	(Outline Planning Ref: 03/257) for dwelling house, garage and associated site works	20-06-04	GLENGOOLE N	N/A	N/A
4539	APPLICATION FINALISED	Harding	Noel	(Outline Ref: 03/257) for a single storey dwelling, garage and entrance	21-06-04	GLENGOOLE N	N/A	N/A
31525	APPLICATION FINALISED	Cahill	Thomas & Mary	bungalow, garage, connection to public sewer and associated site works	22-06-04	BALLYNONTY	N/A	N/A
439	APPLICATION FINALISED	Dunne	Christoper	a bungalow, dwelling, garage, entrance with septic tank and all associated site works	27-06-04	BOULICK	N/A	N/A
4561	APPLICATION FINALISED	McGarry	Alice Stapleton & Mar	Ref. No. 03/257 to build a dwelling house, garage and associated site works	28-06-04	GLENGOOLE N	N/A	N/A
3511109	APPLICATION FINALISED	Cussen	Philip	single dwelling including septic tank with waste water treatment system, private well, garage and entrance wall	29-06-04	ATHLUMMON	N/A	N/A
4510715	APPLICATION FINALISED	Hall	Michael & Patricia	Two-storey dwelling, septic tank, percolation area, garage and entrance wall	30-06-04	CLONCLEIGH,	N/A	N/A
4586	APPLICATION FINALISED	Gleeson	Clement & Geraldine	dwelling, domestic garage, entrance, septic tank with Puraflo treatment unit	01-07-04	GRAIGUEPADI	N/A	N/A
4510716	APPLICATION FINALISED	Creedon	Peter	Two-storey dwelling, septic tank and entrance - (Outline Permission PLC/21223)	05-07-04	BOULABEHA,	N/A	N/A
4615	APPLICATION FINALISED	Campion	Martin	a dry goods store unit	07-07-04	GORTNAHOE	N/A	N/A
31310	APPLICATION FINALISED	Brennan	Jeffery	dwelling house with garage, site entrance, septic tank/effluent treatment system and associated site works	08-07-04	GLENGOOLE S	N/A	N/A
4510765	APPLICATION FINALISED	Pollard	Joe & Annette	erect a single storey extension to the side of dwelling	08-07-04	CLUAIN NA SE	N/A	N/A
4510625	APPLICATION FINALISED	Byrne	Damien	dormer dwelling, garage, septic tank and effluent treatment system and entrance (outline No. 03/51/0927)	11-07-04	RAHELTY, THU	N/A	N/A
4510826	APPLICATION FINALISED	Dunne	Catherine & Kevin	Extend existing dwelling house	20-07-04	MOYNARD, M	N/A	N/A
4510828	APPLICATION FINALISED	Quarries Ltd.,	Maher	A Batching plant, comprising hopper, silo, shed and ramp area located south east of and adjacent to existing quarry extraction area	21-07-04	CASTLETOWN	N/A	N/A

4676	APPLICATION FINALISED	Fanning	Lucy Bourke & Declan	dwelling house, sewage treatment system and percolation area, garage, entrance onto public roadway and all assoicated site works and landscaping	21-07-04	DUNGUIB	N/A	N/A
4687	APPLICATION FINALISED	Slattery	Ann & Edward	Outline Planning Permission Ref: 03/257 to build dwelling house, garage, and associated site works	22-07-04	GLENGOOLE M	N/A	N/A
4510853	APPLICATION FINALISED	Centenary Co-op Societ	N/A	Alter 2 No. grain storage buildings as follows; (a) remove existing asbestos roofing and wall cladding and replace with insulated roof and wall panel and to replace existing roller shutter door with auto roller shutter door. (b) remove existing asbestos roofing and wall cladding and replace with insulated roof and wall panels and to extend existing concrete walls to eaves level and to replace existing roller shutter door with new roller shutter door	25-07-04	MAUNSELSTO	N/A	N/A
4510910	APPLICATION FINALISED	Roche	Brian & Christine	dwelling house, septic tank, entrance and associated site works	05-08-04	CLONCLEIGH,	N/A	N/A
4510704	APPLICATION FINALISED	Revell	Andrew	Temporary mobile home, septic tank, entrance and associated ground works	08-08-04	COOLEENY, M	N/A	N/A
4798	APPLICATION FINALISED	Maher	Joseph & Joanne	dwelling, domestic garage, entrance and septic tank	11-08-04	CURRAHEEND	N/A	N/A
4819	APPLICATION FINALISED	Kerwick	Mary Roarty & Thoma	a two-storey dwelling house and garage, proprietary waste water treatment system and entrance	15-08-04	EARLSHILL	N/A	N/A
4378	APPLICATION FINALISED	Hayes	Martin & Marie	a dwelling, domestic garage, entrance, septic tank and Puraflo treatment unit	16-08-04	BALLINTOGHE	N/A	N/A
4510989	APPLICATION FINALISED	McGovern	Kenny & Catherine	single dwelling, septic tank, percolation area, garage and entrance wall	19-08-04	CLONCLEIGH,	N/A	N/A
4511008	APPLICATION FINALISED	Maher Lambe	Marion	storey and a half dwelling with entrance, bio-clear effluent treatment plant system and all associated site works (outline No. PLC/24897)	28-08-04	BORRIS, TWO	N/A	N/A
3827	APPLICATION FINALISED	Tombrack Ltd		3 no. detached houseswith garages, 26 no. semi-detached houses, connection to the public sewer via a pumping station and discharge of surface water to an open existing drain along with any other ancillary works	02-09-04	GORTNAHOE	N/A	N/A
4511096	APPLICATION FINALISED	Coman	Stephen	Construction of a two-storey dwelling , the widening of the existing site entrance and the installation of a septic tank waste treatment system.	07-09-04	COLDFIELDS,	N/A	N/A
4465	APPLICATION FINALISED	Norton	John	six dwelling houses and associated site works	08-09-04	KILLENAULE	N/A	N/A
4961	APPLICATION FINALISED	Comerford	Philip	a change of house design from that granted under ref. no. 99/1243 and septic tank	12-09-04	URLINGFORD	N/A	N/A
4510654	APPLICATION FINALISED	Heffernan	Donal	enlarge existing shop and to alter both internal layout and front facade	14-09-04	BORRIS, TWO	N/A	N/A
4510836	APPLICATION FINALISED	Ryan	T.J.	Single storey dwelling, plus new site entrance, reinstatement of existing electric and water services and septic tank/percolation area subject to percolation test and all associated site works	15-09-04	GALBOOLY LI	N/A	N/A
4511147	APPLICATION FINALISED	Kavanagh	John & Anne	Conservatory extension	16-09-04	BORRIS, TWO	N/A	N/A
4994	APPLICATION FINALISED	Maher	Margaret	alteration and extension to dwelling. The works consist of raising the dwelling to form a dormer and construct a dormer type extension to the side and front of dwelling and all necessary site works	19-09-04	KILBOY	N/A	N/A
4995	APPLICATION FINALISED	Gleeson Steel & Engine		construction of a workshop, steel store, weighbridge and sign	20-09-04	KNOCKBOY	N/A	N/A
4511186	APPLICATION FINALISED	Fogarty	Michael & Marian	extension to dwelling, garage, new boundary wall and associated site works	23-09-04	LONGFORDPA	N/A	N/A
4511182	APPLICATION FINALISED	Daly	Patrick	Calf shed, slatted tank, milking parlour, dairy, cattle handling unit and associated site works, including new passage-way	23-09-04	COOLEENEY, I	N/A	N/A

4511148	APPLICATION FINALISED	Morrissey	Ed	Change of design of two-storey house planning permission Ref. 03/51/0829 to include biocycle treatment plant, percolation area, retain existing entrance as indiated on original permission with all associated site works	28-09-04	COOLCROO, T	N/A	N/A
4511203	APPLICATION FINALISED	Revell	Andrew	Demolish existing kitchen at the rear of dwelling house and construct a new kitchen to the rear and bedroom to the south-west side of existing dwelling house	28-09-04	COOLEENY, M	N/A	N/A
4510750	APPLICATION FINALISED	Eamon Doyle	Mary Fitzgerald Doyle	two-storey dwelling, septic tank with percolation area, domestic garage and entrance	05-10-04	CLONCLEIGH,	N/A	N/A
4517	APPLICATION FINALISED	Ryan	Edel Coady & David	bungalow, garage, septic tank, percolation area and entrance	05-10-04	RATHBEG	N/A	N/A
4493	APPLICATION FINALISED	Cahill	Seamus & Caroline	dwelling, domestic garage, entrance, septic tank with puraflo treatment unit	07-10-04	GORTNAHOE	N/A	N/A
4510939	APPLICATION FINALISED	Strappe	Pat & Anne	Dwelling house with garage, entrance, effluent treatment system and associated site services	11-10-04	NEW HILL, TW	N/A	N/A
41097	APPLICATION FINALISED	Healy	Noelle Goldsboro & G	bungalow, garage, effluent treatment system and entrance	14-10-04	RATHROE	N/A	N/A
4511284	APPLICATION FINALISED	Martha Flanagan	Jamie Mockler and	To construct bungalow, septic tank and percolation area and new entrance as per Outline Planning Permission, Ref. No. plc/21717	18-10-04	GARRENROE,	N/A	N/A
41131	APPLICATION FINALISED	Cantwell	Brendan & Eamon	2 no. dwellings with 1 no. double access entrance serving both sites and joint proprietary sewage waste water treatment and disposal system serving both dwellings	21-10-04	GRAIGUEPADI	N/A	N/A
4511361	APPLICATION FINALISED	Maguire Telford	Mary	Erect new agricultural entrance	02-11-04	BALLYBEG, LIT	N/A	N/A
4511374	APPLICATION FINALISED	Adrian McGinley	Ursula Ryan &	Change of house type, garage and site layout to Planning Permission Ref. PLC/21585	03-11-04	GARRANROE,	N/A	N/A
4510337	APPLICATION FINALISED	Dunne	John	Dwellinghouse, garage, entrance, driveway, site specific proprietary effluent system, private well and all associated site works	04-11-04	PIERCETOWN,	N/A	N/A
4511388	APPLICATION FINALISED	Walsh	Eugene	Dwellinghouse, septic tank and entrance	04-11-04	MAUNSELSTO	26-11-04	C
4511390	APPLICATION FINALISED	Boilson	Andrew	dwellinghouse, entrance, connection to water supply, septic tank and all associated site works	07-11-04	KYLENOE, HO	N/A	N/A
41145	APPLICATION FINALISED	Stroud	John	dwelling, domestic garage, entrance, septic tank and associated works	08-11-04	EARLSHILL	N/A	N/A
41225	APPLICATION FINALISED	Gortnahoe/Glengoole C		to install 8 no. 12 metre high poles having 3 - 400 W lights per pole to light pitch and 2 no. 12 metre high poles 27 metres apart with retractable 50 x 50 square nylon netting for ball stopping purposes	16-11-04	GORTNAHOE	N/A	N/A
41262	APPLICATION FINALISED	Phelan	Michael & John	an easy feed wintering unit incorporating slurry tanks with slats laid on and cubicle beds, also to extend existing milking parlour and soiled water tank in assembly yard and all associated facilities on land	25-11-04	INICHIROURK	N/A	N/A
4511485	APPLICATION FINALISED	Sweeney	John	as constructed dwelling, fuel shed and storage shed	25-11-04	BORRIS, TWO	N/A	N/A
4511498	APPLICATION FINALISED	Declan Hanna	Michelle Finn &	two-storey dwelling house, domestic garage, entrance and septic tank all complete with associated site works	29-11-04	SHANBALLYDI	N/A	N/A
4510958	APPLICATION FINALISED	Ryan	John	Change of use of yard area from machinery yard to a yard for the parking of hackney vehicles	02-12-04	BALLYDAVID,	N/A	N/A
41282	APPLICATION FINALISED	Tombrack Ltd		change of house design consisting of change of house design from house no. 4 to house no. 29 which was previously granted planning permission under Planning Ref 03/827 for four bedrooom semi-detached houses, now to be changed to three bedroom semi-detached house	02-12-04	GORTNAHOE	N/A	N/A
4511543	APPLICATION FINALISED	Doyle	Paddy	Domestic garage	02-12-04	MOYNARD, M	N/A	N/A

41340	APPLICATION FINALISED	Purcell (Jnr)	Michael	retention of existing mobile home, existng shed and existing septic tank system	14-12-04	FENNOR	N/A	N/A
41360	APPLICATION FINALISED	Walsh	Gerard	dwelling, domestic garage, entrance, septic tank with puraflo treatment unit	20-12-04	GORTNAHOE	N/A	N/A
41359	APPLICATION FINALISED	Bergin	Breda	dwelling, domestic garage, entrance, septic tank with puraflo treatment unit	20-12-04	GORTNAHOE	N/A	N/A
4510608	APPLICATION FINALISED	Fogarty	Sean	1. conservatory to rear of existing dwelling. 2. extension to living room front of existing dwelling. 3. Location and orentation of dwelling	21-12-04	GARRANROE,	N/A	N/A
4511642	APPLICATION FINALISED	Fogarty	Sean and Bridget	Dwelling, garage, septic tank and entrance	23-12-04	MOYNARD, M	N/A	N/A
41407	APPLICATION FINALISED	Joy	Matthew	an extension to existing dwelling and all ancillary works	08-01-05	COOLDINE	N/A	N/A
4511757	APPLICATION FINALISED	Gleeson	Thomas	dormer bungalow, including septic tank Bord na Mona Puraflo peat filter system, garage, private well and entrance wall	29-01-05	RAHELTY, THU	N/A	N/A
4511761	APPLICATION FINALISED	Jacob	John	Garage	01-02-05	MOYNETEMPI	N/A	N/A
4511775	APPLICATION FINALISED	Murray	Norah	front porch, rear porch, two gable ends and separate domestic garage	04-02-05	MOYNETEMPI	N/A	N/A
41543	APPLICATION FINALISED	Crowe	Tim	single storey mono-pitch lean-to agricultural building to serve as a dairy to a milking parlour, to carry out alterations to existing milking parlour, provisions for foul and surface water disposal and ancillary works etc. within the curtilage of a protected structure	08-02-05	CLONAMICKL(	N/A	N/A
4511800	APPLICATION FINALISED	Kearney	Georgina	to relocate position of entrance and all associated site works	10-02-05	GALBOOLY LI1	N/A	N/A
4511799	APPLICATION FINALISED	Moriarty	Sean & Bridget	dwelling house with garage, entrance, effluent treatment system and all associated siteworks	10-02-05	GALBOOLY LI1	N/A	N/A
41590	APPLICATION FINALISED	Tobin	Jim & Aileen	dormer bungalow, new site entrance, garage to park minbuses, septic tank and associated site works	19-02-05	KNOCKABRITT	N/A	N/A
4511879	APPLICATION FINALISED	Barnaville	Martin	Two dwellings and associated site works (Outline Ref. PLC/22462)	22-02-05	LONGFORDPA	N/A	N/A
41603	APPLICATION FINALISED	Moloney	Michael & Eileen	conservatory extension to existing dwelling	22-02-05	GRAYSTOWN	N/A	N/A
4510758	APPLICATION FINALISED	Maher Quarries Ltd	N/A	Extend quarry extraction operations by approximately 1.81 hectares in lands directly east and adjacent to the existing quarry extraction area	22-02-05	CASTLETOWN	N/A	N/A
4511871	APPLICATION FINALISED	Morrissey	Ed	change of design of 2 storey house planning ref 03/51/0829 to include biocycle treatment plant, percolation area, retain existing entrance as indicated on original permission along with associated site works	25-02-05	COOLCROO, T	N/A	N/A
41663	APPLICATION FINALISED	Guilfoyle	Patrick & Eileen	4 bedroomed bungalow, new access entrance with proprietary waste water treatment and disposal system and all associated site works	26-02-05	URARD	N/A	N/A
55	APPLICATION FINALISED	Hourihan	Vincent	change of use from supermarket to restaurant with takeaway including additional ground floor window to front elevation with all associated works	02-03-05	KILLENAULE	N/A	N/A
4758	APPLICATION FINALISED	Campion	Martin	an environmentally friendly dwelling house with garage, entrance, effluent treatment system and associated site works	03-03-05	GRAIGUEPADI	N/A	N/A
41421	APPLICATION FINALISED	Fitzgerald	Liam & Fidelma	dormer bungalow, 3 stables, biological wastewater treatment unit and site entrance	20-03-05	KNOCKABRITT	N/A	N/A
552	APPLICATION FINALISED	Maguire	Pat	single storey extension to the side of existing dwelling including all associated site development works to facilitate the development	22-03-05	TULLEQUANE	N/A	N/A

572	APPLICATION FINALISED	Wright	Susan Weeks & Richar	demolish existing domestic garage and flat roofed extension to existing dwelling and construct a single-storey pitched roof extension to existing dwelling and detached domestic garage in new location and all associated works	27-03-05	DERRICKNEW	N/A	N/A
5510092	APPLICATION FINALISED	Healy	Joseph & Geraldine	single storey domestic extension to the north elevation of existing dwelling, including all associated site development works	30-03-05	NEW HILL, TW	N/A	N/A
4511664	APPLICATION FINALISED	O'Donoghue	Anne	house with domestic garage attached, provide on site septic tank system and entrance	05-04-05	BALLYBEG UP	N/A	N/A
5131	APPLICATION FINALISED	Harding	Pat	change of house type of current permission Planning Ref: 04/472 (Site B) from single storey dwelling to dormer type dwelling, including all associated site development works	10-04-05	LICKFINN	N/A	N/A
5510145	APPLICATION FINALISED	Downey	Pat & Fiona	bungalow, site entrance, septic tank system and all associated site works (Outline No. PLC/23515)	13-04-05	BALLYBEG, LIT	N/A	N/A
5156	APPLICATION FINALISED	McGrath	Patrick & Catherine	dwelling, separate garage, effluent treatment system with raised bed filtration, stable block facility and alterations to existing site entrance	14-04-05	LURGOE	11-05-05	R
5150	APPLICATION FINALISED	Bourke	Kieran	extension to dwelling	14-04-05	DUNGUIB	N/A	N/A
5510181	APPLICATION FINALISED	Moore	Aidan	erect slatted cattle house and calving shed	19-04-05	KILLORAN, M(	N/A	N/A
5510206	APPLICATION FINALISED	O'Halloran	Mary	Garage and outhouse	21-04-05	GARRANROE,	N/A	N/A
5229	APPLICATION FINALISED	Purcell (Jnr)	Michael	dormer dwelling with attached garage, site entrance and effluent treatment system	28-04-05	FENNOR	19-05-05	R
5510263	APPLICATION FINALISED	Edward Fanning	Phyllis Maher &	retain domestic waste water treatment plant and percolation area serving existing house	05-05-05	MOYNETEMP	N/A	N/A
5250	APPLICATION FINALISED	Langton	Paul	dwelling house, garage, site entrance and associated site works (outline ref. no. 03/257)	05-05-05	GLENGOOLE I	N/A	N/A
4511271	APPLICATION FINALISED	Casey	Patrick	Dwelling, entrance, garage, waste water treatment system and associated site works	09-05-05	DERRYFADDA	N/A	N/A
41316	APPLICATION FINALISED	Callaghan	James	dormer bungalow and associated site works	12-05-05	FENNOR	N/A	N/A
5280	APPLICATION FINALISED	Slattery	Francis	dwelling, domestic garage, entrance, septic tank with puraflo treatment unit	12-05-05	COOLDINE	N/A	N/A
5510323	APPLICATION FINALISED	Carney	Michael	(a) demolish existing garage and store; (b) extend and refurbish existing dwelling; (c) construct domestic garage and store and all associated site works	18-05-05	KEVINS PARK,	N/A	N/A
5300	APPLICATION FINALISED	Meagher	Joseph & Liam	dwelling, entrance and septic tank	20-05-05	BALLYKERIN	N/A	N/A
5371	APPLICATION FINALISED	Wright	Richard and Susan	to construct a bungalow, domestic garage, entrance, septic tank and percolation area	25-05-05	DERRICKNEW	07-06-05	R
5378	APPLICATION FINALISED	Hayes	John and Ella	to construct a conservatory extension to existing dwelling	26-05-05	CROSSCANNC	N/A	N/A
5510352	APPLICATION FINALISED	Francis Keogh	Michelle Barnaville &	dwelling, domestic garage, dual dwelling and agricultural entrance, proprietary sewage treatment system and all associated site works	26-05-05	GARRANROE,	N/A	N/A
5394	APPLICATION FINALISED	O'Gorman	Andrew & Martina	two-storey dwellinghouse, garage, septic tank, site entrance and associated site works	30-05-05	KNOCKBOY	N/A	N/A
5395	APPLICATION FINALISED	Croughan	Sharon	single sotrey extension to the dwelling, consisting of a lounge, extended bedroom, porch and carry out associated site works	30-05-05	URARD	N/A	N/A
5510384	APPLICATION FINALISED	Adrian McGinley	Ursula Ryan	two-storey dwelling house, garage, septic tank and entrance	02-06-05	GARRANROE,	N/A	N/A
5412	APPLICATION FINALISED	Maher	Michael	convert existing garage to study/playroom	02-06-05	CASTLEQUAR	N/A	N/A
5416	APPLICATION FINALISED	Corbett	Paul Keating & Karen	dwelling, domestic garage, entrance and proprietary sewage treatment system	02-06-05	RATHROE	N/A	N/A

41660	APPLICATION FINALISED	Fennelly	Mary	change of house plans to include attic conversion and increased ridge height from previously granted planning permission, ref. no. 99/859	16-06-05	LANESPARK	N/A	N/A
5510420	APPLICATION FINALISED	Maziarek	Darek & Frances	dwelling, septic tank, percolation area and entrance (outline No. PLC/22538)	18-06-05	DERRYHOGAN	N/A	N/A
59	APPLICATION FINALISED	Kerwick	Padraig Troy & John	two wind turbines, an electrical sub-station, a meteological mast 40 metres high and associated ancillary works - turbine tower height 65 metres and a blade diameter of 71 metres	19-06-05	GLENGOOLE S	11-07-05	R
5533	APPLICATION FINALISED	Pembroke	Norma & Kevin	extensions to existing bungalow: sun-lounge extension to the west gable; domestic store extension to the east gable; utility room and toilet extension to the rear; and all associated site works	23-06-05	URARD	N/A	N/A
4511828	APPLICATION FINALISED	Egan	Tom	Alteration and extension of existing hotel, bar and restaurant to include a new 2 storey entrance foyer area between the existing single storey bar and restaurant areas and the existing 2 storey hotel bedroom wing. A 2 storey extension around a landscaped courtyard including a conference/function room, 6 meeting rooms, cafe, spa, beauty fitness and leisure centre with swimming pool and ancillary areas at ground floor level. 17 additional bedrooms at first floor level together with gym and residents lounge area. Parking for 66 additional cars and 1 coach; modifications to existing site entrance from L4104 County Road. New sewage treatment plant, site development and landscape works	28-06-05	HORSE & JOCI	N/A	N/A
5562	APPLICATION FINALISED	Wright	Richard & Susan	a cluster of eight traditional cottage-style bungalows with communal entrance, communal effluent treatment system and communal landscaped open space	29-06-05	DERRICKNEW	N/A	N/A
5560	APPLICATION FINALISED	KBS Construction		revision of existing permission, ref. 03/1234, for 31 no. semi-detached two-storey dwellings consisting of a change of house type and increasing the number of dwellings to the south boundary along the road frontage from 6 no. units to 8 no. units and all associated site works	29-06-05	CASTLEQUAR	N/A	N/A
5573	APPLICATION FINALISED	Loughnane	Alan & Caroline	conservatory to dwelling	30-06-05	LANESPARK	N/A	N/A
5594	APPLICATION FINALISED	Glanbia Foods Society L		construct a new bulk material storage building together with associated site works	04-07-05	RATHBEG	N/A	N/A
5612	APPLICATION FINALISED	Lahert	John	easy feed unit incorporating slurry tanks with slates lad on also to erect cubicle beds and scraper passages and for the construction of a silo base and all associated works	06-07-05	CROSSOGES	N/A	N/A
5510527	APPLICATION FINALISED	O'Gorman	Eithne	A pitched roof side extension comprising of a domestic garage and bedroom and a pitched roof kitchen to the rear	07-07-05	RATHMANNA	N/A	N/A
5682	APPLICATION FINALISED	Kennedy	Seamus	existing agricultural entrance	21-07-05	KILBRANNEL	N/A	N/A
5681	APPLICATION FINALISED	Kennedy	Seamus	break new agricultural entrance	21-07-05	KILBRANNEL	N/A	N/A
5510337	APPLICATION FINALISED	Darmody	John & Siobhan	Two-storey single family dwelling and 6 No. stables; to include new septic tank, all landscaping and associated site works	31-07-05	CURRAHEEN,	N/A	N/A
5786	APPLICATION FINALISED	Bergin	Michael	3-bay slatted tank and shed for livestock purposes	09-08-05	GORTNAOHO	N/A	N/A
5510698	APPLICATION FINALISED	O'Dwyer	Brendan & Amanda	Conversion of attic space to living accommodation with 2 no. dormers to south elevation & velux's to the north elevation with all associated site works	11-08-05	BALLYMURRE	N/A	N/A
5510183	APPLICATION FINALISED	Stokes	Lyndsey	two-storey dwelling house, garage, septic tank/effluent treatment system/percolation area, site entrance and associated site works	11-08-05	GARRAUN, TV	N/A	N/A

5820	APPLICATION FINALISED	Cantwell	Eamon	4- bedroomed dormer style dwelling house, new access entrance with septic tank plus proprietary waste water treatment and disposal system and all associated site works	16-08-05	GRAIGUEPADI	N/A	N/A
5818	APPLICATION FINALISED	Fitzgerald	John & Rita	dwelling, domestic garage, septic tank and all associated site works	16-08-05	POYNSTOWN	N/A	N/A
5510748	APPLICATION FINALISED	Dalton	Adam	domestic garage	21-08-05	CURRAHEEN,	N/A	N/A
5510771	APPLICATION FINALISED	John Doyle	Elaine Harte &	Dwellinghouse, waste water treatment system and associated site works including entrance	25-08-05	CASTLETOWN	N/A	N/A
4511873	APPLICATION FINALISED	Barnaville	Helen	Change of use of existing residential ground floor to shop unit and permission to construct extension to same, permission to alter first floor residential unit to incorporate 2 no. Apartments/flats and permission for new shop front with all associated siteworks and ancillary works	29-08-05	BALLYDAVID,	N/A	N/A
5510806	APPLICATION FINALISED	Purcell	Valarie	unauthorised development of rear extension to dwelling house	01-09-05	COOLEENY, M	N/A	N/A
5510447	APPLICATION FINALISED	Thurles Congregation o	N/A	demolish existing house/sheds and build a Kingdom Hall (church) for religious assembly, entrance drive and 20 car parking spaces	06-09-05	THURLES ROA	N/A	N/A
5697	APPLICATION FINALISED	Guilfoyle	Patrick & Eileen	construction of a 4 bedroomed bungalow, new access entrance with proprietary waste water treatment and disposal system and all associated site works	14-09-05	URARD	N/A	N/A
5997	APPLICATION FINALISED	Lanigan	Seamus & Cora	new entrance to dwelling	20-09-05	KNOCKBOY	N/A	N/A
5717	APPLICATION FINALISED	Fennelly	Patrick	to demolish existing dwelling and construct a new dwelling house, install single sewage treatment unit and percolation area, entrance onto public roadway, and all associated site works and landscaping	22-09-05	LANESPARK	N/A	N/A
5510768	APPLICATION FINALISED	Kearney	Donal & Deirdre	dwelling house with entrance, effluent treatment system and all associated site works	22-09-05	BALLYBEG, LIT	N/A	N/A
51043	APPLICATION FINALISED	Taylor	John & Marion	extension to side of dwellinghouse and garage/storage shed	28-09-05	GORTNAHOE	N/A	N/A
5510928	APPLICATION FINALISED	Cummins	John	to construct (1) straw bedded cattle shed, (2) silage slab	29-09-05	BLACKCASTLE	N/A	N/A
51077	APPLICATION FINALISED	Norton	Eric	two storey dwelling, domestic garage, proprietary effluent disposal treatment system, entrance gate and all associated site works	03-10-05	KILCOOLEY	N/A	N/A
5510839	APPLICATION FINALISED	Lahart	John & Catherine	Dwelling house with garage, entrance, effluent treatment system and all associated site works	03-10-05	GALBOOLA, LI	N/A	N/A
51078	APPLICATION FINALISED	Brennan	Declan	existing roof which is constructed at a higher level than was previously granted under ref. no. 02/623	04-10-05	KNOCKILTERR	N/A	N/A
51110	APPLICATION FINALISED	Butler	Richard	extension to existing dwelling	06-10-05	BALLYNASTICI	N/A	N/A
5510953	APPLICATION FINALISED	Graham	Tina	new dwelling house, entrance, septic tank and percolation area and associated site works	06-10-05	BALLYBEG, LIT	N/A	N/A
51109	APPLICATION FINALISED	Hally	Rita	dormer dwelling, entrance with treatment plant system and percolation area and all associated site works (outline ref. 01/1226)	11-10-05	POYNTWTOW	N/A	N/A
5510997	APPLICATION FINALISED	Cleary	Regina	Change of house type from that granted permission under file no. 04/51/0197	17-10-05	BOOLABEHA,	N/A	N/A
51163	APPLICATION FINALISED	South Tipperary V E C		an all-weather pitch, The works will include excavating and filling the ground to the rear of the existing school to form an all-weather pitch and a level grass area, Works to the all-weather pitch will include drainage and flood lighting and will include an enclosing fence and gates approx. 3.1m high.	20-10-05	KNOCKAVARD	N/A	N/A
5511009	APPLICATION FINALISED	Boilson	Tomas	Extension to dwelling house, relocation of septic tank and all associated site works	20-10-05	KYLENOE, HO	N/A	N/A

5510908	APPLICATION FINALISED	Croke	Danny & Tina	four bedroom bungalow, septic tank, Bord na Mona Puraflo peat filter system, percolation area, private well, garage and stone entrance wall	25-10-05	COLDFIELDS,	N/A	N/A
51221	APPLICATION FINALISED	Lahart	Frances Hanarahan &	to install a septic tank and percolation area which shall connect to dwelling and all associated works	02-11-05	LURGOE	N/A	N/A
5511077	APPLICATION FINALISED	Society Ltd.,	Centenary Co-Op	Construct a Bio-Diesel production facility comprising of laboratory and administration building, utilities building, process building, input/output station, 12 No. bunded storage tanks, water storage tank, electrical container, weighbridge, treatment plant with percolation area, fire water retention facilities, storm water retention facilities, car park, access road with new site entrance with public roadway and associated site works. This application requires an IPPC licence. An Environmental Impact Statement will be submitted to the planning authority with this application.	08-11-05	MAUNSELSTO	N/A	N/A
51250	APPLICATION FINALISED	McCormack	Margaret	dwelling, domestic garage, entrance, waste water treatment system and all associated site works	10-11-05	KNOCKAVAD/	N/A	N/A
5511094	APPLICATION FINALISED	Edward Fanning	Phyllis Maher &	Extension to house	13-11-05	MOYNETEMP	N/A	N/A
51266	APPLICATION FINALISED	Tobin	Jim & Aileen	indefinitely of a drilled well to serve house which is under construction per planning reference 04/1590	14-11-05	KNOCKABRITT	N/A	N/A
51126	APPLICATION FINALISED	Walsh	Gerard	dwelling, domestic garage, entrance, waste water treatment system and all associated site works	15-11-05	GORTNAHOO	N/A	N/A
51128	APPLICATION FINALISED	Bergin	Breda	dwellling, entrance, waste water treatment system and all associated site works	15-11-05	GORTNAHOO	N/A	N/A
5511156	APPLICATION FINALISED	Egan	Tom	Modifications to previously approved planning permission Ref. No. 04511828 to provide 13 no. additional bedrooms to new first floor area (515 sqm) to east of block and modifications to previously approved plans to provide 5 no. bedrooms in lieu of approved residents lounge to north-east and suite to south-west area with associated internal modifications to escape stairs and ancillary areas and associated alterations to east and south elevations	29-11-05	HORSE & JOCI	N/A	N/A
5511170	APPLICATION FINALISED	McCormack	Patrick J.	dwelling, domestic garage, entrance and septic tank	01-12-05	CURRAHEEN,	N/A	N/A
51365	APPLICATION FINALISED	Dalton	Christopher & Joan	conservatory as constructed to dwelling	06-12-05	KILLENAULE	N/A	N/A
51367	APPLICATION FINALISED	Cullane	Michael & Eileen	dwellinghouse, entrance, front boundary and septic tank	08-12-05	COOLDINE	N/A	N/A
51388	APPLICATION FINALISED	Phelan	Thomas	of a revised site layout to that granted previously (Planning Ref NO 03/1435) and for permission to complete all associated site development works. The changes to be retained consist of a revised orientation of one of the permitted dwellings. The site development works consist primarily of the installation of two number septic tank systems, a combined entrance and boundary treatment	11-12-05	FENNOR	N/A	N/A
51389	APPLICATION FINALISED	Lanigan	Michael and Margaret	construct/erect extension to existing dwellinghouse and all associated site works	11-12-05	POYNSTOWN	N/A	N/A
5511230	APPLICATION FINALISED	Hayes	John	Milking parlour and all associated site works	14-12-05	BORRIS, TWO	N/A	N/A
5511250	APPLICATION FINALISED	Lorraine Ryan	David Quinlan &	Dwellinghouse and associated site works including septic tank and entrance	18-12-05	CASTLETOWN	N/A	N/A
5979	APPLICATION FINALISED	Lanigan	Pat	construction of a concrete batching plant and concrete yard, two workshops and all necessary site works and an advertising sign	21-12-05	KILBRANNEL	N/A	N/A
5511277	APPLICATION FINALISED	Kearney	Donal & Deirdre	extension to existing dwelling house, to erect timber storage shed with utility room and toilet and all associated site works	04-01-06	BALLYBEG, LIT	N/A	N/A

5511283	APPLICATION FINALISED	Cantwell	David & Mary	remove existing derelict dwelling and construct new dwelling house, septic tank and entrance	05-01-06	NOARD, TWO	N/A	N/A
5510874	APPLICATION FINALISED	Moloney	Gerard	construct a storey and a half extension to dwelling and permission for dormers to existing dwellings roof structure and all associated site works	10-01-06	LISDUFF, THU	N/A	N/A
5511331	APPLICATION FINALISED	Kearney	J.J.	extension to dwelling and garage	14-01-06	BALLYBEG UP	N/A	N/A
5511110	APPLICATION FINALISED	Kearney	J J	dwelling, garage, septic tank and entrance	16-01-06	BALLYBEG, LIT	N/A	N/A
5510512	APPLICATION FINALISED	Koop Stoneworks Ltd		entrance and access road to include provision of a new bridge over the Black River	17-01-06	LONGFORDPA	N/A	N/A
5511083	APPLICATION FINALISED	Coman	Ella & Joe	Extension to side of house and new entrance with and all associated site works	17-01-06	GALBOOLA, LI	N/A	N/A
5510687	APPLICATION FINALISED	Doherty	Kenneth	Dormer bungalow, septic tank, Bord na Mona Puraflo peat filter system, percolation area and entrance wall	27-01-06	LAHARDEN UI	N/A	N/A
5511387	APPLICATION FINALISED	Cass	John	slatted cattle shed	27-01-06	RAHINCH, LIT	N/A	N/A
5511435	APPLICATION FINALISED	Ryan	Tom & Marie	extension to existing slatted shed, including two effluent storage tanks. Also proposed slatted effluent collection tank to rear of existing dairy building and all associated site works	04-02-06	KILMAKILL, M	N/A	N/A
5511529	APPLICATION FINALISED	John Doyle	Elaine Harte &	alteration to site layout including relocation of house from that previously granted under planning permission 05/51/0771	24-02-06	CASTLETOWN	N/A	N/A
5511531	APPLICATION FINALISED	Blake	Paddy	agricultural development consisting of extension to existing shed, proposed new shed, slatted tanks and associated site works	24-02-06	MOYNARD, M	N/A	N/A
5511530	APPLICATION FINALISED	Daly	Richard	agricultural development consisting of demolition of existing shed and the construction of new shed to include slatted tanks, bedding area, cattle handling unit and associated site works	24-02-06	DERRYFADDA	N/A	N/A
51517	APPLICATION FINALISED	Timlin	Maurice	to make an entrance to include a gate, piers and rails, and carry out associated site works	08-03-06	FENNOR	N/A	N/A
51509	APPLICATION FINALISED	Timlin	Maurice	domestic garage, convert existing bungalow to a dormer bungalow, to include a first floor and ten in number Velux rooflights and carry out associated site works	08-03-06	FENNOR	N/A	N/A
6510026	APPLICATION FINALISED	Cooney	Andrew & Kathryn	ground floor and dormer extension	08-03-06	BALLYBEG, LIT	N/A	N/A
651	APPLICATION FINALISED	Cranny	Gene	dwelling house, new domestic garage, new access entrance with septic tank and percolation area and all associated site works	19-03-06	FENNOR	N/A	N/A
6114	APPLICATION FINALISED	Troy	James O'Shea & Seam	to construct three wind turbines, an electrical substation, a meteorological mast 40 metres high and associated ancillary works. The turbines will have a tower height not exceeding 55 metres and a blade diameter not exceeding 58 metres	30-03-06	MELLISON	N/A	N/A
51056	APPLICATION FINALISED	Croke	Irene Hayes & William	dwelling, domestic garage, entrance, waste water treatment system and all associated site works	06-04-06	BALLYNONTY	N/A	N/A
5116	APPLICATION FINALISED	Cantwell	Eamon	4-bedroomed dormer style dwellinghouse, new access entrance, septic tank plus proprietory waste water treatment and disposal system and all associated site works (Outline Ref: 00/1346)	12-04-06	GRAIGUEPADI	N/A	N/A
6206	APPLICATION FINALISED	South Tipperary Vocati		to construct a free standing P.E. Hall with ancillary accommodation and associated external works	16-04-06	KILLENAULE	N/A	N/A
5511324	APPLICATION FINALISED	Butler	Pierce	dwellinghouse and associated site works including septic tank and entrance	16-04-06	KYLEMAKILL, I	10-05-06	M
51705	APPLICATION FINALISED	Hanly	Michael	to retain as constructed a bungalow with garage storeage shed, septic tank system and upgrade to effluent treatment syste, boundary walls and entrances on my site	19-04-06	BALLINTOGHE	16-05-06	M

6231	APPLICATION FINALISED	Duggan	Siobhan	3 no. velux type rooflights to the rear, additional windows to rear and west side of existing house and internal alterations for attic storage area and stairs, change of bathroom and new ensuite bathroom at first floor, and change of layout at basement level, also for single storey extension to west side of basement for kitchen, playroom, bathroom and veranda, for 3 rooflights to existing shed and associated site works at former creamery manager's house which is a protected structure	19-04-06	KILLENAULE	N/A	N/A
5510391	APPLICATION FINALISED	Cheese Company Ltd.,	The Tipperary	Construct an integrated constructed wetland system to treat wash waters and yard waters from cheese processing unit and farm complex	25-04-06	LEIGH, TWO-M	N/A	N/A
6264	APPLICATION FINALISED	Kerwick	Denis	to construct a milking parlour and a slurry storage tank	26-04-06	EARLS HILL	N/A	N/A
6510314	APPLICATION FINALISED	Maziarek	Darek and Frances	dwelling, new septic tank and percolation area, new site entrance and new detached garage (domestic use)	10-05-06	DERRYHOGAN	N/A	N/A
6377	APPLICATION FINALISED	Burke	Desmond	for the development of a slatted unit and cubicle house for the housing of cattle including ancillary site works	15-05-06	DERRICKNEW	N/A	N/A
638	APPLICATION FINALISED	Hogan	Dymphna	(Outline Ref: 01/609) bungalow, entrance, septic tank and all associated site works	21-05-06	CLONAMICKL	N/A	N/A
5511329	APPLICATION FINALISED	Smith	John & Josephine	dwelling, garage, septic tank and entrance	25-05-06	BORRIS, TWO	N/A	N/A
6510027	APPLICATION FINALISED	Ryan	John	two-storey dwelling, separate garage, site entrance, septic tank system and all associated site works	25-05-06	ATHLUMMON	N/A	N/A
6510410	APPLICATION FINALISED	Everard	Colm	dwelling, garage, septic tank and entrance - 04/51/1642	29-05-06	MOYNARD, M	N/A	N/A
6510420	APPLICATION FINALISED	Britton	Kieran & Catherine	(a) additional dormer windows to north and south elevations; (b) omitted 1 No. window from the front elevation; (c) additional window to the south elevation on the ground floor; (d) revised entrance location	31-05-06	MOYNARD, M	N/A	N/A
6510429	APPLICATION FINALISED	Egan	Tom	detached building consisting of Mv substation, Lv switch room and generator room for previously approved planning permission 04/51/1828 amended by 05/51/1156 of floor area approx 39sqm located adjacent to eastern boundary at rear of development and ancillary works	01-06-06	HORSE & JOCI	N/A	N/A
6493	APPLICATION FINALISED	Maher	Seamus & Aine	to construct a dormer type extension to rear and conservatory extension to side of existing dwelling	04-06-06	MONSLATT	N/A	N/A
6510447	APPLICATION FINALISED	Healy	Pat	5 bay suckler cow unit, incorporating straw bedded area, underground slatted storage tank and easy feeding system with all associated site works	04-06-06	LONGFORDPA	N/A	N/A
6497	APPLICATION FINALISED	Purcell	Liam	to construct a dungstead and associated run-off- collection tank with spare slurry capacity and also for construction of a general purpose cattle shed covering collection tank and to extend an existing cubicle shed and extend an existing silage retaining wall	05-06-06	URARD	N/A	N/A
6510483	APPLICATION FINALISED	Patrick Kearney	Catriona Britton &	dwelling house with garage, entrance, effluent treatment system and all associated site works	12-06-06	GALBOOLY LI	N/A	N/A
6568	APPLICATION FINALISED	Rochford	Michael & Michelle	two-storey extension to dwellinghouse together with internal modifications	15-06-06	RATHBEG	N/A	N/A
6510522	APPLICATION FINALISED	Treacy	Sean	slatted cubicle house with calving pens, an extension to existing loose shed, to raise the milking parlour roof and all associated site works	20-06-06	BALLYDAVID,	N/A	N/A
6602	APPLICATION FINALISED	Large	Denis & Anne	to demolsih existing derelict dwelling and construct a repalcement storey and a half type dwelling with septic tank and puraflo effluent treatment system	21-06-06	URARD	N/A	N/A

6610	APPLICATION FINALISED	Carberry	Patrick & Siobhan	to build dwelling, domestic garage, entrance, waste water treatment system and all associated site works	22-06-06	EARLSHILL	N/A	N/A
6510291	APPLICATION FINALISED	Hayes	Thomas	dwelling, garage, entrance and septic tank with effluent treatment system	26-06-06	BORRIS, ROSC	N/A	N/A
6510610	APPLICATION FINALISED	Kellys of Fantane (Conc		entrance and access road to include the provision of a new bridge over the Black River, to provide access to land subject to an application to South Tipperary Co Co for a quarry	06-07-06	LONGFORDPA	N/A	N/A
6510651	APPLICATION FINALISED	Bowe	Paul	dwelling, garage, septic tank and entrance	13-07-06	LEIGH, TWO-M	N/A	N/A
6510653	APPLICATION FINALISED	Bowe	Edward	dwelling, garage, septic tank and entrance	13-07-06	LEIGH, TWO-M	N/A	N/A
6510682	APPLICATION FINALISED	Power	Thomas and Rachel	Dwellinghouse and associated site works including septic tank and entrance	20-07-06	NOARD, TWO	N/A	N/A
6783	APPLICATION FINALISED	McCaffrey	Anne	to build domestic garage, entrance, waste water treatment system and all associated site works	20-07-06	FENNOR	N/A	N/A
6510705	APPLICATION FINALISED	Byrne	John & Deirdre	single storey garage to side including store and home office room with windows to side and rear	25-07-06	TWO-MILE-BC	N/A	N/A
6826	APPLICATION FINALISED	Ryan	Thomas	to raise roof of existing dwelling to develop living space on first floor	25-07-06	GORTNAHOE	N/A	N/A
6581	APPLICATION FINALISED	Slieveardagh Cultural &		to carry out the following works to premises which is a protected structure Ref No. S048 A) carry out internal alterations B) fit tarmacadam to yard area c) build canopy to link main building with toilet block	26-07-06	KILLENAULE	N/A	N/A
5511354	APPLICATION FINALISED	Martin	Mella	conversion of post office building to private dwelling with all associated site works	26-07-06	BALLYDAVID,	N/A	N/A
6847	APPLICATION FINALISED	Gleeson	Alice	to build dwelling, domestic garage, entrance, waste water treatment system and all associated site works	26-07-06	COOLE	N/A	N/A
6510402	APPLICATION FINALISED	Carew	Noel and Simone	extend ground floor and first floor areas, to reconstruct and raise the roof and carry out elevational alterations and all associated site works. The first floor extension will involve the partial removal of the roof of the existing garage.	27-07-06	GALBOOLY, LI	N/A	N/A
6510742	APPLICATION FINALISED	Fintan Campion	Aoife Duignan &	to construct alterations and extension to dwelling house and associated site works	02-08-06	MOYNETEMP	N/A	N/A
6498	APPLICATION FINALISED	Dunne	Christopher & Sarah	to construct a storey and a half dwelling, garage, entrance with septic tank and all associated site works	08-08-06	BOULICK	N/A	N/A
5996	APPLICATION FINALISED	Brophy	Michael	25 No. blocks of 2 No. semi-detached dwelling houses comprising of 18 No. blocks of 2 No. Semi-detached two-storey dwelling houses, 7 No. blocks of 2 No. semi-detached storey and a half style dwelling houses (Outline Planning granted on part of this site for 35 No. dwelling houses/ PL Ref. 01/1016) Ancillary road network, site works and services	09-08-06	GORTNAHOE	N/A	N/A
6933	APPLICATION FINALISED	Sweeney	Michael & Elsie	an unauthorised domestic garage beside dwelling house and all associated site works	10-08-06	BOHERCLUG	N/A	N/A
6945	APPLICATION FINALISED	Sweeney	Michael & Elsie	extension (sun room) to dwelling house and all associated site works	10-08-06	BOHERLUG	N/A	N/A
6510815	APPLICATION FINALISED	Carew	Noel & Simone	extension to side of dwelling	15-08-06	GALBOOLA, LI	N/A	N/A
6510833	APPLICATION FINALISED	Morris	Joe	conservatory to side of dwellinghouse including all associated works	17-08-06	LISKEVEEN, LI	N/A	N/A
6510830	APPLICATION FINALISED	Hayes	Dan	straw bedded cattle shed and straw bedded/slatted shed	17-08-06	BALLYERK, TW	N/A	N/A
6510835	APPLICATION FINALISED	Norton	Vincent	demolish a loose cattle shed and replace it with an easy feed unit incorporating slurry tank with slats laid on and all associated works	17-08-06	LONGFORDPA	N/A	N/A

6510283	APPLICATION FINALISED	Tunstall	Paul & Rita	dwelling, domestic garage, entrance, waste water treatment system and all associated site works	20-08-06	PIERCETOWN,	N/A	N/A
61001	APPLICATION FINALISED	Meagher	Liam	extension for two consulting rooms at existing medical centre and associated site works	21-08-06	KILLENAULE	N/A	N/A
6618	APPLICATION FINALISED	Spellacy	Mary & David	indefinitely for dog kennels, entrance, access road and all associated site works	23-08-06	KILCOOLEY AE	N/A	N/A
6510915	APPLICATION FINALISED	Moloney	Dermot & Maureen	single storey extension to side of existing house	30-08-06	TWO-MILE-BC	N/A	N/A
61127	APPLICATION FINALISED	Carroll	Denis & Rosemary	build garage/store and change existing garage door in dwelling house to bay window	31-08-06	FENNOR	N/A	N/A
6510925	APPLICATION FINALISED	Barnaville	Eamon	to demolish existing dwelling, build dwelling, domestic garage, entrance, waste water treatment system and all associated site works	31-08-06	LEIGH, TWO-M	N/A	N/A
61144	APPLICATION FINALISED	Campion	Martin	(A) a new cubicle house covering existing slurry tank incorporating an easy feed unit with slats laid on and all associated works (B) to demolish and reconstruct milking parlour and dairy and all associated works	04-09-06	GRAIGUEPAU	N/A	N/A
6510980	APPLICATION FINALISED	Shanahan	Thomas	(1) Easy feed system incorporating slatted tank and feed barriers and associated works; (2) Double sided slatted house and associated works	11-09-06	RAHEALTY, TH	N/A	N/A
6510998	APPLICATION FINALISED	Marnell	Martin	05/51/1283 - dwelling, waste water treatment system, entrance	14-09-06	NOARD, TWO	N/A	N/A
61216	APPLICATION FINALISED	Horan	Brendan	slatted shed, dungstead, roofed slatted feed passage and unroofed slatted feed passage and associated site works	14-09-06	GRAIGUEMAN	N/A	N/A
61220	APPLICATION FINALISED	Fitzgerald	Patrick	construct a new lean-to with slatted tank and loose house	14-09-06	GLENGOOLE M	N/A	N/A
6510995	APPLICATION FINALISED	Sinead Forde	Patrick Carroll &	dwelling house, create new entrance and install new septic tank and percolation area together with associated siteworks	14-09-06	CLOONCLEAG	N/A	N/A
6510587	APPLICATION FINALISED	Ryan	Gearoid	to construct new farm buildings as an extension of existing farmyard, consisting of calf house, cattle sheds and underground slatted slurry storage tank	14-09-06	BALLYBEG, LIT	N/A	N/A
6510823	APPLICATION FINALISED	Cullen	Delia & Timothy	raise existing roof of first floor dwelling with all associated site works	15-09-06	MOYNETEMP	N/A	N/A
61244	APPLICATION FINALISED	Gleeson	Breda	(a) glazed front porch (b) domestic garage and utility room all as constructed to the existing bungalow on site and with all associated site works situated	21-09-06	FENNOR, URL	N/A	N/A
61267	APPLICATION FINALISED	Norton	Vincent	demolish two loose cattle sheds and replace with cow cubicles and an easy feed unit incorporating slurry tank with slats laid on and all associated works	24-09-06	GRAIGUEWO(	N/A	N/A
61273	APPLICATION FINALISED	Fitzgerald	Martin	construct a two span A-roof slatted shed and associated farm work	25-09-06	CURRAHEEND	N/A	N/A
61290	APPLICATION FINALISED	Maher	Georoid	build a dwelling, domestic garage, entrance, waste water treatment system and all associated site works	28-09-06	GORTNAHOE	N/A	N/A
61296	APPLICATION FINALISED	Hayes	Martin & Dolores	construct an extension to existing dwelling. This will include raising existing roof pitch to form dormer style accommodation to existing single storey dwelling and all associated site works	02-10-06	KILLENAULE	N/A	N/A
6510411	APPLICATION FINALISED	Power	Jim & Bridget	alterations and extensions to dwellinghouse and associated site works	03-10-06	NOARD, TWO	N/A	N/A
6511132	APPLICATION FINALISED	Phelan	Joanne	dwelling, domestic garage, entrance, waste water treatment system and all associated site works	05-10-06	MOYNETEMP	N/A	N/A
61366	APPLICATION FINALISED	Troy	Padraic	erect an easy feed unit incorporating slurry tanks with slats laid on, silo base and all associated works	12-10-06	BALLYNASTIC	N/A	N/A
6510380	APPLICATION FINALISED	O'Mahony	Donal & Joan	dwelling, domestic garage, entrance and septic tank	19-10-06	SHANBALLYDI	N/A	N/A

				to construct an agricultural/equestrian isolation unit consisting of a single storey dwelling (for farm manager), with associated domestic effluent treatment system and domestic well, 6 no. stables with associated waste water holding tank, general storage barn,				
6753	APPLICATION FINALISED	Byrne	Marie	upgraded roadside entrance and all associated site works	22-10-06	NOAN	24-11-06	R
61425	APPLICATION FINALISED	Harding	Noel	new front porch and dining room/living room extension and associated site works	23-10-06	GLENGOOLE N	N/A	N/A
6510920	APPLICATION FINALISED	Whitehead	Gavin & Noreen	two-storey dwelling, separate garage, site entrance, effluent treatment system with raised bed percolation area and all associated site works	01-11-06	ATHLUMMON	N/A	N/A
61477	APPLICATION FINALISED	Norton	Sean & Richard Norto	(a) retain the 3 bay gilt house as constructed on site; and (b) retain the 4 bay first stage weaner house as constructed on site	02-11-06	RATHBEG, GO	N/A	N/A
61478	APPLICATION FINALISED	Norton	Sean Norton & Richar	(a) construct a new 12 bay pig finishing house with roofed canopy to the existing finishing house on site; (b) construct a new weaner feed mix kitchen;(c) all associated site works	02-11-06	RATHBEG, GO	N/A	N/A
6511302	APPLICATION FINALISED	Cawley	Martin	house with domestic garage attached, provide on site septic tank system and entrance to site	07-11-06	BALLYBEG, LIT	08-12-06	R
61002	APPLICATION FINALISED	Cahill	Eimear Gaynor & Liam	construct a two storey dwelling, biological waste water treatment unit and percolation area and entrance	07-11-06	KILLEHEEN	N/A	N/A
6511318	APPLICATION FINALISED	Maher	Seamus	slatted shed together with all associated site works	09-11-06	BALLYDAVID,	N/A	N/A
6511369	APPLICATION FINALISED	Campion	Dermot & Aoife	two-storey dwelling-house, domestic garage, new entrance and waste water treatment system including all associated site works	16-11-06	MOYNEARD, I	N/A	N/A
6510934	APPLICATION FINALISED	Ryan	Fiona	dwelling house, garage, entrance, connection to group water supply, mechanical aeration system for the treatment of waste water/sewage and all associated site works (outline PLC/24367)	21-11-06	MONARAHEE	N/A	N/A
6511405	APPLICATION FINALISED	Power	Michael	agricultural development consisting of shed with slatted tank and feeding passage, silage slab and associated site works	22-11-06	PIERCETOWN,	N/A	N/A
6511421	APPLICATION FINALISED	Boilson	Martin	slatted cattle shed and carry out all associated site works	23-11-06	LAHARDEN LR	N/A	N/A
6511408	APPLICATION FINALISED	Rayel	Ann	to construct a single storey bedroom and bathroom extension to the side of dwelling with all associated site works	23-11-06	BALLYMOREE	N/A	N/A
61600	APPLICATION FINALISED	Stanley	Richard	new slatted house for cattle, cattle crush, penning, silage slab, all associated concrete work and drainage, new farm roadway with entrance onto public road	26-11-06	RATHBEG, GO	N/A	N/A
61615	APPLICATION FINALISED	Gleeson	Alice	to build dwelling, domestic garage, close up existing entrance and build combined entrance, waste water treatment system and all associated site works	29-11-06	COOLE	N/A	N/A
61621	APPLICATION FINALISED	Carroll	Margaret	of single-storey extension to the rear of premises with all associated ancillary works	30-11-06	KILLENAUE	N/A	N/A
61620	APPLICATION FINALISED	Stanley	Albert & Niall	slatted house for cattle, roofed cattle crush and penned area, new silage slab and apron, resurface existing silage pit, apron, concrete yard and all associated concrete work and drainage	30-11-06	KILCOOLEYAB	N/A	N/A
61639	APPLICATION FINALISED	Rochford	Michael	demolition of an existing straw store to be replaced with a portal framed agricultural building, permission also sought for extension to existing agricultural unit, provisions for foul and surface water disposal and ancillary works etc	03-12-06	RATHBEG	N/A	N/A

5511309	APPLICATION FINALISED	Blee	Pat	78 No. dwellings, consisting of 10 No. 4 bed detached houses, 32 No. 3 bed semi-detached houses and 30 No. 3 bed terraced houses (all two storey), 6 No. 4 bed terraced dwellings (three storey), together with associated site works and ancillary services, including new site entrance, boundary walls and car parking	12-12-06	BALLYMURRE	N/A	N/A
61709	APPLICATION FINALISED	Kennedy	Elizabeth	dwelling, domestic garage, entrance, septic tank and all associated site works	14-12-06	RATHROE, KIL	N/A	N/A
6511274	APPLICATION FINALISED	Thackaberry	Eileen & Michael	dormer dwelling with garage, effluent treatment system, entrance and all associated site works	19-12-06	LAHARDEN UI	N/A	N/A
61773	APPLICATION FINALISED	O'Dwyer	Frances & John	(a) single storey extension to the front of existing dwelling (b) two-storey extension to rear of existing dwelling (c) renew flat roof to existing porch (d) renew portion of existing slated roof (e) replace all existing windows with teak double glazed windows (f) modifications to existing dwelling including conversion of existing bedroom to dining room, removal of windows and portion of walls and change to boiler house flue (g) all associated site works - premises is a protected structure, ref. no. S573	04-01-07	OLDSTONE	N/A	N/A
6511600	APPLICATION FINALISED	Keogh	Jason	dormer bungalow, garage, vehicular entrance, septic tank and percolation area and all ancillary works	05-01-07	COLDFIELDS, ˙	N/A	N/A
6511367	APPLICATION FINALISED	Martina Flynn	Patrick Blake &	dwellinghouse, domestic garage and associated site works including entrance, treatment system and percolation area	12-01-07	MOYNEARD, I	N/A	N/A
61822	APPLICATION FINALISED	Large	John	construction of a new loose housing facility with slatted waste storage and ancillary works	13-01-07	GORTNAHOE	N/A	N/A
61817	APPLICATION FINALISED	Ryan	Edward & Mary	install Velux windows on north and east elevations and develop attic space	13-01-07	GORTNAHOE	N/A	N/A
61133	APPLICATION FINALISED	02 Communications (Irl		erect a 12m lattice structure with associated telecommunications exchange container and security fencing together with access track to form part of the digital communications network (GSM/UMTS)	19-01-07	KILLENAULE	20-02-07	M
6511687	APPLICATION FINALISED	McGonagle	Niall	the conversion of a domestic garage attached to house to a habitable room and for works completed thereon. The works carried out consist mainly of (i) removal of flat roof on the garage and the construction of a pitched roof wth concrete roof tiles; (ii) installation of double glazed windows, sliding doors and extending the electrical and heating services from main residence to the new room. Also for permission to retain the enclosure of a front porch with pitched roof, having concrete roof tiles covering the sliding doors. All the above works have been completed	20-01-07	RAHELTY, THU	N/A	N/A
41356	APPLICATION FINALISED	Gleeson Quarries		(1) retention of the existing working quarry measuring 12.5 ha that contains the following: block manufacturing facility; Readymix concrete plant; garage and maintenance facility; office; ESB substation and other ancillary plant (2) permission to extend an area of the quarry which had previous planning approval but was not used up to the time of the expiration of permission, this measures 12.5 ha in area; (3) permission for an extension of an area to the south of the existing working quarry that did not have previous planning and measures 12.1 ha. An Environmental Impact Statement has been submitted with this application.	23-01-07	MANSERGHSH	12-02-07	M

61909	APPLICATION FINALISED	Ladbrokes (Ireland) Ltd		separate dwelling house from bookmakers, amendments and minor alterations to existing shop front, new shop front signage and all associated internal alterations of this protected structure	23-01-07	KILLENAULE	N/A	N/A
6511722	APPLICATION FINALISED	Boland	John & Ann-Marie	existing sunroom as constructed to side of dwelling and a domestic garage to the rear of same with all associated site works	26-01-07	BOULABEHA,	N/A	N/A
61018	APPLICATION FINALISED	Quinn	Felix	to erect 15 dwellings consisting of 4 no. two-storey 3 bedroom detached units, 4 no. 3 bedroom semi-detached units, 4 no. 3 bedroom terrace units, 1 no. single-storey 2 bedroom detached unit and 2 no. single-storey 2 bedroom semi-detached units, site entrance and entrances and all associated works	26-01-07	KILLENAULE	N/A	N/A
61928	APPLICATION FINALISED	Stroud	John & Patricia	to build dwelling, domestic garage, waste water treatment system, entrance and all associated site works	27-01-07	EARLSHILL	N/A	N/A
61038	APPLICATION FINALISED	Stackmack Developmer		27 no dwelling consisting of 10 no. semi-detached two storey 3 bed and 17 no. detached two storey 4 bed with entrance with connection to public services and all associated and ancillary site works	27-01-07	GORTNAHOO	N/A	N/A
6511757	APPLICATION FINALISED	Browne	Kevin	cattle house incorporating calving pens with soiled water channel to existing slurry tank and all associated works	31-01-07	BALLYBEG, LIT	N/A	N/A
61304	APPLICATION FINALISED	Kennedy	Arthur & Shirley	demolish an existing shed, construct a new dormer dwelling, detached garage, new side entrance and all associated site works	31-01-07	PIKE STREET	N/A	N/A
6511122	APPLICATION FINALISED	J P Moore	Aoife Gleeson &	bungalow, entrance, sewage treatment system and associated site works	01-02-07	KILLORAN, M(	N/A	N/A
61958	APPLICATION FINALISED	Windsor Rose Investme		to make a material alteration to an existing previously approved Planning Application (00/827). The proposed alteration/change involves the replacement of all the front 1.20m high boundary walls on the site with that of a Beech hedge, together with the proposed construction of a number of additional 1.80 m high screen walls	03-02-07	KILLENAULE	N/A	N/A
6510773	APPLICATION FINALISED	Lisheen Mining Ltd.,	Anglo American	wind turbine farm consisting of 22 No. wind turbine generators, access roads, craneage pads and associated infrastructure. An Environmental Impact Statement will be submitted to the Planning Authority with this Application	05-02-07	BARNALISHEE	09-03-07	M
6511789	APPLICATION FINALISED	Power	Jim	shed with slatted tank and feeding passage, extension to existing silage slab and associated site works	06-02-07	NOARD, TWO	N/A	N/A
6511795	APPLICATION FINALISED	Stokes	Linsdey	conservatory built to side of existing two-storey dwelling house	07-02-07	GARRAUN, TV	N/A	N/A
6511186	APPLICATION FINALISED	Lloyd	John	dwelling house, garage, effluent treatment system, raised percolation area, entrance and associated site works	07-02-07	RAHELTY, THU	N/A	N/A
6511803	APPLICATION FINALISED	Scott	Timothy & Annette	extension to south west elevation of existing dwelling and all ancillary site works	09-02-07	KYLENOE, HO	N/A	N/A
6511812	APPLICATION FINALISED	Mairead Gleeson	Mark O'Dwyer &	storey and a half dwelling house, connection to group water scheme, a sewage treatment system and raised percolation area, an entrance and all associated site works	10-02-07	MOYNEARD, I	N/A	N/A
6511813	APPLICATION FINALISED	Gleeson	Niamh	storey and a half dwelling house, connection to a group water scheme, a sewage treatment system and raised percolation area, an entrance and all associated site works	10-02-07	MOYNEARD, I	N/A	N/A

6510361	APPLICATION FINALISED	Hughes	Damien	49 unit residential development, comprising 4 no. house type 1 (2 storey detached with converted attic - 203 sq. m), 14 no. house type 2 (2 storey semi-detached with converted attic - 150 sq. m), 18 no. house type 3 (2 storey semi-detached with converted attic - 112 sq. m), 2 no. house type 4 (single storey semi-detached - 71 sq. m), 11 no house type 5 (2 storey terraced with converted attic - 159 sq. m, in 3 separate blocks) and associated site development works, including an underground foul water treatment plant beneath an above-ground out building (140 sq. m), and an entrance	12-02-07	CURRAHEEN,	N/A	N/A
62032	APPLICATION FINALISED	Bergin	Michael	to construct an extension to existing slatted shed, provisions for foul effluent and surface water disposal and associated site works	13-02-07	GORTNAHOE	N/A	N/A
62047	APPLICATION FINALISED	McCormack	Patrick	to construct an agricultural shed with slatted tank and feeding passage and associated site works	15-02-07	POYNSTOWN	N/A	N/A
62111	APPLICATION FINALISED	Pollard	Anthony	construct (a) cattle shed consisting of slatted tank and easy feed passage with lie back area and (b) silage slab and all associated site works	21-02-07	LICKFINN	N/A	N/A
6511914	APPLICATION FINALISED	Maher	Ken	cow cubicle shed and slatted tanks and associated site works	23-02-07	PARKSTOWN,	N/A	N/A
6511915	APPLICATION FINALISED	Bourke	Henry	silage slab, agricultural shed over feedling line and reception tank	23-02-07	CURRAHEEN,	N/A	N/A
62168	APPLICATION FINALISED	Dalton	Christy	domestic garage and all associated site works	24-02-07	BALLYKERIN	N/A	N/A
6511950	APPLICATION FINALISED	Hayes	Liam & Pauline	revised entrance location and site layout and to retain revised window designs	24-02-07	MANSELSTOV	N/A	N/A
6511991	APPLICATION FINALISED	Hayes	Edward	to construct a slatted shed with bedded area and cattle crush and carry out all associated site works	26-02-07	LEIGH, TWO-M	N/A	N/A
61815	APPLICATION FINALISED	Watson	Tony & Ann	extension to existing dwelling including all associated site works	27-02-07	GORTNAHOE	N/A	N/A
74	APPLICATION FINALISED	Lanigan	Pat	construct additional 2 no. workshops and a loading bay and to alter the existing entrance gate, all in relation to existing stone working yard	28-02-07	KILBRANNELL,	N/A	N/A
6511693	APPLICATION FINALISED	Power	Thomas & Rachel	dwellinghouse, garage and associated site works including septic tank and entrance	28-02-07	NOARD, TWO	N/A	N/A
61664	APPLICATION FINALISED	Harding	Pat	to complete the dwelling which was granted under PL Ref No. 05/131 (Site B). The dwelling was completed to ground floor level under the above. Permission also for vehicular entrance, the repositioning of sewage treatment plant and peroclation area, and alterations to site boundary including all associated site development works as granted under PL Ref NO. 04/472 (Site B)	12-03-07	LICKFINN	02-04-07	R
6511019	APPLICATION FINALISED	Kiely	Martin & Sharon	dwellinghouse, domestic garage and associated site works including entrance, septic tank, and percolation area	14-03-07	MOYNEARD, I	N/A	N/A
6511200	APPLICATION FINALISED	St. Kevin's F.C.	Borris	instal an all weather playing surface adjacent to existing dressing rooms and to erect a viewing stand adjacent to existing playing area, including all associated site works	15-03-07	NEWHILL, TW	N/A	N/A
6511845	APPLICATION FINALISED	Barnes	Noella & Mark	single storey extension to side of existing dwelling and single storey rear extension to kitchen of existing house	15-03-07	TWO-MILE-BC	N/A	N/A
785	APPLICATION FINALISED	Maher	Dick	demolish existing dwelling and construct a new dormer type dwelling with detached garage, septic tank and effluent treatment system, alterations to existing site entrance and associated site works	21-03-07	KNOCKILTERR	N/A	N/A

6511562	APPLICATION FINALISED	Byrne	John & Deirdre	1. Construction of single storey extension to rear of the existing house connecting onto garage consisting of lounge/playroom and to include raising height of existing garage roof and related alterations to garage. 2. Related internal alterations and services. 3. Side rear extension to existing dining area with rooflight. 4. Single storey porch to front	25-03-07	ARDLEIGH, TV	N/A	N/A
62132	APPLICATION FINALISED	Burke	Carrie & James	dwelling house, garage, proprietary treatment system, entrance, together with all associated site works	26-03-07	RATHBEG, UR	N/A	N/A
7510120	APPLICATION FINALISED	Ryan	Sean & Caitriona	dwelling house with garage, entrance, effluent treatment system and all associated site work	27-03-07	MANSELSTOV	N/A	N/A
7134	APPLICATION FINALISED	Patton	Tom & Kathleen	retain domestic garage	28-03-07	FENNOR, URL	N/A	N/A
6510427	APPLICATION FINALISED	Hi-Volt Ireland Ltd & Ph	N/A	revised site boundaries, to retain an extended yard area, to retain revised orientation and elevations of main storage building, to retain office portocabin, staff canteen portocabin, waste battery storage unit and 2 No. small storage units. For permission to provide on site carparking, for permission to retain display and storage area for concrete and stone products, for permission to retain change of use of dwelling to offices, for permission to retain revised entrance location and layout and to complete all drainage, landscaping and associated site works	29-03-07	SHANBALLYDI	N/A	N/A
7172	APPLICATION FINALISED	Griffiths	Kevin	two-storey dwelling house with entrance, garage, septic tank system and percolation area together with all ancillary site works	02-04-07	RATHBEG, GO	N/A	N/A
6511749	APPLICATION FINALISED	Campion	Martin & Julie	dwellinghouse, domestic garage and associated site works including entrance, septic tank and percolation area	05-04-07	MOYNEARD, I	N/A	N/A
7188	APPLICATION FINALISED	Bartley	Kevin & Ann	dwelling house with entrance, domestic garage, entrance, effluent treatment system and associated site works	05-04-07	KILCOOLEY, G	N/A	N/A
6511717	APPLICATION FINALISED	Clancy	Robert and Roisin	dwelling house, entrance, connection to mains water supply, mechanical aeration system and sand polishing filter/raised percolation area, garage and all associated site works	12-04-07	GARRAUN, TV	N/A	N/A
7245	APPLICATION FINALISED	Phelan	Richard	construct (1)slatted cattle unit; (2) slatted effluent tank in an existing collecting yard and carry out all associated site works	12-04-07	GRAIGAMAN,	N/A	N/A
7267	APPLICATION FINALISED	Hennessy	Thomas	2 no. town houses and associated site works	18-04-07	KILLENAULE	N/A	N/A
7265	APPLICATION FINALISED	Kelly	Anne	dormer extension to side of existing dwelling, single storey kitchen extension to rear with internal alterations, also demolition of 1 no. outbuilding, installation of proprietary effluent treatment system and associated site works	18-04-07	FENNOR, URL	N/A	N/A
7510264	APPLICATION FINALISED	Dunphy	Killian & Sandra	single dwelling with effluent treatment system, raised percolation area, garage & entrance walls & associated site works - Outline 04/51/0989	19-04-07	CLONCLEIGH,	N/A	N/A
7510267	APPLICATION FINALISED	McGuire	Liam	slatted slurry storage tank, a new building incorporating easy feed system, an extension to the existing silage slab and all associated site works	19-04-07	LISKEVEEN, LI	N/A	N/A
7319	APPLICATION FINALISED	Hayes	Martin & Marie	retain existing shed of 76.00m2 with max ridge height 4.50m	24-04-07	BALLYNONTY	N/A	N/A
7320	APPLICATION FINALISED	Hayes	Martin & Marie	extension to rear of existing single storey residence consisting of ground floor and attic accommodation of 118.10m2 including 6 no. rooflights to a max. ridge height of 6.50m	24-04-07	BALLYNONTY	N/A	N/A
7323	APPLICATION FINALISED	Fogarty	William	two storey dwelling with entrance, garage, septic tank and soil percolation system with all associated site works	24-04-07	MELLISON	N/A	N/A
7510312	APPLICATION FINALISED	Kinnane	Michael	two slatted tanks and cubicles in existing buildings and permission to construct a silage slab and all associated site works	25-04-07	LISKEVEEN, LI	N/A	N/A

7510324	APPLICATION FINALISED	Dowling	Stephen & Helen	extension to the side of house and for permission to retain domestic garage	26-04-07	GALBOOLY LIT	N/A	N/A
6511951	APPLICATION FINALISED	Ryan	Edward	dwelling, garage, septic tank and entrance (Outline Planning Permission 03/51/1250)	29-04-07	GARRENROE,	N/A	N/A
7510364	APPLICATION FINALISED	& Sinead Forde	Patrick L. Carroll	two-storey dwelling house, create new entrance and install new septic tank and percolation area together with associated site works	03-05-07	CLOONCLEAG	06-06-07	W
6511740	APPLICATION FINALISED	St. Kevin's National Sch	Board of Managemen	3 No. single storey extensions to the existing school building of 131.6m2 in total comprising new staff room, toilets and ancillary accommodation along with a new staff car park including new entrance and associated site development works, refurbishment works to existing school comprising replacing existing flat roofs to front offices and rear classrooms and toilets with new pitch roofs and inserting a new window at the front of the existing building and creating two new exits to the west side of the existing building on this site	07-05-07	LITTLETON	N/A	N/A
7433	APPLICATION FINALISED	Doheny	Seamus	to cnstruct a 6 bay slatted dairy unit and calving pens with underground slurry storage	09-05-07	GRAIGAMAN,	N/A	N/A
7434	APPLICATION FINALISED	Ryan	Thomas	to construct a 6 bay livestock unit with ancillary effluent storage	09-05-07	GORTNAHOE	N/A	N/A
7435	APPLICATION FINALISED	Stokes	James	to construct a 4 bay slatted unit with underground slurry storage	09-05-07	GRAIGAMAN,	N/A	N/A
7510070	APPLICATION FINALISED	Ryan	Seamus & Caroline	construction of two storey side extension together with rear conservatory to existing dwelling and all associated site works	09-05-07	BALLYBEG, LIT	N/A	N/A
7510405	APPLICATION FINALISED	Maher	James and Patrick	slatted cubicle shed, new concrete yard and all associated concrete works and drainage	10-05-07	COOLEENEY, I	N/A	N/A
6511449	APPLICATION FINALISED	Quirke	John	dormer style detached dwelling with new site entrance, garage to side of dwelling, and pump house to rear of site, driveway, Ecopure waste water treatment system, percolation area, retention of mobile home on same site for duration of construction, and all associated site works	10-05-07	DERRYHOGAN	N/A	N/A
7445	APPLICATION FINALISED	Timlin	Maurice	retention of a combined entrance as constructed	10-05-07	NEWHAVEN	N/A	N/A
7473	APPLICATION FINALISED	Power	Kevin and Eithne	to construct a two storey detached garage	16-05-07	COOLE	N/A	N/A
7479	APPLICATION FINALISED	Fitzgerald	Michael and Bernie	to construct a sunroom extension and to raise pitch of existing roof to form dormer style accommodation to existing single storey dwelling which will include 2 no. dormer windows on front elevation	17-05-07	CURRAHEEND	N/A	N/A
7488	APPLICATION FINALISED	Campion	Loughlin	to construct cattle house with slatted waste storage tank underneath, silage slab and all other necessary associated site works	17-05-07	KILBRAUGH	N/A	N/A
7510473	APPLICATION FINALISED	Healy	Joseph	1. Lean-to-structure with slatted effluent tank; 2. Extension of an existing cubicle unit with slatted effluent tank, over-flow channel and feed passage and to carry out all associated site works	17-05-07	NEWHILL, TW	N/A	N/A
7510126	APPLICATION FINALISED	Jacqueline O'Meara	Adrian Ryan and	single storey dwelling, new entrance and garage and all associated site works	21-05-07	BALLYDAVID,	N/A	N/A
7510	APPLICATION FINALISED	Fogarty	William	for an extension to my existing dwelling	21-05-07	MANSERGHSI	N/A	N/A
7517	APPLICATION FINALISED	Troy	Seamus	to construct a slatted shed, consisting of two no. slatted tanks, 3 no. rows of cublicles, milking parlour, dairy, plant room and collection area together with external feeding slab, cattle crush and meal bin base and carry out all associated site works	21-05-07	BALLYNASTICI	N/A	N/A
7555	APPLICATION FINALISED	Kennedy	Gerard	to construct new stables, slatted cattle shed, concrete silo, manure pit and associated concrete works	23-05-07	GLENGOOLE	N/A	N/A

7510537	APPLICATION FINALISED	Donnelly	Edward	straw bedded shed and all associated site works	24-05-07	BALLYDAVID,	N/A	N/A
7510538	APPLICATION FINALISED	Bourke	John	construct (1) a slatted cubicle unit with calving facilities, (2) construct a milking premises with collecting yard, dairy, plant room, storage facilities; (3) construct a feed silo and to carry out all associated site works	24-05-07	RATHCUNNIK	N/A	N/A
7510563	APPLICATION FINALISED	Maher	Noel	construct dwellinghouse, garage and associated site works including effluent treatment system and entrance	27-05-07	PIERCETOWN,	N/A	N/A
7595	APPLICATION FINALISED	Fitzgerald	John	to construct a slatted cattle unit with loose lieback area and to carry out all associated site works	29-05-07	POYNSTOWN,	N/A	N/A
7510340	APPLICATION FINALISED	Lanphier	Phil	single storey extension to rear of dwelling, including repositioning of septic tank and percolation area, and all associated site development works	04-06-07	CURRAHEEN,	N/A	N/A
7613	APPLICATION FINALISED	Lanigan	Martin	convert existing attached garage to bedroom and construct an extention consisting of a living room and also two projecting windows to front of house	04-06-07	CLONMONDR	N/A	N/A
7628	APPLICATION FINALISED	Morris	James	slatted cattle shed including 17 no. cubicles, strawbedded area and 2 no. slatted tanks, silage effluent channel, relocation of cattle crush and associated works	04-06-07	POYNSTOWN	N/A	N/A
7510623	APPLICATION FINALISED	Bourke	James	(a) extend existing cubicle and calf rearing unit with effluent tank; (b) construct a silage base with walls and carry out all associatd site works	07-06-07	NEWTOWN, L	N/A	N/A
7510625	APPLICATION FINALISED	Hickey	John	slatted shed and all associated site works	10-06-07	RAHEALTY, TI	N/A	N/A
7665	APPLICATION FINALISED	Rafter	John & Elsie	For shed on our site.	12-06-07	GLENGOOLE	N/A	N/A
6511534	APPLICATION FINALISED	Cussen	Philip	suckler cow shed with slatted tank and feeding passage	12-06-07	ATHLUMMON	N/A	N/A
7666	APPLICATION FINALISED	Elsie Rafter	John Rafter &	To construct a single storey extension to the side of dwelling with all associated siteworks on our site.	12-06-07	GLENGOOLE	N/A	N/A
7688	APPLICATION FINALISED	Ryan	Thomas	To build extension to existing dwelling including all associated site works.	14-06-07	GORTNAHOE	N/A	N/A
7725	APPLICATION FINALISED	McManus	Ger & Anne	demolition of existing outhouse to side of dwelling and construction of side and rear extension to existing dwelling and all associated site works	21-06-07	KNOCKALONG	N/A	N/A
7510124	APPLICATION FINALISED	Anthony Fitzgerald	Sean Moroney &	to demolish existing dwelling, construct new apartment block unit consisting of 6 no. one bed apartment with bin stores and connection to public services with all associated site works	26-06-07	BALLYDAVID,	N/A	N/A
7510561	APPLICATION FINALISED	Duggan	Thomas	To construct a new entrance and livestock unit and reinforced tanks and all associated site works	26-06-07	PIERCETOWN,	N/A	N/A
7510741	APPLICATION FINALISED	Dunphy	Killian & Sandra	revisions to existing permission 07/51/0264 - 1. Proposed increase in area of side entrance annex; 2. Proposed new sunroom extension; 3. Redefinition of site boundary to 1 Acre site	28-06-07	CLONCLEIGH,	N/A	N/A
7762	APPLICATION FINALISED	South Tipperary VEC		to construct a single storey-staff room extension with associated alterations and external works	28-06-07	KILLENAULE	N/A	N/A
61814	APPLICATION FINALISED	McCormack	Niall & Tracy	single storey dwelling with garage, entrance, septic tank and secondary treatment unit percolation system with all associated site works	03-07-07	SPRINGHILL, K	N/A	N/A
6511227	APPLICATION FINALISED	Cleary	William Joseph	dwellinghouse, septic tank, entrance and all associated site works	04-07-07	BOULABEHA,	N/A	N/A
7826	APPLICATION FINALISED	Morrissey	Benedict & Mary	costruction of an extension and renovations to existing dwelling and all associated works	08-07-07	CASTLEQUAR	N/A	N/A
7847	APPLICATION FINALISED	Kerwick	John	construction of a slatted cattle unit with calf creep area and to carry out all associated works	11-07-07	GLENGOOLE S	N/A	N/A

7510826	APPLICATION FINALISED	Doyle	Patrick	to constuct an overground effluent storage tower with underground reception tank and to carry out all associated site works	12-07-07	KYLEMAKILL, I	N/A	N/A
7510823	APPLICATION FINALISED	O Shea	Robert	to construct 1 no. agricultural building to include grain/straw store and all ancillary works	12-07-07	BALLYVINANE	N/A	N/A
7870	APPLICATION FINALISED	Tormey	Rita	retention of an extension to house	15-07-07	GRAIGAMAN,	N/A	N/A
7871	APPLICATION FINALISED	Shelly	Pat & Josephine	retention of change of use from residential to commercial, retention of signage on front elevation and associated works	15-07-07	KILLENAULE	N/A	N/A
7890	APPLICATION FINALISED	Mulcahy	Joe Hogan & Aileen	construction of a dwelling house, domestic garage, entrance, waste water treatment system and all associated site works	17-07-07	CLONOURA, C	N/A	N/A
7949	APPLICATION FINALISED	Maher	Thomas James	extension to existing milking parlour to include new collection yard, proposed extension to existing shed complete with calving boxes,proposed extension to existing slatted shed and silage slab to rear of site and construction of a new proposed shed over existing silage pit/yard area complete with 24 no. cublcles complete with all necessary demolition and associated site works	25-07-07	MONSLATT, K	N/A	N/A
7988	APPLICATION FINALISED	Purcell	Niall	construction of a second-storey to existing dwelling including all associated site works	26-07-07	LURGOE, KILLI	N/A	N/A
61187	APPLICATION FINALISED	Kellys of Fantane (Conc		dolomite/dolomitic limestone quarry and an access road that is to include the provision of a new bridge over the Black River at Inchirourke, Urlingford, Thurles, Co. Tipperary. An IPPC Licence and a State Mining Facility will be required for this development. A section of the access road is the subject of a planning application to North Tipperary County Council. The site is 15.1 hectares in area and will consist of: quarry and aggregate processing; access road and bridge; mobile office, canteen, store and toilet; marshalling yard and parking area; ESB Substation; other ancillary plant; wastewater treatment system. An Environmental Impact Statement in relation to the above will be lodged with South Tipperary County Council	26-07-07	INCHIROURKE	N/A	N/A
7510934	APPLICATION FINALISED	Darmody	Jeremiah	construct a 5 bay double slatted unit together with all associated site works	02-08-07	NEW HILL, TW	N/A	N/A
7477	APPLICATION FINALISED	Loughnane	Tom and Helena	to build bungalow type residence, entrance, garage, septic tank and percolation area and all associated site works	08-08-07	CLONAMICKL	N/A	N/A
7510984	APPLICATION FINALISED	Healy	Michael	Construct straw bedded cattle shed with external waste storage tank with slatted feeding area overhead and farm yard manure stead and all other necessary associated site works.	09-08-07	BALLYDAVID,	N/A	N/A
7510974	APPLICATION FINALISED	Kennedy	Pat & Joesphine	To construct an extension to existing dwelling house together with all associated site works.	09-08-07	BLACKCASTLE	N/A	N/A
6511655	APPLICATION FINALISED	Hennerby	Patsy	store, showrooms, office and toilets for Puresoft Water Treatment including all associated site works	12-08-07	TWO-MILE-BC	N/A	N/A
7510989	APPLICATION FINALISED	Travers	Eamonn	erect new slatted cubicle shed, new manure pit and all associated concrete works and drainage	12-08-07	BOULABEHA,	N/A	N/A
71074	APPLICATION FINALISED	Lanigan	James & Michael	to decommission an existing earth lined slurry store and construct a geomembrane lined slurrry and effluent store plus two silo bases and aprons	13-08-07	GLENGOOLE	N/A	N/A
7510673	APPLICATION FINALISED	Jason Keogh	Mary Farrell &	dormer dwelling, garage, vehicular entrance, septic tank and percolation area and all ancillary related works (outline No. 06/51/1600)	13-08-07	COLDFIELDS,	N/A	N/A
7510155	APPLICATION FINALISED	Moore	John & Eileen	to extend dwellinghouse and all associated site works	14-08-07	BALLYNAMON	N/A	N/A
7511000	APPLICATION FINALISED	Dempsey	Patrick & Joan	extension to side of dwelling with all associated siteworks	14-08-07	CURRAHEEN,	N/A	N/A

71101	APPLICATION FINALISED	Prout	Robert	build a 4-bay slatted shed and straw bedded area and associated works	16-08-07	FENNOR, URL	N/A	N/A
7510463	APPLICATION FINALISED	Lanigan	John	suckler cow unit with slatted waste storage tank underneath, silage base and all other necessary associated site works	16-08-07	LEIGH, TWO-M	N/A	N/A
7511017	APPLICATION FINALISED	Egan	Laurenz & Caroline	domestic double garage and associated site works	16-08-07	ARDLEIGH, TV	N/A	N/A
7511028	APPLICATION FINALISED	Hayes	Eamonn	agricultural building for bovine accommodation and carry out all associated site works	16-08-07	SHANBALLYDI	N/A	N/A
71130	APPLICATION FINALISED	Gleeson	P J	extensions and alterations to existing dwelling house, domestic garage and associated works	19-08-07	COOLE, GORT	N/A	N/A
71177	APPLICATION FINALISED	Gothard	Barry	retain existing dwelling house	22-08-07	CROSSCANNC	N/A	N/A
71215	APPLICATION FINALISED	Feehan	Pat	erect open concrete slurry tank with protective fencing and associated works	23-08-07	GRAYSTOWN,	N/A	N/A
7511113	APPLICATION FINALISED	O'Grady	Jim	build proposed cubicle/slatted shed and proposed extension to existing cubicle/slatted shed together with all associated site works	23-08-07	COOLEENEY, I	N/A	N/A
7511154	APPLICATION FINALISED	Kinnane	Michael	To construct an overground slurry storage tank with reception tank together with all associated site works.	23-08-07	LISKEVEEN, LI	N/A	N/A
71259	APPLICATION FINALISED	Kelly	Philip	construction of an A- Framed slatted cattle shed	26-08-07	MARDYKE,	N/A	N/A
7510110	APPLICATION FINALISED	Rafter	Majella	storey and a half dwelling, garage, waste water treatment plant and percolation area, site entrance and all associated site works	28-08-07	CURRAHEEN,	N/A	N/A
7510924	APPLICATION FINALISED	Roche	Brian	domestic garage/fuel store with all associated site works	29-08-07	CLONCLEIGH,	N/A	N/A
7511189	APPLICATION FINALISED	O'Dwyer	Thomas	dwelling house, domestic garage, new entrance, proprietary effluent treatment system and percolation area, including all associated site works	30-08-07	GARRANROE,	N/A	N/A
7511190	APPLICATION FINALISED	Surestone Construction		The 87m long as-built western boundary wall, the 7.7m radius as-built circular turning bay within the estate, and 7 no. soakaways within site curtilage of house no.s 1 to 7 inclusive (previous application PLC/20606)	30-08-07	TWO MILE BC	N/A	N/A
7511192	APPLICATION FINALISED	Surestone Construction		The 3 no. detached garages - house no. 5 (area 66 sq.m), house no. 7 (64 sq.m), & house no. 11 (area 52 sq.m)(previous application PLC/21744)	30-08-07	TWO MILE BC	N/A	N/A
7511193	APPLICATION FINALISED	Surestone Construction		4 no. detached garages - at house no. 3 (area 43 sq.m), house no. 5 (area 43 sq.m), house no. 11 (area 46 sq.m), house no. 14 (area 43sq.m) and the single storey garage extension (area 56 sq.m) to the side of house no. 12 (previous application PLC/23247)	30-08-07	TWO MILE BC	N/A	N/A
7947	APPLICATION FINALISED	Kelly	Jerry	construction of a dwelling house with garage, entrance, connection to public sewer, together with all associated works	04-09-07	CASTLEQUAR	N/A	N/A
7510944	APPLICATION FINALISED	Two-Mile-Borris Nation	Board of Managemen	to erect a prefabricated classroom and carry out all associated works	13-09-07	TWO MILE BC	N/A	N/A
7862	APPLICATION FINALISED	Hassett	Lisa	demolition of an existing dwelling in ruins and construction of a new single storey dwelling, new recessed site entrance, new maechanical aeration system and percolation area and all associated site works	16-09-07	BALLINTOGHE	N/A	N/A
71391	APPLICATION FINALISED	McGrath	Patrick & Catherine	completion of the reconstruction, alterations and extension to existing dwelling, for extension to said dwelling, site entrance, effluent treatment system with raised bed percolation area, treatment of roadside boundary and all associated site works	17-09-07	LURGOE, KILLI	N/A	N/A
71392	APPLICATION FINALISED	McGrath	Patrick & Catherine	reconstruction, alteration and extension of original derelict dwelling and amendments to roadside boundary	17-09-07	LURGOE, KILLI	N/A	N/A

7510016	APPLICATION FINALISED	Bowe	Phil & Mary	to construct a storey and a half type dwelling, garage, effluent treatment system and soil percolation system together with landscaping and entrance	20-09-07	KILLORAN, M(	N/A	N/A
71429	APPLICATION FINALISED	Scott	Darragh	construction of a new two-storey dwelling with on site waste water treatment and disposal system and with all associatedsite works	24-09-07	INCHIROURKE	N/A	N/A
71430	APPLICATION FINALISED	Carroll	Margaret	first floor private domestic extension to the rear of my premises and new front door to north facing facade with all associated ancillary works	25-09-07	KILLENAULE	N/A	N/A
71444	APPLICATION FINALISED	Kirwan	Una	construction of 4 no. two-storey detached dwellings, a communial proprietary treatment plant and all ancillary site works	27-09-07	GRAIGUEPAU	01-11-07	R
7510933	APPLICATION FINALISED	Ryan	Matt	construct a dwellling house with entrance, effluent treatment system together with all associated site works	27-09-07	MOYNEARD, I	N/A	N/A
7864	APPLICATION FINALISED	Duggan	Paul & Angela	construction of a dwelling house, entrance, garage, effluent treatment system together with all associated site works	03-10-07	KNOCKBOY, G	N/A	N/A
7510259	APPLICATION FINALISED	Shortall	T.J.	dormer dwelling house, garage, sewage treatment system, entrance and associated site works	03-10-07	BALLYDAVID,	N/A	N/A
71474	APPLICATION FINALISED	Gortnahoe Community		construction of new extension to north-east gable of the existing community hall, consisting of new stairwell to the first floor, with modifications to the existing hall with all associated site works	04-10-07	GORTNAHOE	N/A	N/A
7329	APPLICATION FINALISED	Hogan	William	silage base and ancillary works	16-10-07	GORTNAHOE	N/A	N/A
7760	APPLICATION FINALISED	Maher	Donal	to construct a)new 3-bay double slatted live stock unit incorporating underground slatted storage tanks , concrete straw bedded areas with central easy feed passage b) New dungstead with all associated site works	24-10-07	COALBROOK	N/A	N/A
71562	APPLICATION FINALISED	Lakovara	Matthew & Sheena	rear extension to existing dwelling together with raising roof ridge height on existing dwelling to accommodate rooms in attic roof space and associated works	30-10-07	FENNOR, URL	N/A	N/A
71570	APPLICATION FINALISED	Kennedy	Elizabeth	two storey dwelling house, septic tank and associated works	31-10-07	LANESPARK, E	N/A	N/A
7511424	APPLICATION FINALISED	Fahy	Michael	construct an agricultural storage shed together with all associated site works	01-11-07	BALLYVILLANE	N/A	N/A
7511438	APPLICATION FINALISED	Delaney	Jim and Christina	storey and a half style dwelling house, entrance, garage, connection to mains water supply, mechanical aertion system and polishing filter and all associated site works	01-11-07	NOARD, TWO	N/A	N/A
71579	APPLICATION FINALISED	Sugrue	Timothy	demolition of dwelling for development of 5 houses consisting of 3 no. 3-bed two storey detached unit (A type); 2 no. 3-bed two storey detached units (B type); site entrance and entrances, realignment of public footpath, connection to services and associated works	01-11-07	KILLENAULE	N/A	N/A
7511453	APPLICATION FINALISED	Cussen	Philip & Eleanor Glees	horse stables, dungstead, effluent tank, new entrance and all associated site works	08-11-07	ATHLUMMON	N/A	N/A
7510973	APPLICATION FINALISED	O'Donoghue	Bridget & William	Full planning permission to construct an extension to the rear of our dwelling with all associated siteworks.	12-11-07	BALLYBEG UP	N/A	N/A
7510565	APPLICATION FINALISED	Kemerer	Lynn & Breda	extension to west side of existing sunroom & kitchen with balcony over extension, link between the existing house and detached garage to accommodate WC & utility on the ground floor, together with extension at first floor over existing balcony to provide frist floor conservatory together with all associated site works	13-11-07	GLEN CARRIG	N/A	N/A
71635	APPLICATION FINALISED	Rochford	Pat	concrete slurry storage tank underground	15-11-07	FENNOR, URL	N/A	N/A

7383	APPLICATION FINALISED	Sloane	Dermot	demolish existing outbuildings and construct dormer style detached dwelling, alterations to existing site entrance, new septic tank, percolation area and all associated site works	22-11-07	GRAIGUEPAU	N/A	N/A
71509	APPLICATION FINALISED	Killenaule Co-Ownershi		demolition of existing single storey house on Pike Street to provide a vehicular and pedestrian entrance to the rear lands and construction of a 60-bed nursing home with car parking for 58 cars; a Day Care Centre, 48 no. 2 bedrooom single storey sheltered houses with integral car space, an ESB sub-station and associated ancillary services and landscaping works	28-11-07	KILLENAULE	04-01-08	C
7510460	APPLICATION FINALISED	O'Mahony	Donal	a loose shed with slatted feed passage and all associated site works	03-12-07	PIERCETOWN	N/A	N/A
7511311	APPLICATION FINALISED	Fahy	Michael	existing domestic garage, together with all associated site works.	06-12-07	BALLYVINANE	N/A	N/A
7511431	APPLICATION FINALISED	Surestone Construction	N/A	the demolition of existing dwelling and out buildings and the construcition of 5 no bungalows a single storey medical centre a single storey creche a single storey security administration building a single storey 63 bed nursing home 30 no single storey 2 bedroomed retirement apartments in 3 no blocks and associated site development works including a proposed entrance from the public road car parking foul and storm water drainage.	10-12-07	BORRIS, TWO	17-01-08	W
7510487	APPLICATION FINALISED	Shredwood Ltd		Site office, toilets, weighbridge and mobile shredder unit for the acceptance and storage of timber products, the shredding of timber, the storage of shredded timber and subsequent removal off site	12-12-07	DERRYHOGAN	N/A	N/A
7511617	APPLICATION FINALISED	Shorley	Noel	dwelling, garage, entrance, waste water treatment system and all associated site works	13-12-07	GARRAUN, TV	N/A	N/A
71768	APPLICATION FINALISED	Fogarty	Eileen	construction of a two storey dwelling, single storey domestic garage, proprietary site specific effluent treatment system and all associated works	16-12-07	LURGOE, KILL	24-01-08	W
71781	APPLICATION FINALISED	Coady	Orla	construction of a single storey extension to the side of existing bungalow and associated site works	18-12-07	GRAIGUEPAU	N/A	N/A
7511054	APPLICATION FINALISED	Power	Sean	two-storey dwelling with garage with an existing entrance to be shared and a proprietary effluent treatment system and percolation area with all associated site works	19-12-07	LEIGH, TWO-M	N/A	N/A
7511281	APPLICATION FINALISED	Gorman	John	extension to existing dwelling	04-01-08	LISDONOWLE	N/A	N/A
7511725	APPLICATION FINALISED	Leahy	Michael	dwelling house, a platinum mini wastewater treatment plant with percolation area on site and entrance to site	18-01-08	LAHARDEN UI	N/A	N/A
7511498	APPLICATION FINALISED	Stokes	Patrick James	two storey dwelling house, garage, septic tank/effluent treatment system/percolation area, site entrance and associated site works	19-01-08	GARRAUN, TV	N/A	N/A
71884	APPLICATION FINALISED	Large	John	new loose housing facility with slatted waste storage and ancillary works	19-01-08	GORTNAHOE	N/A	N/A
7511735	APPLICATION FINALISED	and Mairead Gleeson	Mark O'Dwyer	06511812 - storey and a half dwelling house, connection to group water scheme, a sewage treatment system and raised percoaltion area, an entrance and all associated site works	19-01-08	MOYNEARD, I	N/A	N/A
7511748	APPLICATION FINALISED	Clarke	Michael	single storey extension to south-west of existing bungalow and retention of single storey domestic shed to rear of site and all associated site works	22-01-08	BORRIS, TWO	N/A	N/A

71899	APPLICATION FINALISED	Kennedy	Arthur & Shirley	raise roof and eaves level of existing dwelling to form first floor accommodation with new first floor windows to north, east and west facing elevations, demolish existing bay window and form new openings at ground floor and associated changes to all elevations, construct single storey extension to rear and associated works	22-01-08	KILLENAULE	N/A	N/A
71653	APPLICATION FINALISED	Maher	Dick	two-storey domestic dwelling which abuts a protected structure and associated works	24-01-08	KILLENAULE	N/A	N/A
71246	APPLICATION FINALISED	Fitzgerald	John W	geomembrane lined lagoon and ancillary works	26-01-08	POYNSTOWN	N/A	N/A
7511609	APPLICATION FINALISED	Centenary Thurles Co-C	N/A	demolition of existing derelict building, construction of new glazed lobby, re-clad existing front elevation, construct new boundary wall with pedestrian access, widen existing main entrance, revised car parking with landscaping, additional signage and associated site works	29-01-08	MAIN ST, LITT	N/A	N/A
7511770	APPLICATION FINALISED	Mairead Keogh	Patrick Ryan &	to renovate & extend existing dwellinghouse, permission to convert existing outbuildings to habitable area together with raising the roof level and incorporating windows to the front of the structure, permission to demolish existing garage and re-building a new garage on the site, together with all associated site works	29-01-08	BORRIS, TWO	N/A	N/A
7511824	APPLICATION FINALISED	Kennedy	Denis & Bridget	permission to retain revised site layout and boundaries and to retain revised dwelling design incorporating attic conversion to storage space	09-02-08	SKEHANE TW(	N/A	N/A
7511823	APPLICATION FINALISED	Kennedy	Denis & Bridget	permission to build an extension to our dwelling	09-02-08	SKEHANE TW(	N/A	N/A
7511819	APPLICATION FINALISED	Corcoran	Maeve	full planning permission to convert attic to bedroom spaces and permission to construct an extension to the rear of my dwelling with minor elevational facade changes, with all associated siteworks	09-02-08	TWO MILE BC	N/A	N/A
71876	APPLICATION FINALISED	O'Connell	Mary	construction extension/alterations, porch reconstruction to existing dwelling house and the blocking up of the existing vehicle entrance	10-02-08	KNOCKABRITT	N/A	N/A
71967	APPLICATION FINALISED	Duggan	Paul & Angela	construction of a dwelling house, entrance, garage, effluent treatment system and all associated site works	12-02-08	KNOCKBOY, G	N/A	N/A
71982	APPLICATION FINALISED	Peters	John	construction of a single storey extension to the side of existing dwelling	15-02-08	BROOMHILL, I	N/A	N/A
7874	APPLICATION FINALISED	McElligott	Seamus	a mixed use residential development comprising the construction of 39 no. dwellings, 9 no. apartments, a creche/playschool wtih separate staff building, a commercial /retail neighbourhood centre development which will comprise an office suite, a hair dresser/beauty salon, a butchers shop, a pharmacy and a fast food restaurant, the provision of a public house with function room, a doctors surgery/consulting rooms, site development works to include the provision of 3 no. site entrances, services roads, site services, the provision of a riverside walk including all associated car parking	17-02-08	LANESPARK, E	20-03-08	C
72045	APPLICATION FINALISED	Stackmack Developmer		minor alterations to previous planning Ref No. 06/1038 consists of the provision of a access lane with gate entrance to the rear of No,s 2,3,4,5,6,7,8,9,10,11 and all associated ancillary site works	23-02-08	GORTNAHOE	N/A	N/A
89	APPLICATION FINALISED	South Tipperary Vocati		partly demolish the existing building and to alter and extend the building	28-02-08	KNOCKAVARD	N/A	N/A

7511139	APPLICATION FINALISED	Cussen	Philip	03/51/1109 - dormer bungalow including septic tank with waste water treatment system, private well, garage and entrance wall	05-03-08	ATHLUMMON	N/A	N/A
8510020	APPLICATION FINALISED	Doyle	Joan & Paddy	construct a sun-room on the eastern side of dwelling house with all associated site works	11-03-08	KILMAKILL, M	N/A	N/A
71970	APPLICATION FINALISED	Walsh	Kevin	construction of a dwelling house, waste water treatment system, percolation area, entrance and all other associated site works	16-03-08	MARDYKE, BA	N/A	N/A
856	APPLICATION FINALISED	Kelly	Jerry	construction of a treatment system together with percolation area to service existng dwelling house planning Ref 07/947 together with all associated site works	17-03-08	CASTLEQUAR	N/A	N/A
880	APPLICATION FINALISED	Hayes	Martin & Marie	extension to rear of existing single storey residence consisting of ground floor extension 67.50 sq m. with 2 no. rooflights, height to match existing ridge level	23-03-08	BALLYNONTY	N/A	N/A
8510070	APPLICATION FINALISED	Paul Blanche	Catherine Moloney &	(within previously approved planning permission PLC/21744 - the as built stonework central bay to the front elevation containing the ground floor front door and first floor window, and amended roof detail	26-03-08	TWO-MILE-BC	N/A	N/A
8103	APPLICATION FINALISED	Walsh	Gerard	construction of a sunroom extension on to existing dwelling	27-03-08	GORTNAHOE	N/A	N/A
8165	APPLICATION FINALISED	Lahart	Frances Hanrahan An	construction of an extension to the rear of an existing dwelling which is currently being renovated and all associated site works	09-04-08	LURGOE, KILLI	N/A	N/A
71904	APPLICATION FINALISED	Healy	Kenneth	construction of a dormer bungalow, new vehicular entrance and all associated site development works	16-04-08	KILLENAULE	N/A	N/A
8510197	APPLICATION FINALISED	Kearney	Raymond & Mary	construct a two-storey dwelling, site entrance and effluent treatment system with raised bed percolation area and to complete partially constructed domestic garage and stable block and all associated site works. Proposal includes the demolition of the existing partially constructed dwelling which is structurally unsound, which was granted under Ref No. 03/51/0039	24-04-08	GARRAUN, TV	N/A	N/A
8235	APPLICATION FINALISED	Ryan	Brigid	to replace flat roof of dwelling extension with a pitched tiled roof	24-04-08	RATHBEG, GO	N/A	N/A
8510195	APPLICATION FINALISED	McCarthy	Michael & Bridget	construct an extension to existing dwelling with all associated site works	24-04-08	GALBOOLY, TI	N/A	N/A
8510196	APPLICATION FINALISED	Kearney	Raymond & Mary	existing domestic garage constructed to wall plate level and existing stable block constructed to wall plate level which have been constructed contrary to granted planning file 03/51/0039	24-04-08	GARRAUN, TV	N/A	N/A
8510011	APPLICATION FINALISED	Loughnane	Bridget	existing structures comprising of (a) extension to rear of dwelling; (b) domestic storage areas to rear of dwelling; (c) domestic garage and fuel store and (d) outside toilet and septic tank, including associated site works	27-04-08	COOLEENY, M	N/A	N/A
8510228	APPLICATION FINALISED	Ryan	John & Kay	extend the domestic living area to the rear of dwelling, including the provision of first floor living space and any associated site works	30-04-08	BALLYBEG, LIT	N/A	N/A
71777	APPLICATION FINALISED	Joyce	Patrick & Louise	indefinitely of a self contained two bed apartment adjoining existing house	06-05-08	KILBRANNELL,	N/A	N/A
8510253	APPLICATION FINALISED	Perkins	Liam & Loretta	a single storey extension to side of existing dwelling's side elevation, new velux to side roof of existing dwelling and all associated site works	06-05-08	TWO MILE BC	N/A	N/A
8510268	APPLICATION FINALISED	Gleeson	Niamh	(06/51/1813) for a storey and a half dwelling house, connection to a group water scheme, a sewage treatment system and raised percolation area, an entrance and all associated site works and permission for a garage.	08-05-08	MOYNEARD, I	N/A	N/A
7511417	APPLICATION FINALISED	Cooney	Laura	single storey dwelling, a septic tank system, an entrance and ancillary site work	13-05-08	GALBOOLY LIT	N/A	N/A

7511844	APPLICATION FINALISED	& Gerard Ryan	Maria Maher	dormer dwelling house, domestic garage, proprietary treatment system, new entrance and ancillary works	15-05-08	BOULABEHA,	N/A	N/A
8104	APPLICATION FINALISED	Mahon	Sinead Ryan & James	construction of a dwelling house, domestic garage, waste water treatment system and all associated site works	21-05-08	BALLINUNTY	N/A	N/A
821	APPLICATION FINALISED	Walsh	Matt	construction of a rear extension	22-05-08	KNOCKABRITT	N/A	N/A
8377	APPLICATION FINALISED	Lacovara	Matt & Sheena	upgrade current efflyent system and put in a new effluent treatment system to comply with current regulations	26-05-08	FENNOR, URL	N/A	N/A
71999	APPLICATION FINALISED	Perry	William & Alice	portion of existing shop currently uesd as a restaurant, kitchen and store, existing garage together with existing toilet block and 2 existing stable blocks with all associated site development works	27-05-08	BALLINUNTY	N/A	N/A
8388	APPLICATION FINALISED	McGuire	Stephen	change of house type from that permitted under planning ref no. 03/860 and all associated site development works	28-05-08	KNOCKAV	N/A	N/A
8241	APPLICATION FINALISED	Hannigan	Claire Kerwick & Vince	construction of a dwelling house, domestic garage, proprietary effluent treatment system and percolation area, entrance and to carry out all associated site works	29-05-08	GLENGOOLE S	N/A	N/A
8419	APPLICATION FINALISED	Heffernan	Denis & Brid	construction of new kitchen/ dining room, extension to rear of existing dwelling and associated site works	05-06-08	GLENGOOLE S	N/A	N/A
7511444	APPLICATION FINALISED	Blee	Pat	demolition of existing single storey dwelling and construction of a total of 50 no., two storey dwellings consisting of 2 no., 4-bed detached, 24 no., 3-bed dwellings in semi-detached arrangement, 24 no., 3-bed terraced dwellings in 1 block of 3 units, 1 no., block of 4 units, 1 no., block of 5 units and 2 no., blocks of 6 units, with 10 no., individual serviced sites, with 3 no., associated single storey detached sheds/garages together with a 204 sq. m. two storey creche, car parking and ancillary site services and new vehicular entrance	08-06-08	BALLYMURRE	04-07-08	W
8510402	APPLICATION FINALISED	Boland	Noel	construct a dwelling with garage, entrance, and mechanical aeration system and polishing unit with all associated site works	10-06-08	KILMAKILL, M	N/A	N/A
8442	APPLICATION FINALISED	Sugrue	Tim	demolition of existing dwelling, development of 5 houses consisting of 3 no. 2 bedroom 2 storey terraced town house units (Type A), 2 No. 2 bedroom 2 storey semi-detached town house units (Type B), site entrance, connection to services and all associated works	11-06-08	MONSLATT, K	01-07-08	C
7511797	APPLICATION FINALISED	Doyle	Larry	dwelling, garage, entrance and septic tank	12-06-08	ATHLUMMON	N/A	N/A
8510121	APPLICATION FINALISED	Flanagan	P.J.	Two-storey dwelling house, domestic garage, entrance, septic tank, percolation area, puraflow treatment system and all associated site works	17-06-08	GALBOOLA, LI	N/A	N/A
8510450	APPLICATION FINALISED	Moore	Damien & Patricia	to erect a steel framed shed to rear of house	19-06-08	GARRANROE,	N/A	N/A
8492	APPLICATION FINALISED	Duggan	Paul & Angela	construction of a dwelling house, entrance, garage, effluent treatment system together with all associated site works	19-06-08	KNOCKBOY, G	N/A	N/A
8510454	APPLICATION FINALISED	Stokes	Patrick James	dormer dwellinghouse, garage, septic tank/effluent treatment system/percolation area, site entrance and associated site works. (This application is a revision to previous planning application 07/51/1498 for two storey dwelling)	22-06-08	GARRAUN, TV	N/A	N/A
8508	APPLICATION FINALISED	Hogan	Gerard & Marie	recently constructed domestic garage and all associated site works	25-06-08	KILLENAULE	N/A	N/A
8525	APPLICATION FINALISED	Guinan	Patrick	construction of a new Bellmouth entrance to facilitate forest management	25-06-08	GRAIGAMAN	N/A	N/A
8536	APPLICATION FINALISED	Heffernan	Denis & Brid	construction of new kitchen display area to existing workshop and associated site works	30-06-08	GLENGOOLE S	N/A	N/A

8598	APPLICATION FINALISED	Lanigan	Martin	construction of a domestic garage and extend 2 no. bedrooms to the front of existing dwelling	10-07-08	CLONAMOND	N/A	N/A
8592	APPLICATION FINALISED	Kenny	Darren	dwelling, entrance, domestic garage, waste water treatment system and all associated site works	10-07-08	CLONAMICKL	N/A	N/A
8510271	APPLICATION FINALISED	Abbott	Victor	conversion of old dwelling to domestic garage with increased size and second existing entrance to side road with all assoicated site works	17-07-08	CURRAHEEN,	N/A	N/A
8510418	APPLICATION FINALISED	Ely	Michael	dwelling house, entrance, site boundaries and waste water treatment system	21-07-08	RAHEALTY, TH	N/A	N/A
7511804	APPLICATION FINALISED	O'Donoghue	Bridget & William	stables to the rear of site and all associated siteworks	31-07-08	BALLYBEG, LIT	N/A	N/A
8510602	APPLICATION FINALISED	Maher	Pat	agricultural entrance onto the public road	31-07-08	COOLEENEY, I	N/A	N/A
8510269	APPLICATION FINALISED	Ryan	Jacquie	Dwelling with garage, entrance, septic tank, percolation area and all associated site works.	07-08-08	CURRAHEEN,	N/A	N/A
8725	APPLICATION FINALISED	Kelly	Philip	construction of an A-Framed slatted cattle shed	13-08-08	MARDYKE, BA	N/A	N/A
8732	APPLICATION FINALISED	Cormack	Tracy McCarthy & Tho	construction of a dwelling house with domestic garage, effluent treatment system, entrance and all associated site works	14-08-08	GLENGOOLE	N/A	N/A
8510019	APPLICATION FINALISED	& Owen Sheridan	J J O'Sullivan	demolish an existing dwelling and construct a new two storey dwelling in place consisting of ground floor restaurant and takeaway facility and 2 no., first floor apartment units with independent access at ground floor, with connection to public services and all associated site works	20-08-08	BORRIS, TWO	N/A	N/A
7511854	APPLICATION FINALISED	Ireland Ltd.,	Hi-Volt	revised site boundaries, an extended yard/parking area and change of use of dwelling and private garage to offices and revised entrance location and layout and change of use of office building back to its original use as a dwellinghouse and to incude some of the yard within its grounds. Permission to build an extension to the existing storage building, to provide carpark area and to complete all drainage landscaping and associated site works	21-08-08	SHANBALLYDI	N/A	N/A
8510408	APPLICATION FINALISED	Doyle	Seamus	dwelling, treatment system, percolation area, entrance, garage and associated site works	25-08-08	CASTLETOWN	N/A	N/A
8510701	APPLICATION FINALISED	Hayde	Martin	one and a half storey dormer dwelling, domestic garage, biocycle waste water treatment system and percolation area, vehicular entrance, driveway and associated siteworks in lieu of previously approved permission Ref. No. 04511871	26-08-08	COOLCROO, T	N/A	N/A
8510710	APPLICATION FINALISED	& William O'Brien	John O'Mahony	change of house design and relocation of garage as granted under permission Ref. No. 04510298	28-08-08	COOLCROO, T	N/A	N/A
8510715	APPLICATION FINALISED	Bowe	Edward	dormer style dwelling, garage, entrance and septic tank	28-08-08	LEIGH, TWO-M	N/A	N/A
8510718	APPLICATION FINALISED	Bowe	Paul	dormer style dwelling, garage, entrance and septic tank	28-08-08	LEIGH, TWO-M	N/A	N/A
8510484	APPLICATION FINALISED	Gleeson	Kathleen	two storey dwelling, entrance, septic tank	29-08-08	SHANBALLYDI	N/A	N/A
8843	APPLICATION FINALISED	Rodgers	S O' Callaghan & Hugh	extension of existing cottage, relevant demolition of rear kitchen area, new septic tank and percolation area, relocation of utility room in the adjacent existing shed and all associated site works	11-09-08	DERRYVELLA,	N/A	N/A
8855	APPLICATION FINALISED	Framhill Ltd		construction of 12 no. 4 & 5 bed two storey dwelling units consisting of 10 no. detached dwellings and 2 no. semi-detached and 3 no. seviced sites with entrance and all associated ancillary site works, treatment plant system to cater for development	14-09-08	GORTEEN LOV	N/A	N/A
8856	APPLICATION FINALISED	Heffernan	Denis & Bried	two bay extension to existing workshop with a total floor area of 101.61 sq m, consisting of workshop and spray room with mezzanine floor over and asssociated site works	14-09-08	GLENGOOLE S	N/A	N/A

8876	APPLICATION FINALISED	Spellacy	David & Mary	construction of a domestic garage and bay window to front elevation of existing dwelling house together with all associated site works	18-09-08	SALLYBOG, GC	N/A	N/A
8510559	APPLICATION FINALISED	& Katie Chapple	Shane Healy	demolish existing extension to rear of dwelling and construct a new extension with internal refurbishments to existing dwelling with all associated siteworks	23-09-08	FCOOLEENY, N	N/A	N/A
7511853	APPLICATION FINALISED	Recycling Limited	Acorn	facility to accommodate Biological Treatment of organic residues and production of Class 1 compost comprising (a) Landscaped Fenced c.3.2 Hectare complex; (b) Main Building c.3870sqm. Housing Storage, Equipment & treatment activities; (c) Marshalling yard; (d) Office & staff building; (e) Effluent storage tank (Domestic, serving staff facilities only); (f) Entrance Road & Weighbridge; (g) Bio-filter & associated Plant; (h) Tree plantation (Willow & similar species); ESB substation and all ancillary works. An Environmental Impact Statement (EIS) is included with the application documents	02-10-08	BALLYBEG, LIT	N/A	N/A
8949	APPLICATION FINALISED	Tobin	Jim & Aileen	retain existing domestic well together will all associated site works	09-10-08	KNOCKABRITT	N/A	N/A
71799	APPLICATION FINALISED	MCCB Partnership		the demolition of a habitable dwelling and the proposed erection of 94 No dwellings, 25 No. terraced blocks, 9 No. semi-detached blocks and 1 No 2 -bedroom apartment, a 202 sq m creche togethre with all associated site works and services including boundary treatments and landscaping	13-10-08	KILLENAULE R	N/A	N/A
8971	APPLICATION FINALISED	Kennedy	Elizabeth	change of house type on existing permission ref. no. 07/1570 from 2-storey house to single storey house	15-10-08	LANESPARK, E	N/A	N/A
81040	APPLICATION FINALISED	Meagher	Patrick	demolition of existing dwelling house and construction of a new dwelling house, garage, waste water treatment system, new road entrance, driveway and all associated site works	03-11-08	CURRAHEEND	N/A	N/A
8510628	APPLICATION FINALISED	Coman	Jacinta	build a two storey dwelling, garage entrance and effluent treatment system	06-11-08	COLDFIELDS T	N/A	N/A
8510970	APPLICATION FINALISED	Hayes	Donal & Liam	install 1,000,000 gal. capacity overground slurry tank including all associated site works	20-11-08	LEIGH, TWO-M	N/A	N/A
81122	APPLICATION FINALISED	Heffernan	Denis & Brid	construction of a new kitchen display area to existing workshop and associated site works	30-11-08	GLENGOOLE S	N/A	N/A
8510572	APPLICATION FINALISED	Noble	Kenneth	Bungalow, Entrance, Septic tank and Bord Na Mona Treatment system.	01-12-08	BALLYBEG, UF	N/A	N/A
81160	APPLICATION FINALISED	Barrett	Noelle	new garage to the rear of existing dwelling	09-12-08	KILLENAULE	N/A	N/A
8511031	APPLICATION FINALISED	O'Connell	Ann	demolish 40.95 m.sq. of existing dwelling and construct a dormer style extension of 204.9m.sq., treatment system, percolation area and associated site works	16-12-08	NOARD, TWO	N/A	N/A
81209	APPLICATION FINALISED	McCormack	Sarah	construction of a dwelling, domestic garage, entrance, fit waste water treatment system and all associated site works	18-12-08	POYNTSTOWN	N/A	N/A
8511048	APPLICATION FINALISED	Everard	Colm	attic conversion	02-01-09	MOYNEARD, N	N/A	N/A
81242	APPLICATION FINALISED	Hogan	Gerard & Marie	construction of a domestic garage together with all associated site works	07-01-09	KILLENAULE	N/A	N/A
81247	APPLICATION FINALISED	Ryan	Liam	construction of a new porch extension at front door and provide two new dormer windows including altering position of existing windows to roof and associated site works	09-01-09	BALLINUNTY	N/A	N/A
81265	APPLICATION FINALISED	Lanigan	Michael	construction of a garage and all associated works	15-01-09	POYNSTOWN	N/A	N/A

8511092	APPLICATION FINALISED	Fitzgerald	J.J. & D.	single storey extension to link between existing dwelling house and detached garage, comprising WC, kitchen/dining area, pantry, garage alteration, with all associated site works, landscaping	17-01-09	TWO-MILE-BC	N/A	N/A
8511112	APPLICATION FINALISED	Cantwell	Margaret	amended site boundaries and site layout	24-01-09	NOARD, TWO	N/A	N/A
8510943	APPLICATION FINALISED	Murphy	Peter	dwelling house, septic tank and percolation area, new entrance, and all associated site works	29-01-09	GARRANROE,	N/A	N/A
8511004	APPLICATION FINALISED	Graham	Christina	single storey extension to the side of existing dwelling house, install advanced sewage treatment system and all associated site works	29-01-09	BALLYBEG, LIT	N/A	N/A
8511141	APPLICATION FINALISED	Morrissey	Bill	dwelling house, entrance, driveway and all associated site development works (on the same site for which planning was granted for a house under reference no. 06511227)	06-02-09	BOOLABEHA,	N/A	N/A
81095	APPLICATION FINALISED	Cahill	Eamonn	construction of a two storey dwelling, mechanical aeration wastewater treatment system and raised bed percolation area, entrance and all associated site works	10-02-09	LICKFINN	03-03-09	C
8511188	APPLICATION FINALISED	SWS Energy Ltd	N/A	1 no. meteorological mast of 61.5m in height (pl ref 03/51/1001) for the limited purpose of monitoring wind and climate conditions for development referenced in planning application 06/51/0773	24-02-09	KILORAN, MO	N/A	N/A
81252	APPLICATION FINALISED	O Connell	Mary Egan & Eddie	construction of a dwelling, garage, entrance and septic tank	24-02-09	COOLE	N/A	N/A
8510819	APPLICATION FINALISED	Co-op Society Ltd	Centenary Thurles	construct a new twenty thousand tonne grain store and associated site works	25-02-09	MANSELSTOV	N/A	N/A
8510735	APPLICATION FINALISED	O'Brien	Maria	bungalow style dwelling house, entrance, garage, connection to mains water supply, septic tank and percolation area and all associated site works	09-03-09	BALLYMOREE	N/A	N/A
81205	APPLICATION FINALISED	Maher	Emma Hogan & Sean	a two storey dwelling, detached domestic garage, entrance, waste water treatment system, percolation area, connection to water main and all other associated works	11-03-09	GORTNAHOE	N/A	N/A
9510029	APPLICATION FINALISED	Boland	John	(i) front roadside boundary wall and entrance, (ii) screen wall panels on the northern side of house, all as now constructed	19-03-09	BOULABEHA,	N/A	N/A
942	APPLICATION FINALISED	Loughnane	Fergal & Valerie	two-storey extension to two-storey dwelling, new septic tank and associated works	23-03-09	GLENGOOLE	N/A	N/A
9510032	APPLICATION FINALISED	Heffernan	Michael & Mary	construct single storey extension to existing dwelling; Upgrade existing dwelling, demolish existing chimneys, new internal changes to existing layout incorporating changes to elevations due to new layout; Raise roof level to allow for attic conversion and construct new velux windows in roof; Demolish existing building in ruins and upgrade front garden, site entrance and road boundary wall and all associated site works	24-03-09	BORRIS, TWO	N/A	N/A
8511166	APPLICATION FINALISED	Kearney	Lucy	construct a dwelling house with entrance, effluent treatment system together with all associated site works	05-04-09	GALBOOLY LIT	N/A	N/A
991	APPLICATION FINALISED	Framhill Ltd		5 no. dwellings consisting of 1 no. 5-bed detached dwelling and 4 no. 4-bed detached dwellings, entrance, associated works and treatment plant	09-04-09	GORTEEN LOV	N/A	N/A
9510073	APPLICATION FINALISED	Quinn	Nicky & Mary	detached dwelling, part two storey, part single storey, with integrated garage, septic tank and percolation area, new site entrance and associated site works	15-04-09	MOYCARKEY (	N/A	N/A
8511113	APPLICATION FINALISED	Hayes	Pat and Anne	revised garage design and elevational alterations at dwelling	24-04-09	MANSELSTOV	N/A	N/A
9510138	APPLICATION FINALISED	Kearney	Patrick & Mairead	existing fuel shed and retain existing domestic garage together with all associated site works	07-05-09	BALLYDAVID,	N/A	N/A

8510290	APPLICATION FINALISED	& Dolores Cullinane	Andy Darmody	construct a dwelling house with garage, entrance, effluent treatment system together with all associated site works	12-05-09	BORRIS, TWO	N/A	N/A
9170	APPLICATION FINALISED	Crowe	Tim	portal framed agricultural building, yard slab extension, surface water disposal and ancillary works	13-05-09	CLONMICKLO	N/A	N/A
9186	APPLICATION FINALISED	Foley	Patrick	replace existing agricultural entrance with a splayed recessed entrance including associated site works	21-05-09	KILLENAULE	N/A	N/A
9193	APPLICATION FINALISED	O Reilly	Thomas	construction of a septic tank, percolation area and all associated site works for existing dwelling	24-05-09	CLONOURA, C	N/A	N/A
9510174	APPLICATION FINALISED	Moloney	Caoimhe	1) new stone cladding finish to the front gable; 2) proposed single storey extension to side and rear of existing house; 3) proprietary waste water treatment plant and all associated site works	24-05-09	RATHMANNA	N/A	N/A
9200	APPLICATION FINALISED	Kelly	Philip	retain dairy	27-05-09	MARDYKE	N/A	N/A
9215	APPLICATION FINALISED	Meagher	Sharon Brown & Richa	dormer dwelling, garage, mechanical aeration system and polishing unit, site entrance and associated works	31-05-09	CURRAHEEND	N/A	N/A
9214	APPLICATION FINALISED	Shankar	Dr Jay K & Rita	dwelling, separate garage, site entrance, septic tank and soil percolation system and associated works	31-05-09	COOLDINE	N/A	N/A
9232	APPLICATION FINALISED	Meagher	Josephine Lyons & Bre	dormer dwelling, garage, mechanical aeration system and polishing unit, site entrance and associated works	08-06-09	CURRAHEEND	N/A	N/A
9272	APPLICATION FINALISED	O'Donoghue	William	(a) retain entrance to site (b) permission for dwelling, wastewater treatment system and associated works	18-06-09	GORTNAHOO	N/A	N/A
9510089	APPLICATION FINALISED	Co-Operative Society Lt	Centenary Thurles	(a) revised extended shop floor plan; (b) revised car parking layout; (c) extended building facade elevational treatment; (d) revised landscaping layout; (e) revised site entrance; (f) additional building signage and site signage	23-06-09	MAIN STREET,	N/A	N/A
9510286	APPLICATION FINALISED	O'Connell	Eamon	garage/shed to the rear of existing dwelling and all associated site works	09-07-09	NOARD, TWO	N/A	N/A
81073	APPLICATION FINALISED	Campion/Stackmack De	Martin	demolition of existing single storey dwelling and out building and permission to construct a two storey dwelling consisting of a creche, offices retail units and all associated site development works	19-07-09	GORTNAHOE	N/A	N/A
81310	APPLICATION FINALISED	McLoughlin	Sean	renovation works to existing dwelling house, extension to the rear of house, conversion of barn to residential accommodation and vehicular entrance, construction of a domestic garage and install an effluent treatment system and percolation area and all associated site works	19-07-09	EARLSHILL	12-08-09	C
9510317	APPLICATION FINALISED	Rehab Group		shed, second entrance and access lane to dwelling house	27-07-09	GARRAUN, TV	N/A	N/A
9510344	APPLICATION FINALISED	Dwyer	Paul & Louise	construct a single storey extension to the rear of existing dormer dwelling, domestic garage and associated site works	05-08-09	LONGFORDPA	N/A	N/A
9326	APPLICATION FINALISED	Beatty	C O'Kane & Michael	(1) demolish 3-bedroom dwelling (2) construct 6-bedroom dwelling consisting of lounge, dining, kitchen and utility areas - all rooms located on 2 floors, ground floor and a first floor loft area (3) remove septic tank and percolation area and install an approved waste water treatment system to appropriate standards (4) construct entrance by remodelling land which forms a hazardous slope, provide new wall, piers and entrance gates (5) landscape by retaining boundary trees and hedges and provide gravel driveway, footpaths, seating areas, grass areas, planting beds, trees, shrubbery and associated works	17-08-09	GLENGOOLE M	N/A	N/A
9510385	APPLICATION FINALISED	O'Donoghue	Bridget & William	service entrance to site and all associated siteworks	20-08-09	BALLYBEG, LIT	N/A	N/A

9443	APPLICATION FINALISED	Caschera	Laura	two-storey dwelling, domestic garage, proprietary waste water treatment system, entrance gate and associated works	20-08-09	FENNOR	N/A	N/A
9510100	APPLICATION FINALISED	SWS Energy Ltd		12 no wind turbines (hub height 95m, blade diameter 90m), with an overall height from ground to blade tip of 140m, the use of 3 no. new borrow pits, construction of internal site tracks, upgrade of existng access track and associated works as an extension to Lisheen Wind Farm (Pl Ref no 06/51/0773, ABP Ref PL22.222142). An EIS has been submitted with this application.	26-08-09	BARNALISHEE	N/A	N/A
9502	APPLICATION FINALISED	Duggan	Padraig & Siobhan	single storey veterinary clinic with attached storage shed, septic tank and Puraflo effluent treatment system, underground effluent storage tank, entrance and associated works	07-09-09	CASTLEQUAR	N/A	N/A
9510431	APPLICATION FINALISED	Morris	Joe	domestic garage, including all associated works	10-09-09	LISKEVEEN, LI	N/A	N/A
9510013	APPLICATION FINALISED	Carroll	Brendan and Maura	dormer style dwelling house, connection to group water scheme, a mechanical aeration system and raised polishing filter, solar panels on the roof of that dwelling house, a combined entrance, a domestic garage and all associated site works	11-09-09	MONARAHEE	N/A	N/A
9510014	APPLICATION FINALISED	Hennessy	Aine	dormer style dwelling house, connection to group water scheme, a mechanical aeration system and raised polishing filter, solar panels on the roof of dwelling house, a combined entrance, a domestic garage and all associated site works	11-09-09	MONARAHEE	N/A	N/A
9520	APPLICATION FINALISED	Ryan	John	geomembrance lined out wintering pad and ancillary works	15-09-09	GORTNAHOE	N/A	N/A
9271	APPLICATION FINALISED	Hanrahan	Brian	(a) retain entrance as constructed (b) permission to operate a B&B in accordance with exempted development regulations	27-09-09	KNOCKAVAD/	N/A	N/A
9559	APPLICATION FINALISED	Dowling	Kathleen & Mark	retention of front boundary hedge	06-10-09	DUNGUIB	N/A	N/A
9510517	APPLICATION FINALISED	Ely	Martin	domestic storage buildings to rear of house and shop and retain ''A'' framed tiled roof of shop and back kitchen of house	27-10-09	MOYNETEMP	N/A	N/A
9608	APPLICATION FINALISED	Slattery	Andy & Mary	construction of a domestic garage and a front boundary wall to both sides of the existing entrance	29-10-09	KILLENAULE	N/A	N/A
9624	APPLICATION FINALISED	Campion	Martin & Catherine	construction of a single storey extension to the side and rear and new porch to front of existing dwelling with minor internal alterations, permission for garage/outbuilding, boundary walls and demolition of previous kitchen and addition and provision of new waste water treatment system and percolation area	05-11-09	GORTNAHOE	N/A	N/A
9510323	APPLICATION FINALISED	Bernie Martin	Patrick Behan &	dwelling, domestic garage, entrance, install waste water treatment treatment system and all associated site works	15-11-09	BOULABEHA,	N/A	N/A
9510165	APPLICATION FINALISED	Padraig Crowe	Maire Cummins &	construct a dormer style dwelling, garage, entrance driveway, septic tank, percolation area and all associated site works	19-11-09	CURRAHEEN,	N/A	N/A
9510569	APPLICATION FINALISED	Morrissey	Bill	change of house type, revised site boundaries, revised site layout and erection of out-buildings	03-12-09	BOOLABEHA,	N/A	N/A
9625	APPLICATION FINALISED	Ryan	Sean & Sally Anne	dwelling, domestic garage, entrance, waste water treatment system and associated site works	08-12-09	CROSSCANNC	N/A	N/A
9510591	APPLICATION FINALISED	Hayes	Edward	two storey extension and a single storey porch to the rear of existing dwelling and all associated site works	09-12-09	LEIGH, TWO-M	N/A	N/A
9510619	APPLICATION FINALISED	Club	Moyne Athletic	single storey extension will be constructed to the south and east of the existing clubhouse and be used as an indoor training facility. Permission is also requested for a new septic tank and percolation area, a new entrance and a new boundary wall	21-12-09	MOYNETEMP	N/A	N/A
9709	APPLICATION FINALISED	Kennedy	John	retain greyhound training track with pulp running surface (with timber kennel/shelter) and 6 no. greyhound compounds (4 with timber kennels/shelters) surrounded with timber post and wire fence	22-12-09	RATHBEG	N/A	N/A

9659	APPLICATION FINALISED	Bourke	Kevin	retain development works under ref. 03/1255: (a) car repair workshop comprising 3 bay service areas with offices and toilets; (b) vehicular entrance (for deliveries only) to north of workshop; (c) repositioned petrol interceptors; (d) lean-to store; (e) completion of all associated site development works to facilitate the development; permission is also being sought for the following: (a) repositioning of petrol/diesel pumps; (b) construction of a filling station shop unit including toilets, storeroom and offices; (c) on-site parking; (d) car wash with soiled water storage tank; (e) demolish work shop/toilets/stores and office; (f) installation of an underground petrol/diesel storage tank; (g) all associated site development works to facilitate the development.	05-01-10	KILLENAULE	N/A	N/A
9717	APPLICATION FINALISED	O'Grady	Maureen	retain gabled pitched roof over previous flat roofed extension and associated works to dwelling	05-01-10	BALLYNASTICI	N/A	N/A
9510643	APPLICATION FINALISED	Murphy	John and Kathleen	single storey extension to the side of dwelling house and all associted site works	06-01-10	CLONCLEIGH,	N/A	N/A
9510653	APPLICATION FINALISED	Barrett	Padraig & Julie	to demolish existing extension to rear of dwelling and construct a new extension to the rear with a new garage and upgrade existing septic tank and percolation area with all associated site works	12-01-10	CASTLETOWN	N/A	N/A
9510356	APPLICATION FINALISED	Amber Petroleum Ltd		to demolish existing store, construction of new store and offices, construction of new retail pump island and provision of new signage and associated site works, together with the retention of overhead loading gantry	02-02-10	PARKSTOWN,	N/A	N/A
9777	APPLICATION FINALISED	O'Meara	John & Siobhan	dwelling, domestic garage, entrance, waste water treatment system and associated works	04-02-10	KILLEHEEN	N/A	N/A
9807	APPLICATION FINALISED	O'Donoghue	William	retain temporary dwelling, septic tank and entrance	18-02-10	GORTNAHOO	04-03-10	C
9510722	APPLICATION FINALISED	Maher Quarries Ltd		a concrete batching plant comprising hopper, silos, shed and ramp area located south east of and adjacent to the existing quarry extraction area	23-02-10	CASTLETOWN	N/A	N/A
101	APPLICATION FINALISED	Mahon	James	replace painted timber sash windows in a protected structure with new painted timber sash windows in same style (all window openings are to retained as existing)	28-02-10	KILLENAULE	N/A	N/A
9837	APPLICATION FINALISED	Brennan	Sinead	single storey dwelling, domestic garage, entrance, driveway, waste water treatment system and associated works	02-03-10	MELLISSON	N/A	N/A
1015	APPLICATION FINALISED	Guilfoyle	Michael	bungalow, habitable roof space, domestic garage, foul effluent treatment system, percolation area, bored well, entrance and associated works	14-03-10	FENNOR	N/A	N/A
1018	APPLICATION FINALISED	Horan	Brendan	demolish cubicle house, construct cubicle house, milking parlour dairy and collecting yard with slatted tank and associated works	15-03-10	GRAIGUEMAN	N/A	N/A
9510411	APPLICATION FINALISED	Maher	Michelle	two storey dwelling, septic tank, percolation area, Bord na Mona puraflow peat filter system, private well, garage and entrance wall	16-03-10	CLOVER LANE	N/A	N/A
10510010	APPLICATION FINALISED	Corcoran	Catriona	two storey dwelling with entrance and all connection to public services and all associated site works	16-03-10	BORRIS, TWO	N/A	N/A
10510034	APPLICATION FINALISED	Maher	Thomas & Margo	rear extension to existing dwelling house together with all associates site works	30-03-10	CLOONCLEAG	N/A	N/A
9510445	APPLICATION FINALISED	Browne	Bridget	renovate and extend existing derelict gate lodge, to construct a waste water treatment system and all associated works	31-03-10	LISKEVEEN, LI	23-04-10	R
10510044	APPLICATION FINALISED	Hayes	Pat and Anne	extended floor area and revised elevations to domestic garage	06-04-10	MANSELSTOV	N/A	N/A

9510510	APPLICATION FINALISED	Darmody	John	reinstatement of the discontinued existing retail use at ground floor level adjacent to bar and lounge; changes to Main Street Elevation (South east) including 2 no. new entrance doors, new shopfront with associated signage, construction of single storey flat roofed extension comprising a total area of (63m2) including lobby (19m2), kitchen/store 23m2) and relocate female and gents WCs to serve lounge area (18.5m2); enlargement of the existing smoking deck (56m2) with retractable canopy, reconstruction of the existing private stairs to existing residential accommodation, construction of new flat roofed extension (16m2) at first floor level to provide new kitchen to residential accommodation with external fire escape to roof of ground floor extension and fire escape stairs to timber deck at ground level to rear of the building; provision of 5 no. rooflights to rear of pitched roof of existing main 2 storey structure (north west side) and 2 no. rooflights to north east and north west sides of existing 2 storey extension to rear of the property at Darmody's Bar & Lounge	19-04-10	MAIN STREET,	N/A	N/A
10510083	APPLICATION FINALISED	Cantwell	Maryann	two storey dwelling, detached stable and domestic garage building, provide on site septic tank with percolation area and entrance on site	27-04-10	KILLORAN, M(	N/A	N/A
1082	APPLICATION FINALISED	Harding	Lindsay	retain indefinitely concrete floor slab including associated works completed under ref. no. 05/131 (Site B). Permission is also being sought to construct a single storey dwelling, new vehicular entrance and the installation of a sewage treatment with percolation area, including the completion of all associated site works to facilitate the development	27-04-10	LICKFIN	N/A	N/A
1084	APPLICATION FINALISED	Guilfoyle	Nicholas	dwelling, domestic garage, entrance, septic tank and associated works	27-04-10	FENNOR	N/A	N/A
9510699	APPLICATION FINALISED	Phelan	Brendan	roofed easi-feed unit cubicle type shed, a milking parlour and dairy, a collecting and drafting yard with associated open/slatted tank and all associated works	09-05-10	MOYNETEMP	N/A	N/A
9510507	APPLICATION FINALISED	O'Keeffe	John	(a) demolish existing commercial garage building; (b) construct new commercial garage, parts store, sewage treatment plant and associated site works; (c) retain existing surface car display area	16-05-10	PARKSTOWN,	N/A	N/A
9678	APPLICATION FINALISED	Kennedy	Seamus	single storey extension to sides, second storey extension to rear and alterations to provide for sitting room, utility and bathrooms for alterations including raising roof level to convert existing outbuilding to granny flat, upgrading of waste water treatment system and associated site works, all at existing dwelling which is a protected structure	25-05-10	BALLINUNTY	N/A	N/A
9510642	APPLICATION FINALISED	O'Brien	Mary	bungalow style dwelling house, double domestic car garage, entrance, private well, mechanical aeration system and polishing filter and all associated site works	27-05-10	NOARD, TWO	N/A	N/A
9510710	APPLICATION FINALISED	Cantwell	John & Margaret	to demolish existing single storey dwelling and construct replacement dwelling on same site with new garage and upgrade/replace existing septic tank and percolation area with all associated site works	27-05-10	NOARD, TWO	N/A	N/A
10214	APPLICATION FINALISED	Ryan	John	construction of a portal frame milking parlour, underground slatted tank and associated site works	11-07-10	GORTNAHOE	N/A	N/A
10510231	APPLICATION FINALISED	Macken	Anne Marie	single storey conservatory to the side of existing two storey house and all associated site works	14-07-10	RATHMANNA	N/A	N/A

10127	APPLICATION FINALISED	McGettigan	Donnie	demolish and reconstruct the western party wall of existing dwelling, demolish rear wall of existing dwelling and permission to construct an extension to rear elevation of existing dwelling and all associated site works	21-07-10	KILLENAULE	N/A	N/A
10510094	APPLICATION FINALISED	Cawley	Martin	house with domestic garage, septic tank and entrance	21-07-10	BALLYBEG, LIT	N/A	N/A
10102	APPLICATION FINALISED	Sharp	Malcolm & Julie	build a replacement dwelling, entrance, install septic tank and all associated site works	22-07-10	EARLHILL	N/A	N/A
10510263	APPLICATION FINALISED	Butler	Mary	extension to existing dwelling house together with all associated site works	04-08-10	PARKSTOWN,	N/A	N/A
10510267	APPLICATION FINALISED	Moyne National School	Board of Managemen	extension to Moyne National School comprising a classroom, toilet facilities, staff room and access corridor, to upgrade sewerage treatment system and carry out all associated site works	04-08-10	MOYNETEMP	N/A	N/A
9762	APPLICATION FINALISED	Looby	Tim	retain changes to original derelict building incorporating Chinese Take-Away and Off Licence to ground floor, 2 no. 1 bedroom apartments to first floor and 2 no. 1 bedroom apartments to second floor	05-08-10	KILLENAULE	N/A	N/A
10259	APPLICATION FINALISED	Downing	Paul & Noreen	private bungalow dwelling, connection to an effluent waste water treatment system and percolation area, new entrance onto public road and new well	08-08-10	CLONMICKLO	23-08-10	R
10510141	APPLICATION FINALISED	Troy	Noelle	dwelling house, garage and associated site works including effluent treatment system and entrance	11-08-10	KYLEMAKILL, I	N/A	N/A
10510285	APPLICATION FINALISED	Maxey	John	indefinitely garage to rear of dwelling including orientation and location	16-08-10	RATHMANNA	N/A	N/A
10510289	APPLICATION FINALISED	Ltd.,	SWS Energy	one no. temporary meteorological mast of 70 metres in height for the limited purpose of monitoring wind and climate conditions for the development referenced in North Tipperary County Council Pl. Ref. 09510100. Permission for a period of 3 years is requested	18-08-10	DERRYFADDA	N/A	N/A
10289	APPLICATION FINALISED	Duggan	Padraig & Siobhan	alterations to existing permitted development granted under ref. 09/502 for construction of a veterinary clinic; the alterations include reduction in size and height of rear storage shed and adjustment to proposed building finished floor level	18-08-10	CASTLEQUAR	N/A	N/A
10510318	APPLICATION FINALISED	Ryan	Gearoid & Miriam	extension to dwelling house and associated site works	07-09-10	BALLYDAVID,	N/A	N/A
10510361	APPLICATION FINALISED	O'Connell	Robert	construct a agricultural shed, widen existing entrance with all associated siteworks	29-09-10	GARRAUN, TV	N/A	N/A
10358	APPLICATION FINALISED	Maher	Joseph	retain two domestic garages and one agricultrual building	29-09-10	CURRAHEEND	N/A	N/A
10510189	APPLICATION FINALISED	Quinlan	Dan	to refurbish and build new rear/side extension to existing cottage	21-10-10	COOLEENY, M	N/A	N/A
10396	APPLICATION FINALISED	Laffan	Kevin	construct an easy cattle unit incorporating slurry tanks with slats laid on, also extend existing cattle house and all associated works and demolish existing cattle house	25-10-10	GORTNAHOO	N/A	N/A

				The Tipperary Venue -Mixed use Leisure Campus comprising: A) Demolition of all existing buildings on site comprising 5No. dwelling houses; 1No. derelict dwelling house; 1No. commercial warehouse/storage build; agric. outbuildings.Total GFA of buildings to be demolished is 2,872sq.m. B) Construction of: i) 500 Bedroom Hotel build. (80,577sq.m.) ii) 15,000 person capacity Venue Build. (23,362sq.m.-to accommodate sports, concerts & other events. iii) Equestrian Centre (5,872sq.m.) iv) Heliport (2,383sq.m.) v) 18 Hole Golfcourse & ancillary Golf Club Build. (3,462sq.m.) vi) Driving Range & ancillary build.(484sq.m.) vii) Chapel (255sq.m.) viii) 31No. Retail units (2,883sq.m.) ix) Hoban Memorial Build. (1,984sq.m.) to accommodate banqueting suite & museum with reproduction Lafayette Park & subterranean link to proposed Hotel Build. x) Grade 1 Race Course (c.23.5ha) & Greyhound Track (c.0.36ha) with shared ancillary builds. (40,358sq.m.) xi) Single Storey Energy Centre Build. (1,530sq.m.) xii) Treatment Plant (252sq.m.) C) Provision of all associated landscaping, boundary treatment & site developement works includ.: i) Diversion of existing site services. ii) Revised surface water drainage regime includ. diversion & culverting of parts of Derheen & Clover Rivers. Relocation of an attenuation pond adjacent to the Two Mile Borris Interchange. iii) Drilling for a potable water supply (on site) to serve proposed development. iv) Provision of 5743No. Car Parking spaces; 136 Bus Parking Spaces; 72No. Greyhound box spaces; 100 Horse Box Spaces. v) Provision of new 4-arm roundabout on R639 to serve proposed develop. Provision of emergency only access rd.			
9510624	APPLICATION FINALISED	Quirke	Richard	with priority junction onto R639. vi) Link Rd. to connect R639 (via	14-11-10	NOARD, NEW	19-11-10	M
10510433	APPLICATION FINALISED	Croke	Declan & Josephine	construct a rear extension to dwelling house together with all associated site works	14-11-10	BALLYBEG UP	N/A	N/A
9801	APPLICATION FINALISED	Gurteen Wind Farm Ltd		1 no. wind turbine, site tracks, hard standing areas, anemometry mast, small control building and compound, underground cabling, temporary site works and ancillary works	14-11-10	GORTEEN LOV	N/A	N/A
10436	APPLICATION FINALISED	Stapleton	Anthony	extension and alterations to existing residence and all associated site works	22-11-10	BALLYNONTY	N/A	N/A
10439	APPLICATION FINALISED	O'Dwyer	Joe	extension and alterations to existing derelict house and all associated site works	23-11-10	KILLENAULE	N/A	N/A
10510446	APPLICATION FINALISED	Oil Ltd.,	G.R.O.	Construct a Bio-Diesel production facility comprising of laboratory and administration building, utilities building, process building, input/output station, 12 No. bunded storage tanks, water storage tank, electrical container, weighbridge, treatment plant with percolation area, fire water retention facilities, storm water retention facilities, car park, access road with new site entrance with public roadway and associated site works. This application requires an IPPC licence. An Environmental Impact Statement will be submitted to the planning authority with this application - 05/51/1077	25-11-10	MAUNSELSTO	N/A	N/A
9806	APPLICATION FINALISED	Prout	John	demolish water tank, smoking area, rear single storey extension and toilets, construct raised slated roof to main two-storey building with new single storey rear extension consisting of bar, toilets, smoking area and associated works; this development is a protected structure	01-12-10	GORTNAHOE	N/A	N/A

10155	APPLICATION FINALISED	Hogan	Nicola Rice & Philip	dwelling house, garage, entrance, wastewater treatment system, percolation area and all associated site works	16-12-10	KNOCKBOY	N/A	N/A
10510482	APPLICATION FINALISED	Costigan	John	domestic garage to the north side of dwelling with all associated site works	21-12-10	TWO-MILE-BC	N/A	N/A
10336	APPLICATION FINALISED	Smyth	Mervyn	retain indefinitely single storey extension to rear of existing dwelling including all associated site development works	04-01-11	KILLENAULE	N/A	N/A
10510498	APPLICATION FINALISED	Coffey	Mick & Christina	construct an extension to existing dwelling with internal refurbishment, new septic tank and percolation area and all associated site works.	11-01-11	DRUMGOWEI	N/A	N/A
10510416	APPLICATION FINALISED	Cantwell	Grainne	2 storey dwelling house, garage, entrance, access lane and septic tank	27-01-11	LEIGH, TWO-M	N/A	N/A
10510415	APPLICATION FINALISED	Cantwell	Sabrina	2 storey dwelling house, garage, entrance, access lane and septic tank	27-01-11	LEIGH, TWO-M	N/A	N/A
1035	APPLICATION FINALISED	Holohan	Bobbi	7 no. dwelling sites, access road, entrance, footpaths, services and associated works	27-01-11	GLENGOOLE S	N/A	N/A
10467	APPLICATION FINALISED	Cantwell Quality Water		retain yard area as completed to sub base level, premission to build an entrance, to complete the yard in concrete as a parking area and to carry out all associated works	22-02-11	GRAIGUEPAU	N/A	N/A
10510288	APPLICATION FINALISED	Windfarm Ltd.,	Lisheen	one no. temporary meteorological mast of 70 metres in height for the limited purpose of monitoring wind and climate conditions for the development referenced in North Tipperary County Council Pl. Ref. 06510773 and ABP PL 22.222142. Permission for a period of 3 years is requested	17-03-11	COOLEENY, M	N/A	N/A
1110	APPLICATION FINALISED	McCormack	Patrick	two-storey dwelling, detached domestic garage, entrance, private well, septic tak, percolation area and all associated site works	07-04-11	POYNSTOWN	N/A	N/A
10510376	APPLICATION FINALISED	Maher	Valerie	2 storey dwellinghouse, garage, entrance and septic tank	12-04-11	CLOONCLEAG	N/A	N/A
10510536	APPLICATION FINALISED	Ryan	Aidan & Grainne	two-storey dwelling, new site entrance, package wastewater treatment system and polishing filter, connection to County Council Water Scheme and all associated site works	14-04-11	LAHARDEN LR	N/A	N/A
1181	APPLICATION FINALISED	Board of Management	N/A	extension to existing school consisting of: one classroom, general purpose room, access corridor to front elevation and alterations	27-04-11	GORTNAHOE	N/A	N/A
11510080	APPLICATION FINALISED	Lyons	Emma	dormer dwelling with attached garage, treatment plant and polishing filter, vehicular entrance and all ancillary related works	04-05-11	RATHMANNA	N/A	N/A
11117	APPLICATION FINALISED	Hourihan	Vincent	retain (a) change of use from commercial garage to retail shop; (b) increase in ground floor area; (c) elevational changes carried out to existing building	17-05-11	CROSSCANNC	N/A	N/A
11118	APPLICATION FINALISED	Barry	Gerard & Margaret	build an extension to existing dwelling including all associated site works	17-05-11	SPRINGHILL	N/A	N/A
10510496	APPLICATION FINALISED	Association	Littleton Development	construct Moycarkey-Borris Community and Sports Centre, consisting of a two storey building containing a sports hall, changing rooms, gym, meeting rooms and ancillary accommodation along with a new site entrance and all associated siteworks	23-05-11	CHURCH VIEV	N/A	N/A
10510567	APPLICATION FINALISED	Cantwell Quality Water		commercial well, pump house, shared entrance and access lane, turning area and all associated site works	24-05-11	LEIGH, TWO-M	N/A	N/A
11151	APPLICATION FINALISED	Fitzgerald	Martin	extend agricultural building; the extension will consist of extending the existing two span shed by one span southwards to include calf pins and constructing a two span A-roof shed to the east side of it to include a feed passage, slatted effluent tank and cubicles and all associated farm works	06-06-11	CURRAHEEND	N/A	N/A

11510140	APPLICATION FINALISED	Boilson	Martin	milking parlour with collection yard and to build a slatted tank and carry out all associated works	21-06-11	LAHARDEN LR	N/A	N/A
10462	APPLICATION FINALISED	Looby	Tim	remove unauthorised apartment development carried out to first floor and second floors, permission for first and second floor residential accommodation associated with and over the former ground floor shop (since permitted as a take-away and off sales under planning file ref 09/762) to provide two apartments	21-06-11	KILLENAULE	N/A	N/A
10510469	APPLICATION FINALISED	Centre Committee	Moyne Community	demolish part of Moyne Community Centre and to build an extension to the centre incorporating a meeting room, computer room, toilets, kitchen, viewing balcony, reception lobby, storage and service areas. Also, to upgrade exiting sewerage treatment system and to carry out all associated site works	30-06-11	MOYNETEMP	N/A	N/A
10508	APPLICATION FINALISED	Maher	Gearoid	two storey Georgian style residence, domestic garage, vehicular entrance, wastewater treatment system and associated site works	05-07-11	GORTNAHOE	N/A	N/A
11510163	APPLICATION FINALISED	Brian Lyons	Olive Fanning &	to construct a cubicle house with underground slurry storage tanks, together with all associated site works	10-07-11	MONARAHEE	N/A	N/A
11510166	APPLICATION FINALISED	Heffernan	Michael & Mary	demolish an existing shed and construct a new garage with all associated site works	11-07-11	BORRIS, TWO	N/A	N/A
10491	APPLICATION FINALISED	Rea	Tim & Orla	minor alterations to granted extension ref. 07/1781 and permission to construct new single storey bedroom extension to front of dwelling; permission also for relocation of existing vehicular entrance to south-eastern corner of site and all associated site works	11-07-11	GRAIGUEPAU	N/A	N/A
11225	APPLICATION FINALISED	Fahey	Amanda Hanly & Marl	for development of a dormer bungalow dwelling, new site entrance and all associated site development works including a packaged waste water treatment system and percolation area	19-07-11	LURGOE	N/A	N/A
11510181	APPLICATION FINALISED	Quinn	Niall	slatted shed and all associated site works	21-07-11	GARRANROE,	N/A	N/A
11510193	APPLICATION FINALISED	Carey	John & Geraldine	single storey extension to existing dwelling and indefinite retention for garage and store	27-07-11	BALLYERK, TW	N/A	N/A
10539	APPLICATION FINALISED	Duggan	Siobhan & Padraig	erection of rear and side extensions and internal alterations to existing dwelling house including alterations to existing vehicular entrance, refurbishment of existing outbuilding and all associated site works; this proposed development consists of carrying out works to protected structures	27-07-11	KILLENAULE	N/A	N/A
10557	APPLICATION FINALISED	Ryan	Catherine	dwelling and garage with new joint entrance, treatment plant system, polishing filter and all associated site works	18-08-11	CROSSCANNC	N/A	N/A
11287	APPLICATION FINALISED	Cantwell Quality Water		extend yard area to build storage building and to carry out all associated works	23-08-11	GRAIGUEPAU	N/A	N/A
11292	APPLICATION FINALISED	Fitzgerald	Oliver	demolish existing residence and construct a dormer residence and detached garage. Works to include: Vehicular entrance, wastewater treatment system and all ancillary works	28-08-11	DUNGUIB	N/A	N/A
11330	APPLICATION FINALISED	Slieveardagh Rural Dev	N/A	to erect direction signage to our centre which is a protected structure, ref. S048	18-09-11	KILLENAULE	N/A	N/A
11510066	APPLICATION FINALISED	Mason	Philip and Helena	two storey dwelling house, a shed, an entrance, connection to Group Water Scheme, septic tank and percolation area and all associted site works	25-09-11	BORRIS, TWO	N/A	N/A
11510317	APPLICATION FINALISED	Phelan	Eamon & Catherine	to build a sun room extension to existing dwelling including associate site works	06-11-11	COOLEENY, M	N/A	N/A
11375	APPLICATION FINALISED	Johnson	Helena	construct a two storey dwelling, garage, entrance, septic tank, percolation area and all associated site works	06-11-11	DERRICKNEW	N/A	N/A

11390	APPLICATION FINALISED	Taylor	Norman	to erect a new dwelling house, new vehicular entrance, septic tank and percolation area, connection to Fennor Group Water Scheme and all associated works	14-11-11	URARD, URLIN	N/A	N/A
11510244	APPLICATION FINALISED	O'Connell	Robert	construct a two-storey dwelling with carport/garage, new entrance with all associated site works	12-12-11	GARRAUN, TV	N/A	N/A
11336	APPLICATION FINALISED	Hayes	P J & Una	construct a two storey dwelling with separate domestic garage, waste water treatment unit and percolation area and all associated site works	18-12-11	CROSSCANNC	N/A	N/A
11510360	APPLICATION FINALISED	& Jacintha McCormack	Alan Leahy	alterations and extension to existing dwelling and associated site works including waste water treatment system	20-12-11	MOYNEARD, I	N/A	N/A
11510379	APPLICATION FINALISED	B.O.M.	Two Mile Borris N.S.	build an extension to school	12-01-12	TWO MILE BO	N/A	N/A
11455	APPLICATION FINALISED	Cashin	Laura Mockler & Patri	demolish existing kitchen extension to rear, construct new single storey extension to include kitchen/utility/wc, single bedroom and new living area, minor modifications within existing building, re-align existing entrance to form new piers and gates, new garage, store to rear and associated site works	17-01-12	BALLYNUNTY	N/A	N/A
11510404	APPLICATION FINALISED	Maher	Rosaleen	for sunroom extension to west side of dwelling, with all associated site works	31-01-12	BALLYMURRE	N/A	N/A
11474	APPLICATION FINALISED	Ryan	Michael	(a) remove existing cubicle shed roof, (b) extend cubicle shed with slattted tank and construct a new roof over entire cubicle shed, (c) to construct new hay shed and all associated site works	02-02-12	BOULICK	N/A	N/A
11475	APPLICATION FINALISED	Cantwell	Brendan	carport, garage/store, closing up of an existing entrance, alterations to main entrance to residence, (replacement) domestic foul effluent treatment system, boundary walls, alterations to existing walls, associated patio/paving, site works and landscaping	02-02-12	GRAIGUEPAU	N/A	N/A
11495	APPLICATION FINALISED	Cantwell Quality Water		take notice that planning permission reg. ref. 10/467 and reg. ref. 11/287 has been granted for a new entrance, site works and a new building etc. permission is now sought for further improvements: (a) wing walls, signage, security fencing, (b) visitor and staff carpark, (c) replacement domestic foul effluent treatment system complete, (d) extension of office and customer car facilities, (e) extension to yard, truck/trailor park area, (f) associated surface water drainage, site works and landscaping	21-02-12	GRAIGUEPAU	N/A	N/A
11510452	APPLICATION FINALISED	Vodafone Ireland Ltd.,		36 metre high telecommunications structure with antenna and dishes attached. Development will also consist of fencing, equipment cabin, access track and other associated site works. The development will allow continuance and improvement of Vodafone's existing GSM and 3G telecommunications network	25-02-12	BORRIS, TWO	13-03-12	U
1213	APPLICATION FINALISED	Purcell	Liam	construct a milking parlour including underground slatted effluent tank, collecting yard, crush and drafting facilities	18-03-12	CRAB	N/A	N/A
1229	APPLICATION FINALISED	Guilfoyle	Padraig	build a dwelling, domestic garage, entrance, install waste water treatment system and all associated site works	26-03-12	FENNOR	N/A	N/A
1240	APPLICATION FINALISED	Caschera	Lorenzo	single storey dwelling house with habitable attic accommodation, new road entrance, domestic effluent treatment system, garage, boundary treatment, landscaping and site development works	03-04-12	INCHOROURK	N/A	N/A
12510063	APPLICATION FINALISED	O'Dwyer	Thomas	dwelling house, domestic garage, new entrance, proprietary effluent treatment system and percolation area, including all associated site works	18-04-12	GARRANROE,	N/A	N/A

1271	APPLICATION FINALISED	Maher	Richard P	construct a single storey extension to the side of dwelling house and all associated site works	24-04-12	KNOCKILTERR	N/A	N/A
1276	APPLICATION FINALISED	Taylor	John	build an extension to dwellinghouse	30-04-12	GORTNAHOE	N/A	N/A
11510396	APPLICATION FINALISED	& Fiona Flanagan	John Ryan	two storey dwelling house, solar panels on the roof of dwelling house, a private well, an entrance, a septic tank and percolation area and all associated site works	10-05-12	CURRAGHEEN	N/A	N/A
12510031	APPLICATION FINALISED	Moyne Community Cen		carry out revisions to proposed development previously granted permission (ref 10/51/0469) for the demolition of part of Moyne Community Centre and the building of an extension to the centre incorporating a meeting room, computer room, toilets, kitchen, viewing balcony, reception lobby, storage and service areas. Permission also included for the upgrade of existing sewerage treatment system and all associated works). Revisions now proposed include the provision of a changing room, 2nd stairwell, alterations to the windows, doors, wall and roof elevations of the building and alterations to the internal layout of the building	16-05-12	MOYNETEMP	N/A	N/A
12114	APPLICATION FINALISED	South Tipperary Vocati	N/A	form a second entrance from the public road and to alter and extend car parking	29-05-12	KNOCKEENSH	N/A	N/A
12510127	APPLICATION FINALISED	Molloy	James & Madeline	single storey extension to the rear of premises, incorporating new bedroom and bathroom and extending existing kitchen area with all associated site works	06-06-12	DERRYNAFLAI	N/A	N/A
12510054	APPLICATION FINALISED	Power	Sean & Lorraine	two storey dwelling house, garage, septic tank, entrance and upgrade of existing access lane	14-06-12	LEIGH, TWO N	N/A	N/A
12510141	APPLICATION FINALISED	Quirke	John	dormer style detached dwelling with new site entrance, garage to side of dwelling, and pump house to rear of site, driveway, Ecopure waste water treatment system, percolation area, retention of mobile home on same site for duration of construction, and all associated site works	14-06-12	DERRYHOGAN	N/A	N/A
12510146	APPLICATION FINALISED	Ryan	Thomas & Philomena	existing steel frame shed structure and permission to complete same as a domestic garage to the rear of dwelling with all associated site works	20-06-12	GALBOOLY LIT	N/A	N/A
12510087	APPLICATION FINALISED	John Carroll	Annette McCormack &	to erect a two storey dwelling house, garage, create new entrance, install waste water treatment system together with associated site works	05-07-12	CLOONCLEAG	N/A	N/A
12183	APPLICATION FINALISED	Ballysloe National Scho	Board of Managemen	decommission existing septic tank and percolation area and install a new septic tank and percolation area and all associated site works	09-07-12	BALLYSLOE	N/A	N/A
12188	APPLICATION FINALISED	South Tipperary Vocati		alter and extend the existing school building. The works will include alterations and extension to form a repositioned Library and to form an additional Classroom with associated external works.	11-07-12	KILLENAULE	N/A	N/A
12189	APPLICATION FINALISED	Cantwell Quality Water	N/A	to use existing domestic borehole water supply as a back-up water supply to service our commercial business	11-07-12	GRAIGUEPAU	N/A	N/A
11490	APPLICATION FINALISED	Murphy	Michael	demolition of existing two storey derelict residential building, rear store and rear outhouse together with construction of a new two storey dwelling, alterations to existing site boundary, retain existing way leave, connection to existing services and all associated site works	25-07-12	KILLENAULE	N/A	N/A

12229	APPLICATION FINALISED	Norton	Sean Norton & Richar	for the following development (a) Retention Permission to retain the farrowing Accommodation Extension - constructed on site. (b) PERMISSION to construct an extension to Dry Sow House & permission to construct new loading bay: with all associated site works. This application relates to an E.P.A Licensed Site (Licence No. 0460)	13-08-12	RATHBEG	N/A	N/A
12510245	APPLICATION FINALISED	O'Connell	Richard & Kathleen	single storey extension to side and rear of house and new detached garage at rear	16-08-12	TWO MILE BO	N/A	N/A
12247	APPLICATION FINALISED	Ryan	John	construction of an open slurry tank, slatted slurry channel, cubicle livestock house with easy feed area, loose livestock housing and associated works	21-08-12	GORTNAHOO	N/A	N/A
12510240	APPLICATION FINALISED	Burke	James	dwelling, garage, wastewater treatment system, entrance and all associated site works	23-09-12	LAHARDAN UI	N/A	N/A
12291	APPLICATION FINALISED	Lanigan	Martin	construct a two storey extension (storey & half) at the back of existing house. Alterations and renovations to existing dwelling to provide granny flat accommodation in accordance with drawings and documents provided	27-09-12	GORTNAHOE	N/A	N/A
12314	APPLICATION FINALISED	Burke	Kathleen & Paul	construct a new single storey extension to the side and rear of existing dwelling consisting of a special needs shower-room/bedroom and all other associated site works	15-10-12	GORTNAHOE	N/A	N/A
12315	APPLICATION FINALISED	Ivers	William & Amanda	construct a new single storey extension to the side of existing dwelling consisting of a garage and all other associated site works	15-10-12	GORTNAHOE	N/A	N/A
12510275	APPLICATION FINALISED	Bord na Mona Energy L		extension to the existing Lisheen substation including the construction of a new control building, transformer bay, transformer/transformer bund, 38kV cubicle and the extension of the existing 110kV busbar. Ancillary works to include the realignment of the internal mine access track to facilitate the proposed extension and the erection of a new compound palisade fence to secure the extension	08-11-12	KILLORAN, TH	N/A	N/A
12366	APPLICATION FINALISED	Hanly	Mark Fahey & Amand	bungalow dwelling, new site entrance and all associated site development works including a packaged waste water treatment system and percolation area	03-12-12	LURGOE	N/A	N/A
12380	APPLICATION FINALISED	Boland	Dick	(a) construction of farm building, (b) widening of entrance and (c) increasing width of passageway to farmyard	13-12-12	RATHROE	N/A	N/A
12510354	APPLICATION FINALISED	Paul Phelan & Arlette F	N/A	dwelling, domestic garage, entrance, install septic tank and all associated site works	26-01-13	COOLEENY, M	N/A	N/A

				(1)modific. to permitted develop. Ref. 05/31/0024 (ABP REF.PL.22.237958) Redesign of layout extent of racecourse to now cover c.33.6 ha;, 18 hole golf course with relocat. of individ. holes as a result of revised racetrack design & assoc. builds; Relocat. of permitted shared grandstand, entran. building, greyhound track, greyhound building, saddling stalls, weighrooms buildings, stables, mainten. builds, park. & assoc. support builds c.300m to sth-east; Redesign of permitted grandstand to now include casino area & new weighing facilities in new basement level (c.3,963sq.m) & new sunken parade ring. Total floor area of build. is now c.36,841sq.m.; Redesign of permitted entran. build. (c1,322sq.m. as per previous permitted build.); Permitted weigh-rooms build. to now be used for new jockey club & ancill. admin use; Redesign & reloc. of permitted exhibit. area c.225m to the sth-east with reduction in exhibit. floorspace by c.247sq.m (now 2,636sq.m); Change of permitted casino use within hotel to ancill. entertainment/conference uses; Relocat. of permitted golf club hse, driving range & assoc. park. c.300m to the sth east; Relocate permitted chapel build. & park. c.140m to the nthwest; Relocate permitted Hoban Memorial build. c.60m to nth & redesign of permitted formal gardens; Diversions/culverting of rivers/streams on site to accomm. revised develop; Redesign & relocate permitted car & coach park. areas across the site to now provide a total of 5731no. car park. spaces, 103no. bus park. spaces & 766no. horse/greyhound box park.spaces; Redesign of internal road system & landscaping to incorp. the above revisions. (2) Replace permitted equestrian				
12510172	APPLICATION FINALISED	Quirke	Richard	centre with larger equestrian centre complex (c.43,718sq.m) now the demolition of existing dwelling and out buildings and the construcition of 5 no bungalows a single storey medical centre a single storey creche a single storey security administration building a single storey 63 bed nursing home 30 no single storey 2 bedroomed retirement apartments in 3 no blocks and associated site development works including a proposed entrance from the public road car parking foul and storm water drainage.	15-02-13	NOARD	N/A	N/A
12510431	APPLICATION FINALISED	Surestone Developmen		dwelling house, septic tank and percolation area, new site entrance and ancillary works	19-02-13	BORRIS, TWO	N/A	N/A
12510389	APPLICATION FINALISED	Shanahan	Seamus	two-storey dwellinghouse, domestic garage, entrance, septic tank and all associated site works	06-03-13	PARKSTOWN,	N/A	N/A
12510358	APPLICATION FINALISED	O'Dwyer	Tom & Elaine	dormer style extension to the west side of dwelling consisting of a living room at ground floor and extended bedroom room at first floor level and retain the conversion of attic storage to habitable space and retain domestic garage with attic storage/study space to the rear of dwelling with associated site works	13-03-13	GARRANROE,	N/A	N/A
13510008	APPLICATION FINALISED	Collins	Elaine	extension of limestone quarry. The development will consist of extension to an area of 2.428ha in lands directly north of the existing quarry and for continued use of the site entrance, access laneway, lagoons, plant and machinery and ancillary works. An Environmental Impact Statement has been prepared for this application.	14-03-13	BALLYBEG	N/A	N/A
12510188	APPLICATION FINALISED	Quarries Ltd	Maher	2 no site with a joint shared entrance, septic tank system and percolation area	20-03-13	CASTLETOWN	N/A	N/A
13510021	APPLICATION FINALISED	Purcell	Sean		24-03-13	DRUMGOWEI	N/A	N/A

12510314	APPLICATION FINALISED	Phelan	Brendan & Louise	to build an extension to our existing dwelling including associated site works	28-03-13	MOYNETEMP	N/A	N/A
13510062	APPLICATION FINALISED	Two-Mile-Borris Comm	N/A	single storey 248 sqm Community Centre, Playground and Sensory Garden, new car parking spaces, use of existing site entrance plus connection to public water supply and foul mains and all associated site works at site adjacent to Two-Mile-Borris National School	24-04-13	TWO-MILE-BO	N/A	N/A
1351	APPLICATION FINALISED	Manton	Paul	two storey dwelling, septic tank and percolation area, alterations to existing agricultural entrance and associated site works	30-04-13	URARD, GORT	N/A	N/A
13510072	APPLICATION FINALISED	Mockler	Mary	kitchen and hall extension to the front of dwelling	06-05-13	LONGFORDPA	N/A	N/A
12322	APPLICATION FINALISED	GAA Club	Killenaule	provision of a new juvenile playing pitch (130mx85m) including ball-stopping nets, and the repositioning of existing playing pitch, complete with retention of existing ball-stopping nets with construction of new covered spectator seating and 3 no. all-weather hurling wall alleys at pitch level. The development is also to include a juvenile changing & public toilet facilities pavillion and car parking with provision for approx. 70 no cars within the curtilage of the existing community hall, including new floodlighting, footpaths & fencing, with alterations to the existing boundary wall, public vehicular entrance and all associated site works and drainage to be constructed	15-05-13	CROSSCANNO	N/A	N/A
1385	APPLICATION FINALISED	Cantwell	Eamon	as built domestic garage at rear of existing permitted dwelling house	19-05-13	GRAIGUEPAU	N/A	N/A
1399	APPLICATION FINALISED	Ryan	John & Marguerite	erect dwelling house, new entrance, new borewell, proprietary treatment plant, raised percolation and all associated site works	30-05-13	GORTNAHOE	N/A	N/A
13510147	APPLICATION FINALISED	Fox	Josephine	sun room extension to existing dwelling including associated site works	02-07-13	DERRYHOGAN	N/A	N/A
13510166	APPLICATION FINALISED	Boland	Noel	construct a dwelling with garage, entrance, and mechanical aeration system and polishing unit with all associated site works previous ref 08510402	16-07-13	KILMAKILL, M	N/A	N/A
13510107	APPLICATION FINALISED	Rossiter	Richard & Frankie	extension to the side of dwelling along with energy retrofit and upgrade of percolation area and system with all associated site works	29-07-13	BALLYDAVID,	N/A	N/A
13111	APPLICATION FINALISED	Dalton	John Paul	building as constructed and (b) PERMISSION to build new entrance and all associated site works	14-08-13	EARLSHILL	N/A	N/A
13193	APPLICATION FINALISED	South Tipperary Vocati	N/A	to construct a pre-fabricated temporary classroom complete with all associted site works	22-08-13	KILLENAULE	N/A	N/A
13510210	APPLICATION FINALISED	& Sharon Hassett	Paul Kearney	extension and renovation of dwelling house and residence, consisting of two extensions to the rear and side of the dwelling house, new septic tank and percolation area, solar panels on the roof of dwelling house and permission to demolish outbuildings to the rear of the dwelling and all associated site works	22-08-13	RAHINCH, LIT	N/A	N/A
13202	APPLICATION FINALISED	Ryan	Liam	of pitch roof build over existing flat roof and for PERMISSION to construct new pitch roof over existing flat roof areas and associated site works	28-08-13	BALLINUNTY	N/A	N/A

				consisting of modification of the permitted water impoundment facility (permitted under An Bord Pleanala Ref. No. PL22.100093 (North Tipperary County Council Reg. Ref. PLC17663) including use of the facility to provide for the storage and management of mine tailings within the same structure (for the purposes of extending life of mine), and associated capping and reinstatement activities. The proposed development also includes: the installation of spigots and reclaim pumps; and all other ancillary site development works. An Environmental Impact Statement (EIS) and Natura Impact Statement (NIS) have been prepared and will be submitted to the Planning Authority with the Planning Application. The application relates to development which comprises, or is for the purposes of an activity requiring an Integrated Pollution Prevention and Control Licence under the Environmental Protection Agency Acts, 1992 to 2013 (EPA Licence Reg. No. P0088-03)				
13510275	APPLICATION FINALISED	Lisheen Milling Limited			02-10-13	KILLORAN, M(	N/A	N/A
13510302	APPLICATION FINALISED	Dwyer	Patrick	to erect 6 span cattle wintering unit extension and under slat tank to existing sheds and all associated site works	24-10-13	BORRIS, TWO	N/A	N/A
13510303	APPLICATION FINALISED	Dwyer	Patrick & Edel	for a one and a half storey dwelling house, domestic garage, connection to mains water and sewage, and new entrance, and all ancillary site works	24-10-13	BORRIS, TWO	N/A	N/A
13279	APPLICATION FINALISED	Carroll	Liam & Tatsiana	construct a single storey dwelling, upgrade existing entrance, construct driveway, septic tank and percolation area with all associated site works	04-12-13	LANESPARK	N/A	N/A
13310	APPLICATION FINALISED	Gortnahoe Social & Am	N/A	(A) regeneration of derelict site adjoining the Church grounds, to include construction of community wheelchair car-parking facilities & recreational garden, new boundary surrounding wall treatments including lowering of adjoining wall to the church-grounds, modifications to the existing entrance; and include all associated site works (b) PERMISSION FOR RETENTION of works previously carried out on site, i.e. removal of derelict building and associated works	13-02-14	GORTNAHOE	N/A	N/A
13376	APPLICATION FINALISED	McCormack	Mary	extensions to the side and rear of dwelling house, plus the enclosing of the front porch	20-02-14	RIVER STREET	N/A	N/A
13510411	APPLICATION FINALISED	Morrissey	Bill	change house type from that which was granted already under previous planning file reference no. 09/51/0569 and permission for a treatment system including all associated site development works	20-02-14	BOOLABEHA,	N/A	N/A
13385	APPLICATION FINALISED	Ryan	Eoin	alterations to existing dwelling, demolition of existing garage and construction of a new single storey extension to the north side of existing dwelling comprising of kitchen, living, dining & entrance lobby	22-02-14	BOULICK	N/A	N/A
14510006	APPLICATION FINALISED	Quinn	Nicky & Mary	detached dwelling, part two storey, part single storey, with integrated garage, septic tank and percolation area, new site entrance and associated site works - 09510073	06-03-14	MOYCARKEY (	N/A	N/A
13336	APPLICATION FINALISED	Duggan	Michael	(a) extension, raising roof and developing attic space to existing dwelling. (b) construction of domestic garage (c) roadside boundary walls and associated site works	20-03-14	FENNOR, URL	N/A	N/A

14510035	APPLICATION FINALISED	Windfarm Limited	Lisheen	twelve month extension of the permitted planning lifetime for one existing temporary meteorological mast of 70m in height (planning permission ref 10/51/0288) for the limited purpose of monitoring wind and climate conditions for the development referenced in Planning Permission Ref 06510773 & ABP PL 22.222142 for lands a single wind turbine, overall height of up to 126.5 metres, electrical control building, access road, attenuation pond and ancillary site works	06-04-14	KILLORAN, M(	N/A	N/A
13231	APPLICATION FINALISED	Biogas Environmental T			10-04-14	BALLINCURRY	12-05-14	C
14510047	APPLICATION FINALISED	Butler	Eoghan	demolish existing derelict dwelling and for construction of a replacement two storey dwelling, domestic garage, package waste water treatment system and polishing filter, existing entrance to be replaced by new entrance and all associated site work	14-04-14	BALLYMURRE	N/A	N/A
14510068	APPLICATION FINALISED	Morrissey	Bill	change house type from that which was granted already under previous planning file reference no. 09/51/0569 and permission for a treatment system including all associated site development works - 13510411	24-04-14	BOOLABEHA,	N/A	N/A
1470	APPLICATION FINALISED	Ballysloe National Scho	Board of Management	new single storey extension to existing school building and associated site works	27-04-14	BALLYSLOE	N/A	N/A
13510347	APPLICATION FINALISED	Bowe	Paul	dormer style dwelling, garage, entrance and septic tank	29-04-14	LEIGH, TWO-M	N/A	N/A
14510078	APPLICATION FINALISED	& Shane Dunne	Siobhan Stokes	single storey dwelling house, entrance, waste water treatment system and associated site works	30-04-14	CASTLETOWN	N/A	N/A
1493	APPLICATION FINALISED	Shankar	Dr Jay K & Rita	dwelling, separate garage, site entrance, septic tank and soil percolation system and associated works	25-05-14	COOLDINE	N/A	N/A
13510420	APPLICATION FINALISED	Butler	Frank & Joan	dwelling, garage with entrance, septic tank system and percolation area	25-05-14	DRUMGOWEI	N/A	N/A
14107	APPLICATION FINALISED	Stokes	Edward	build a dwelling, domestic garage, entrance, install septic tank and associated site works	03-06-14	GRAIGAMAN,	N/A	N/A
14510138	APPLICATION FINALISED	SWS Energy Limited		underground electrical and communication cables, linking the 8 no. proposed turbines, within Counties Laois and Kilkenny and described hereunder, to the substation and control building at the existing 110kV Lisheen Sub-Station and construction of approximately 1.3km of new internal site access tracks. A ten-year permission is sought. The application is accompanied by an Environmental Impact Statement and Natura Impact Statement. The development is part of a larger development and the site also extends into the townlands of Baunmore, Bruckana and Rathpatrick near Johnstown, Co. Kilkenny and Graigueadrisly, Co. Laois	26-06-14	KILLORAN, TE	N/A	N/A
14510142	APPLICATION FINALISED	Cullen	Noel	single storey extension to existing dwelling together with the construction of a storage shed on-site. Also retention permission is sought for the repositioning of existing dwelling on-site and to retain 1st. floor attic storage conversion includging roof lights and all associated site services	02-07-14	COLDFIELDS,	N/A	N/A
14168	APPLICATION FINALISED	Rochford	Pat	construction of a cubicle house, covered yard, roof extension to existing covered yard, conversion of disused dungstead to open slurry tank, open slurry tank extension, slatted slurry channel, reception slurry tank and associated works	22-07-14	FENNOR, URL	N/A	N/A
14600006	APPLICATION FINALISED	Ryan	Michael	extend existing milking parlour with slatted tank and feeding passage and all associated site-works	29-07-14	BOULICK, GOI	N/A	N/A

14600011	APPLICATION FINALISED	Cahill	Eamonn	construction of a two storey dwelling, mechanical aeration wastewater treatment system and raised bed percolation area, entrance and all associated site works	30-07-14	LICKFINN, BAL	N/A	N/A
14600046	APPLICATION FINALISED	Dwyer	Patrick & Edel	change house design from that granted under planning reference number 13/51/0303	12-08-14	TWO MILE BO	N/A	N/A
14600095	APPLICATION FINALISED	Coillte		to replace the permitted 36m telecommunications structure (never constructed) Planning Reg. Ref: 11/51/0452 with a similar 36m multi user telecommunications structure with antennas and dishes attached. The proposed development will also consist of palisade fencing with adjoining access track, a 5m fire break and other associated ground works. The development is planned to provide accommodation for the provision of localised moblie and braodband services within an area desiginated for National Braodband Scheme rollout	01-09-14	BORRIS, TWO	N/A	N/A
14600248	APPLICATION FINALISED	Prout	Brian & Anne	partial demolition of a dwellinghouse, construction of extensions to the front, side and rear of that dwelling house, solar panels on the roof of that dwellinghouse, alterations fo ground levels and construction of a wall to the front boundary, upgrade of waste water treatment system and percolation area and all associated site works	28-10-14	GARRYCLOUG	N/A	N/A
14510117	APPLICATION FINALISED	Billy Lynch	Siobhan Cantwell &	to construct a single storey dwelling, garage, entrance onto existing lane, entrance, septic tank and percolation area with all associated site works	16-11-14	LEIGH, TWO-M	N/A	N/A
14600207	APPLICATION FINALISED	Cleere	Angela Fogarty and Al	the development will consist of the construction of a proposed new two-storey dwelling house, the refurbishment of an existing disused shed for proposed use as a garage, the construction of a proposed new vehicle entrance, a waste water treatment system, and all associated hard and soft landscaping	24-11-14	INCHIROURKE	N/A	N/A
14600380	APPLICATION FINALISED	Rochford	Michael	(a) the construction of a portal framed cow cubicle shed and (b) a proposed extension to dairy with provisions for foul and storm waer disposal and ancillary site works. Permission is also sought for the retention of (a) a replacement milking parlour building, (b) a portal framed calf rearing shed, and (c) an underground slatted tank	17-12-14	RATHBEG, UR	N/A	N/A
14600396	APPLICATION FINALISED	Lisheen Milling Limited		an increase in height of the existing Tailings Management Facility (TMF), previously permitted under Reg. No. 13/510275, granted in 2013 (small adjoining cell to the main TMF). The raise in height of this adjoining cell, from c. 131.5 mod up to aa maximum of c. 136.5 mod, will provide additional storage for the management of mine tailings for the purposes of extending the life of the mine, abd will result in an increase in the footprint of the TMF of c 2.25 hectares. The development also includes all related ancillary development works. This application is accompanied by an Environmental Impact Statement(EIS) & Natura Impact Statement(NIS) and relates to an activity requiring an Integrated Pollution Control Licence	23-12-14	KILLORAN, M	N/A	N/A
14600474	APPLICATION FINALISED	Troy	Noelle	dwelling house, garage and associated site works including effluent treatment system and entrance pre ref 10510141	29-01-15	KYLEMAKILL, I	N/A	N/A
14600478	APPLICATION FINALISED	Brennan	Josephine	a dormer type extension onto rear of existing dwelling and renovations to existing dwelling	03-02-15	RATHROE, KIL	N/A	N/A

14600546	APPLICATION FINALISED	Saint Mary's Central Na	Board of Managemen	for alterations and extension to existing school, removal of existing detached sheds, construction of a detached storage shed and all associated site works	24-02-15	KILLENAULE	N/A	N/A
14600535	APPLICATION FINALISED	Wilson	Nancy	to construct an entrance	25-02-15	BALLYMURRE	N/A	N/A
15600005	APPLICATION FINALISED	Ryan	Eamon	construct a slatted suckler cow shed and handling yard/crush and all other necessary associated site works	03-03-15	COLDFIELDS &	N/A	N/A
15600037	APPLICATION FINALISED	Moloney	Gerard	as constructed agricultural shed with all associated site works	24-03-15	LISDUFF, THU	N/A	N/A
14600522	APPLICATION FINALISED	Maher Quarries Ltd	N/A	for a concrete batching plant comprising hopper, silos, shed and ramp area located south east of and adjacent to existing quarry extraction area	09-04-15	CASTLETOWN	N/A	N/A
14600461	APPLICATION FINALISED	Fahey	Amanda Hanly & Marl	alteration to granted planning application ref 11-225 (with a subsequent alteration granted under application ref 12-366) for an alteration of house type and minor changes to the site layout to accommondate the new house type	15-04-15	LURGOE	N/A	N/A
15600125	APPLICATION FINALISED	O'Keeffe	John	(a) demolish existing commercial garage building; (b) construct new commercial garage, parts store, sewage treatment plant and associated site works; (c) retain existing surface car display area	22-04-15	PARKSTOWN,	N/A	N/A
15600137	APPLICATION FINALISED	O'Meara	John and Siobhan	dwelling, domestic garage, entrance, waste water treatment system and associated works	27-04-15	KILLEHEEN, B/	N/A	N/A
15600148	APPLICATION FINALISED	Ryan	Michael	to construct a new storage shed on my land and relocate existing site and all associated site works	03-05-15	BOULICK, GOI	N/A	N/A
15600230	APPLICATION FINALISED	Connors	Larry	of change of use of a building on my site from agricultural use to domestic use including associated site works	27-05-15	LURGOE, KILLI	N/A	N/A
14600450	APPLICATION FINALISED	Maher	Ken	cow kennels and slatted tank and feed face and associated works. This is a Protected Structure	28-05-15	PARKSTOWN,	N/A	N/A
15600240	APPLICATION FINALISED	Hanrahan	Christina Hayes & Stu	to construct a shed to the rear of the property and to demolish the existing shed to the side of the property	01-06-15	BALLYNONTY	N/A	N/A
14600524	APPLICATION FINALISED	Maher Quarries Ltd	N/A	the deepening of the existing limestone quarry by 12 metres so as to extract down to a depth of 25 metres below ground level, and for continued use of the site entrance, access laneway, lagoons, plant and machinery and ancillary works. The development area will be 8.75ha in the existing quarry. An Environmental Impact Statement has been prepared and is submitted with the application	15-06-15	CASTLETOWN	10-07-15	M
15600377	APPLICATION FINALISED	O'Keeffe	John	alterations to approved building plan (commercial garage) and site boundary as granted under Ref No. 15/60/0125 (Prev Ref No 09/51/0507)	12-07-15	PARKSTOWN,	N/A	N/A
15600163	APPLICATION FINALISED	Boney	John	to construct a new entrance to the existing forest in order to accommodate haulage access which enables the clearance of the forests on lands	22-07-15	LICKFINN, BAI	N/A	N/A
15600164	APPLICATION FINALISED	Boney	John	to construct a new entrance, to the existing forest in order to accommodate haulage access which enables the clearance of the forests on lands	22-07-15	LICKFINN, BAI	N/A	N/A
15600434	APPLICATION FINALISED	Pollard	Joe & Annette	for domestic storage purposes the log cabin constructed to the rear of house site	28-07-15	CLUAIN NA SE	N/A	N/A
15600512	APPLICATION FINALISED	Kerwick	Denis	extension to cattle house and ancillary slatted effluent storage tank	18-08-15	EARLSHILL, BA	N/A	N/A
15600207	APPLICATION FINALISED	Moycarkey Borris GAA	N/A	new club house building incorporating 4 no dressing room with toilets and shower areas, meeting room, toilets facilites, store rooms, upgrading existing pitches surfaces and new hurling wall with all associates site works and connection to public services	19-08-15	BALLYDAVID,	N/A	N/A

15600536	APPLICATION FINALISED	Cawley	Martin	house with domestic garage, septic tank and entrance - Prev Ref 10/51/0094	25-08-15	BALLYBEG, LIT	N/A	N/A
15600392	APPLICATION FINALISED	Ryan	Miriam Ryan and Eoin	construction of a new two storey dwelling , domestic garage, waste water treatment system, new site entrance and all associated site works	25-08-15	GORTNAHOE	N/A	N/A
15600577	APPLICATION FINALISED	Hanrahan	Christina Hayes & Stua	construction of a shed to the rear of the property	02-09-15	BALLYNONTY	N/A	N/A
15600486	APPLICATION FINALISED	Alexander	Michelle	construct extension to the side to consist of living and dining room, alterations to existing kitchen including new roof over, new rear bedroom and changing room extension, alterations to existing bedroom to form new hallway and en-suite, new velux windows to rear of existing roof to provide natural light to new hall, existing bathroom and en-suite, convert existing garage to storage and utility room, re-locate entrance driveway to the centre of the property and additional drainage connections from new en-suite bathroom	02-09-15	CLUAIN NA SE	N/A	N/A
15600583	APPLICATION FINALISED	Ryan	Eamon	revisions to previously granted planning permission Ref. No. 15/60/0005 for slatted suckler cow shed and handling yard/crush and all other necessary associated site works. Revisions include alterations to size and layout to slatted suckler cow shed	08-09-15	COLDFIELDS &	N/A	N/A
15600623	APPLICATION FINALISED	Woodlock	Ger	a single storey open front part cladded workshop shed with all associated site work	16-09-15	BLACKCASTLE	N/A	N/A
15600301	APPLICATION FINALISED	Mining & Ivernia Lishee	Anglo American Lishee	demoltiion of all structures including 1 no disused house and 1 no shed, surrounding walls and associated works to restore the site to a greenfield state. The septic tank associated with the disused dwellinghouse will be emptied and backfilled with stone	30-09-15	KILLORAN, M(	N/A	N/A
15600302	APPLICATION FINALISED	Mining & Ivernia Lishee	Anglo American Lishee	demoltiion of all structures including 1 no disused house and 1 no shed, surrounding walls and associated works to restore the site to a greenfield state. The septic tank associated with the disused dwellinghouse will be emptied and backfilled with stone	30-09-15	KILLORAN, M(	N/A	N/A
15600303	APPLICATION FINALISED	Mining & Ivernia Lishee	Anglo American Lishee	demoltiion of all structures including 1 no disused house and 4 no sheds, surrounding walls and associated works to restore the site to a greenfield state. The septic tank associated with the disused dwellinghouse will be emptied and backfilled with stone	30-09-15	DERRYFADDA	N/A	N/A
15600695	APPLICATION FINALISED	Borris-St Kevins FC	N/A	a 150 seater spectator stand and all associated site works at the football grounds	06-10-15	NEWHILL TW(	N/A	N/A
15600274	APPLICATION FINALISED	O'Keeffe	John	(a) commercial garage including associated siteworks/services (b) security fencing along public road (c) hardcore surface for parking of vehicles (d) open storage of vehicles	12-10-15	PARKSTOWN,	N/A	N/A
15600723	APPLICATION FINALISED	Gurteen Wind Farm Ltd		1 no. wind turbine, site tracks, hard standing areas, anemometry mast, small control building and compound, underground cabling, temporary site works and ancillary works	13-10-15	GORTEEN LOV	N/A	N/A
15600459	APPLICATION FINALISED	Fitzgerald	Liam	slatted cow cubicle house and a straw bedded cow house	14-10-15	GLENGOOLE N	N/A	N/A
15600758	APPLICATION FINALISED	Fitzgerald	Liam	construction of a new milking parlour, slatted cow slurry tanks, an uncovered cow cubicle area and all associated site works	20-10-15	GLENGOOLE N	N/A	N/A
15600763	APPLICATION FINALISED	Maher	Valerie	2 storey dwellinghouse, garage, entrance and septic tank	22-10-15	CLOONCLEAG	N/A	N/A
15600776	APPLICATION FINALISED	McGrath	Gregory & Clara	construct an extension to existing dwelling with attic conversion to habitable space, new garage to rear of site and connection to existing public services with all associated site works	29-10-15	BORRIS, TWO	N/A	N/A
15600789	APPLICATION FINALISED	Butler	Pierce	construction of cubicle shed with slatted slurry storage tank under and all associated site works	04-11-15	KYLEMAKILL, I	N/A	N/A
15600825	APPLICATION FINALISED	Rochford	Pat	of a cubicle house and associated works	17-11-15	FENNOR, URL	N/A	N/A

15600576	APPLICATION FINALISED	Troy	Padraig	(1) permission for retention for existing 3 span slatted shed (2) permission to alter and extend existing slatted shed (3) permission to build a new 4 span lean to cattle shed and all associated site works on my farm	18-11-15	BALLYNASTICI	N/A	N/A
15600561	APPLICATION FINALISED	Ballincurry Wind Farm I		a single wind turbine, overall height of up to 138 metres, electrical control building, access road and ancillary site works	19-11-15	GORTANASSY	15-12-15	C
15600839	APPLICATION FINALISED	Guinan	P.J.	for the erection of 1 no. 500kw wind turbine(hub height 50.00m / blade tip height 73.50m and the construction of a 14.00 sq.m control building / electrical sub-station, site entrance, site access track and hard standing and all ancillary works.	23-11-15	GRAIGAMAN,	N/A	N/A
15600853	APPLICATION FINALISED	Tompkins	Wendy	existing domestic garage and associated siteworks	29-11-15	GLENGOOLE S	N/A	N/A
15600917	APPLICATION FINALISED	McCormack	Richard	indefinite retention planning permission for change of use from domestic dwelling to commercial hair dressing and beauty treatment salon including all associated works and signage	16-12-15	KILLENAULE	N/A	N/A
15600942	APPLICATION FINALISED	Phelan	Brendan	a roofed straw bedded calf shed/isolation pens and an ancillary open slatted tank with roofless cubicles and associated feeding area and all associated site works and also to demolish an existing calf shed	02-01-16	MOYNETEMP	N/A	N/A
15600953	APPLICATION FINALISED	Healy	Joseph & Anthony	for permission to construct a (i) milking parlour with crush yard (ii) cubicle house with outside feeding area (iii) extension to silage slab (iv) slatted tank and all associated site works	09-01-16	NEW HILL, TW	N/A	N/A
15600954	APPLICATION FINALISED	O'Sullivan	Anne	for the retention for (a) alterations to plans and elevations of domestic extension permitted under P3738 and for (b) front porch to original house , including all associated works	09-01-16	GORTNAHOE	N/A	N/A
15600964	APPLICATION FINALISED	and Ciaran Maguire	Ursula Kiely	the 1. Construction of a detached two storey dwelling and a detached domestic garage. 2. Installation of a prefabricated septic tank system and a percolation area to appropriate standards. 3. Construction of a site entrance, driveway, footpaths,parking and hard landscaping areas. 4. Landscaping of the site consisting of a boundary fence and hedging, planting beds, trees and shubbery, grass areas and all associated site works	14-01-16	GLENGOOLE N	N/A	N/A
15601014	APPLICATION FINALISED	Kenny	Kevin	new two storey dwelling, garage, associated treatment system and all site and ancillary works	03-02-16	COOLE BALLY	N/A	N/A
15601037	APPLICATION FINALISED	O'Dwyer	Joe	extension and alterations to existing derelict house and all associated site works	10-02-16	RIVER STREET	N/A	N/A
15601072	APPLICATION FINALISED	Ryan	John	construction of a calving house, loose house, cubicle house, 2 covered easy feed passages, open easy feed passage, slatted channel and associated works and demolition of existing stone building and stand off pad	19-02-16	BOULICK, GOI	N/A	N/A
16600028	APPLICATION FINALISED	McCarthy	Shane	demolish part of the existing house and to extend and refurbish the existing house, relocate the existing shed, to install new treatment system and percolation area and all associated site works	15-03-16	GORTEEN LOV	N/A	N/A
15600795	APPLICATION FINALISED	Gleeson	Richard	change of use from office to residential dwelling, along with an extension to the rear of the property and a new garage	31-03-16	SHANBALLYDI	N/A	N/A
16600088	APPLICATION FINALISED	McGuire	Liam and Gerry	construct a cubicle house with slatted tanks incorporating straw bedding areas and all associated site works	06-04-16	LISKEVEEN, LI	N/A	N/A
16600092	APPLICATION FINALISED	Mcguire	Liam and Gerry	milking parlour extension with slatted tank and holding yard. Permission to construct a cubicle house incorporating straw bedding areas and all associated site works	07-04-16	LISKEVEEN, LI	N/A	N/A

16600134	APPLICATION FINALISED	Fitzgerald	John	A. planning permission to construct a calf house and associated effluent storage tank and B. permission for 1. retention of extension to existing milking parlour, 2. retention of existing meal bin X 3. retention of existing storage shed and 4. retention of existing meal bin Y	18-04-16	POYNSTOWN,	N/A	N/A
16600173	APPLICATION FINALISED	Roberts	Margaret	development at this site, the development consists of 1. an existing garage being converted into a bedroom and disabled w.c. 2. retention permission for existing front porch	27-04-16	KNOCKABRITT	N/A	N/A
16600179	APPLICATION FINALISED	O'Brien	Joan	for extension to existing dwelling, shed and all associated site works	01-05-16	BALLYBEG LIT	N/A	N/A
16600200	APPLICATION FINALISED	Electricity Supply Board		alteration to the existing 38 kV station consisting of demolition of existing control building and replaced with new single storey control building, new 38kV bunded transformer, existing MV Busbar to be extended at each end, new bay in existing 38kV busbar, existing chain link compound fence to be replaced with new 2.65 metre high palisade fence and new gates, associated drainage and site works	04-05-16	GLENGOOLE I	N/A	N/A
16600288	APPLICATION FINALISED	O'Dwyer	Joseph & Marian	extensions to dwelling house as constructed and a detached shed and associated site works	29-05-16	BALLYMURRE	N/A	N/A
16600290	APPLICATION FINALISED	Hanrahan	Christina Hayes & Stua	the development will consist of the demolition of the existing single storey extension to the rear of the residence, minor works to the existing residence remaining and the construction of an extension to include a kitchen/dining room, living room, utility, bathroom and en-suite	30-05-16	BALLYNONTY	N/A	N/A
16600212	APPLICATION FINALISED	Stokes	Pat	existing garage and associated siteworks	02-06-16	GARRAUN, TV	N/A	N/A
16600348	APPLICATION FINALISED	Darmody	Cyril & Ailish	the construction of a two storey dwelling house, entrance, domestic garage, a private well, a packaged waste-water treatment system and polishing filter and all associated site works	14-06-16	DRUMGOWEI	N/A	N/A
16600388	APPLICATION FINALISED	Cantwell	Catriona	dwelling, domestic garage/fuel store, construct entrance, install waste water treatment system including associated site works	23-06-16	NOARD, TWO	N/A	N/A
16600223	APPLICATION FINALISED	Kieran Fitzgerald	Sean Treacy &	construction of a cubicle house with concrete apron, an overground slurry storage tank along with all associated site works	28-06-16	BALLYBEG LIT	N/A	N/A
16600399	APPLICATION FINALISED	Hayden	Sean	(1) Slatted suckler cow shed with underground slurry storage tank & straw lie back area including calf creep area, covered feed passage & calving pens (2) a new cattle handling facility/crush (3) demolition of existing unused silage slab and (4) a new farm entrance and all other necessary associated site development works	28-06-16	LONGFORDPA	N/A	N/A
16600417	APPLICATION FINALISED	Healy	Pat	agricultural development consisting of a 5 bay suckler cow unit, incorporating lie-back area, underground slatted storage tank and feeding passage with all associated site works	30-06-16	LONGFORDPA	N/A	N/A
16600457	APPLICATION FINALISED	Ryan	John and Marguerite	erection of domestic garage and all associated works	11-07-16	GORTNAHOE	N/A	N/A
16600487	APPLICATION FINALISED	Kelly	Tim	renovate and extend existing dwelling and install a new waste water treatment system with all associated site works	21-07-16	BALLYERK, TW	N/A	N/A
16600241	APPLICATION FINALISED	Healy	John and Katrina	to convert attic space to a habitable use with all ancillary internal and external works and associated siteworks	25-07-16	CASHEL-DUN(	N/A	N/A
16600510	APPLICATION FINALISED	Phelan	Deirdre Cashin & Patri	a dwelling, domestic garage, construct entrance, install septic tank including associated site works	26-07-16	INCHOROURK	N/A	N/A

				The development will consist of alterations to a previously permitted wind farm development (Planning Register References 14/510138 (Tipperary), 14/202 (Kilkenny) and 14/109 (Laois)) where the permitted development also extends into the townland of Bruckana, Baunmore and Rathpatrick near Johnstown, County Kilkenny and Graigueadrisly, County Laois. The proposed alterations will consist of: Amended cable route for underground electrical and communication cables; the omission of 1.3 km of previously permitted access track in Tipperary; and all associated works and services. A ten-year permission is sought. The application is accompanied by a Natura Impact Statement. This current application is part of an application for development which extends into the townlands of Bruckana and Baunmore near Johnstown, County Kilkenny The proposed amendments will consist of: relocated vehicular entrance on R502 through widening existing agricultural entrance; alterations to internal access tracks including construction of approximately 572m of new access track with associated drainage and watercourse crossing; the omission of 1.775 km of previously permitted access tracks; Clearfelling of approximately 0.5 Hectares of forestry associated with the				
15600924	APPLICATION FINALISED	Brookfield Renewable I		new section of internal access track within the Baunmore forestry	04-08-16	KILLORAN, TE	N/A	N/A
16600578	APPLICATION FINALISED	Power	Cait	demolition of an existing dwelling and adjoining sheds and construction of a new single storey dwelling, new site entrance, new septic tank and percolation area, private well and all associated site works	16-08-16	GORTNAHOE	N/A	N/A
16600580	APPLICATION FINALISED	Maher	Gearoid	two storey Georgian style residence, domestic garage, vehicular entrance, wastewater treatment system and associated site works previous reference 10/508	17-08-16	GORTNAHOE	N/A	N/A
16600646	APPLICATION FINALISED	Purcell	Liam	construction of a (I) cubicle house with flow channel (ii) extension to existing milking parlour building to cover collecting yard & incorporating storage area (iii) roofed concrete slurry storage tank and all associated site works	01-09-16	CRABB, GORT	N/A	N/A
16600648	APPLICATION FINALISED	Thomas	Adam & Dawn	extension & renovation of existing single storey house and all ancillary site works	01-09-16	GALBOOLA, LI	N/A	N/A

16600652	APPLICATION FINALISED	Phelan	John	existing farm structures and layout including 4 no. dry stores, chemical store, milking parlour, dairy and collection yard straw bed house, calf house, dung stead, silage storage pit, 3 no. slatted animal houses, 1 no. cubicle house, 1 no. external cubicle yard, dairy wash tank, 5 no. slatted slurry storage tanks, 6 no. feed passages and clean yards, Planning Permission for extension to milking parlour, dairy and store, conversion of part of calf house to collection yard, and new covered collection yard, conversion of part of dry store to cubicle house, race crush and walkway, roofing of existing cubicle yard and slatted slurry storage tank, installation of 2 no. cubicle houses and 2 no. feed passages, slatted slurry storage tank and flow channel, feed bin and clean water storage tank and all associated site works	04-09-16	URLINGFORD	N/A	N/A
16600706	APPLICATION FINALISED	Langton	Pat and Mary	the following structures conservatory, extension to existing kitchen and en-suite facilities to existing bedroom and associated site works	26-09-16	GLENGOOLE S	N/A	N/A
16600224	APPLICATION FINALISED	Stapleton	Mary J	construction of an extension to existing dwelling house together with all associated site works	28-09-16	PARKSTOWN,	N/A	N/A
15600926	APPLICATION FINALISED	Slieveardagh Rural Dev	N/A	develop a site for parking, widen existing entrance, provide picnic area, pedestrian bridge to adjoining shop, installation of a storage container and ancillary works	29-09-16	LANESPARK, E	N/A	N/A
16600726	APPLICATION FINALISED	Horan	Brendan and Carmel	demolition of uninhabitable dwelling, build a two storey dwelling, construct entrance, install septic tank and associated site works	04-10-16	GRAIGAMAN,	N/A	N/A
16600732	APPLICATION FINALISED	Scott & Niamh Horan	James	the construction of a two storey/storey and a half style dwelling house, entrance, domestic garage, a connection to mains water supply, a packaged wastewater treatment system and polishing filter and all associated site works	05-10-16	KYLENOE, HO	N/A	N/A
16600632	APPLICATION FINALISED	Leahy	Sean	changes to existing greyhound kennels and compound previously permitted under Ref No PLC/23509, changes include increased floor area, change of use from garage to kennels, alterations to elevations and compound size, location of existing septic tank and associated site works	09-10-16	RATHMANNA	N/A	N/A
16600742	APPLICATION FINALISED	Maher	Valerie	alterations to house plans previously granted under PA 10510376 & PA 15600763 together will all associated site works	09-10-16	CLOONCLEAG	N/A	N/A
16600770	APPLICATION FINALISED	Petts	Frank	garage/domestic workshop, garden store and green house	16-10-16	KYLENOE, HO	N/A	N/A
16600809	APPLICATION FINALISED	Dempsey	John & Lily	alterations to existing garage which includes increased footprint and ridge height	25-10-16	BALLYDAVID,	N/A	N/A
16600622	APPLICATION FINALISED	Purcell	Liam	construction of a cubicle house incorporating an isolation pen area and all associated site works	30-10-16	CRABB, GORT	N/A	N/A
16600170	APPLICATION FINALISED	Templederry Energy Re	N/A	a ten year permission for the construction, operation and decommissioning of a solar photovoltaic panel array to export electricity to the national grid. The solar panel array will consist of up to approximately 33,000 square metres of solar photovoltaic panels supported by ground mounted frames, one electrical control building, 4 number power inverter cabins, underground cable ducts, temporary laydown area, boundary security fence, CCTV, site entrance, and all associated site works	06-11-16	MOYNE, THUI	N/A	N/A

16600460	APPLICATION FINALISED	Maher	Jim & Breda	an extension to cheese production unit, to retain existing storage area and incorporate into the new extension and to retain staff changing area. Also for permission to provide access yard and carry out all associated works. Works are within the curtilage of a protected structure, S778.	09-11-16	COOLEENY, M	N/A	N/A
16600192	APPLICATION FINALISED	Fitzgerald	Bridget	construction of a new two-storey dwelling with new entrance, waste water treatment system and drainage, landscaping and associated site works	24-11-16	GLENGOOLE M	N/A	N/A
16600903	APPLICATION FINALISED	Fitzgerald	Martin	calf house, concrete yard and silage slab as constructed	28-11-16	CURRAHEEND	N/A	N/A
16600905	APPLICATION FINALISED	Stapleton	Dominic and Josephin	location of existing entrance and all assoicated site works	29-11-16	GARRANROE,	N/A	N/A
16600705	APPLICATION FINALISED	Barry	Marie Tierney and Tor	construction of a dormer style dwelling, garage, wastewater treatment system, use of existing entrance and all associated site works	14-12-16	LANESPARK, E	N/A	N/A
16600787	APPLICATION FINALISED	Boland	Noel	construction of a dwelling with garage, entrance, packaged waste water treatment system and polishing unit with all associated siteworks	18-12-16	KILMAKILL, M	N/A	N/A
16601028	APPLICATION FINALISED	Ryan	Eamon	and completion suckler cow shed with underground slurry storage tank and all other necessary assocaited site development works	12-01-17	COLDFIELDS,	N/A	N/A
16601130	APPLICATION FINALISED	Dufficy	Joe	domestic garage as constructed	11-02-17	SALLYBOG, GC	N/A	N/A
16600584	APPLICATION FINALISED	Duggan	Joe & Pauline	dwelling, domestic garage, entrance, waste water treatment system with all associated site works	16-02-17	PIERCETOWN,	N/A	N/A
16600527	APPLICATION FINALISED	Farcroft Inns Ltd		single storey extension (60sqm) to the existing bar of the Horse & Jockey Hotel, including modifications to the existing road R639, including the relocation of a coach layby and the relocation of a traffic island on the R639	16-02-17	HORSE & JOCI	N/A	N/A
16601189	APPLICATION FINALISED	Ely	Patrick & Bernadette	construction of a single storey dwelling with entrance, garage, septic tanks system and percolation area with all associated siteworks	23-02-17	BALLYDAVID,	N/A	N/A
17600001	APPLICATION FINALISED	Mason	Seamus & Catherine	an un-authorised domestic car garage/fuel shed and a boundary wall around the perimeter of the property and all associated site works	28-02-17	BALLYBEG UP	N/A	N/A
16601174	APPLICATION FINALISED	O'Reilly	Brian	the construction of an 84m2 extension to the rear of an existing house including all associated drainage and site works	23-03-17	CLONORA	N/A	N/A
16601018	APPLICATION FINALISED	Bourke	John and Elaine	the construction of a two storey dwelling house, entrance, a connection to group water scheme, a septic tank and percolation area and all associated site works	06-04-17	RATHCUNNIK	N/A	N/A
17600213	APPLICATION FINALISED	Butler	Richard and Anna	1. Construction of a storey and a half style extension to the front and side of our single storey dwelling. 2. Alterations to the interior spaces of the existing dwelling and conversion of a bedroom to a study. Also, alterations to the front, side and rear elevations of the existing dwelling. 3. Construction of a patio, footpaths, and hard landscaping areas and the remodelling of parking areas. 4.Landscaping of the site consisting of planting beds, trees, hedging, shrubbery and all associated site works	27-04-17	BALLINASTICK	N/A	N/A
17600211	APPLICATION FINALISED	Miskella	Delores	raising the roof pitch of my dwelling from that granted under planning ref 99/338 and development of the attic space including associated site works	27-04-17	COOLE, GORT	N/A	N/A
17600274	APPLICATION FINALISED	Bridget Neary	Thomas Ryan &	dwellinghouse, entrance, septic tank and percolation, new bore well and all associated works	15-05-17	RATHBEG, GO	N/A	N/A

17600037	APPLICATION FINALISED	Beatty	Cathriona O'Kane &M	demolition of a detached single storey dwelling and construction of a detached two storey dwelling, installation of an approved wastewater treatment system and percolation area to appropriate standards, removal and replacement of the site entrance with new walls, piers and gates at same location of current site entrance, construction of a driveway, parking areas, footpaths, retaining walls, courtyard and hard landscaping areas, landscaping of the site consisting of new grass areas, planting beds, trees, hedging and shrubbery and all associated site works	16-05-17	GLENGOOLE N	N/A	N/A
16601225	APPLICATION FINALISED	Stephen Healy & Deirdr		(1) Construction of a single storey extension to the front and side of our single storey dwelling. (2) Alterations to the interior spaces of the existing dwelling & alterations to the front, side & rear elevations of existing dwelling. (3) Construction of a driveway, parking areas, footpaths and hard landscaping areas and demolition of a single storey domestic garage. (4) Removal & replacement of the site entrance with new walls, piers & gates at the same location of the current site entrance. (5) Landscaping of the site consisting of planting beds, trees, hedging, shrubbery and all associated site works.	25-05-17	BALLYNONTY	N/A	N/A
17600145	APPLICATION FINALISED	Gortnahoe/Glengoole C	N/A	construct new pitches with all associated drainage, ball stops to each end, a gravel walk track/path around the site with all associated site works and ancillary works	04-06-17	GORTNAHOE	N/A	N/A
17600429	APPLICATION FINALISED	Caschera	Lorenzo	single storey dwelling house with habitable attic accommodation, new road entrance, domestic effluent treatment system, garage, boundary treatment, landscaping and site development works	13-06-17	INCHOROURK	N/A	N/A
17600426	APPLICATION FINALISED	O'Donovan	Paddy	the construction of extension to side of dwelling consisting of bedroom and bathroom and modification for disabled access, upgrading works to foul effluent treatment system and all associated site works	19-06-17	CURRAHEEN,	N/A	N/A
17600489	APPLICATION FINALISED	Ryan	Edward	new two storey, part one storey dwelling house, with connected one storey domestic garage, new on site waste water treatment system and percolation area, new site entrance and all associated site works	03-07-17	COLDFIELDS,	N/A	N/A
17600294	APPLICATION FINALISED	Gortnahoe Community	N/A	to construct a single storey extension to existing playschool facility to incorporate, 2 no classrooms and ancillary rooms and new boiler house all to the rear of existing community centre building and all associated site works, play areas and ancillary works	06-07-17	GORTNAHOE	N/A	N/A
17600560	APPLICATION FINALISED	O'Grady	Jim	building 2 cubicle houses with slatted tanks including associated site works	12-07-17	COOLEENY, M	N/A	N/A
17600314	APPLICATION FINALISED	O'Shea	Robert & Maureen	extensions to dwellinghouse and partial demolition of dwelling house also alterations to the facades of that dwelling house, upgrade of existing septic tank to packaged wastewater treatment system and polishing filter, demolition of domestic garages and the construction of new domestic garages and all associated site works	18-07-17	BALLYVINANE	N/A	N/A
17600651	APPLICATION FINALISED	Purcell	Bernadette and Micha	(a) to retain the rear extension constructed to the dwelling house (b) to retain the existing domestic shed/garage (c) to retain the glasshouse complex, all as constructed on site	02-08-17	URARD, GORT	N/A	N/A

17600653	APPLICATION FINALISED	Moycarkey Borris GAA	N/A	relocation of clubhouse previously granted (planning ref no.15600207) to new location within the confines of the existing site with all associated site works and connections to public services	03-08-17	BALLYDAVID,	28-08-17	M
16601129	APPLICATION FINALISED	Stokes	James	the construction of 256.37m2 four bedroom house with a 45.90m2 detached garage, to install new treatment system and percolation area and all associated site works. The proposed road access from the development will be onto the public road, all on lands	08-08-17	GRAIGAMAN,	N/A	N/A
17600719	APPLICATION FINALISED	Barrett	James	building an extension to rear of my primary dwelling consisting of kitchen, bedroom, bathroom, utility and wc with all associated site works	21-08-17	ST MARYS RO	N/A	N/A
17600414	APPLICATION FINALISED	Dwyer	Paul & Louise	a new wastewater treatment system, re-alignment of boundaries to achieve sightlines for existing entrance, store/shed and all associated site works and retention permission for extension to existing dwelling and store/shed	18-09-17	LONGFORDPA	N/A	N/A
17600312	APPLICATION FINALISED	Commins	Ann & John	(1) new single storey Artisian Food Building (meat packaging), (2) change of use for existing single storey farm sheds from agricultural to commercial (storage), (3) closing existing entrance and forming new site entrance, (4) new wastewater treatment system and percolation area (5) all associated site works	25-09-17	BLACKCASTLE	N/A	N/A
17600922	APPLICATION FINALISED	Blain	Julia	construction of a new living room extension to front of existing dwelling together with all associated site works	12-10-17	CURRAGHEEN	N/A	N/A
17600706	APPLICATION FINALISED	Ryan	Martin and Ailish	building a dwelling, domestic garage, entrance, install septic tank, including associated site works	19-10-17	FENNOR, URL	N/A	N/A
17600446	APPLICATION FINALISED	Slattery	Andrew and Mary	the construction of a dormer type extension onto the rear and side of our existing dwelling	29-10-17	COOLDINE	N/A	N/A
17600577	APPLICATION FINALISED	Geraldine Barnaville	Yvonne Barnaville &	dwelling extension to the side and rear of existing kitchen and permission to extend dwelling to the side and rear by 20m2 and for permission to extend and convert part of existing domestic garage to a self contained one-bed residential unit	30-10-17	FANNING PAR	N/A	N/A
17600704	APPLICATION FINALISED	Sliabh-Ardagh Rural De	N/A	provision of a riverside amenity park to serve our community, the amenity park will include a walking path, play area for children, picnic area and a playing pitch for field games, Permission is also sought for a community hall car parking upgrade existing entrance and all necessary site works	31-10-17	BALLYNONTY	N/A	N/A
17601054	APPLICATION FINALISED	Lahart	Anthony	construction of a cattle house incorporating slatted tank, lie back area, and all associated works on my land	19-11-17	LURGOE	N/A	N/A
17601070	APPLICATION FINALISED	Fennelly	Mary	construction of a single storey extension to rear of property consisting of entrance hall and accessible bathroom with all associated site works	22-11-17	BOULICK, GOI	N/A	N/A
17601083	APPLICATION FINALISED	Gortnahoe Playground	N/A	a community playground area, site boundary fencing and landscaping and associated site works	26-11-17	GORTNAHOE	N/A	N/A
17601086	APPLICATION FINALISED	Cantwell	Simon	removal of existing laneway, hedgerow, turning yard and entrance and to reinstate as agricultural land. Also for Permission to Retain alterations to and change of use of previously granted pump control building to agricultural store	27-11-17	LEIGH	N/A	N/A

17600865	APPLICATION FINALISED	Rae	Tim and Orla	construction of a new single storey extension to the East (side) and a new single storey extension to the West (side), alterations to elevations and construction of replacement bay window to front elevation, replacement of existing septic tank and percolation area with a new packaged waste water treatment system and polishing filter, associated site boundary and site development works	13-12-17	GRAIGUEPAU	N/A	N/A
17601051	APPLICATION FINALISED	Carey	Ger & Sinead	a two storey dwelling, domestic garage, new site entrance, new septic tank and percolation area and all associated site works	14-12-17	LEIGH, TWO-M	N/A	N/A
17601162	APPLICATION FINALISED	Shelly	Pat & Josephine	Change of use from commercial back to residential use.	17-12-17	MAIN STREET,	N/A	N/A
17601173	APPLICATION FINALISED	Fogarty	Fr Tom	the construction of a single storey extension to the rear of the Church incorporating WC, Sacristy and permission for internal alterations consisting of additional WC and disable WC facility's and connection to public services and all associated site works	19-12-17	BALLYDAVID,	N/A	N/A
17600902	APPLICATION FINALISED	Cantwell	Sabrina	two-storey dwelling, garage, septic tank and shared entrance	03-01-18	LEIGH, TWO-M	N/A	N/A
17600903	APPLICATION FINALISED	Cantwell	Grainne	two-storey dwelling, garage, septic tank and shared entrance	03-01-18	LEIGH, TWO-M	N/A	N/A
17600425	APPLICATION FINALISED	Healy	Michael	the construction of a new agricultural shed on farm complex with all associated site works	11-01-18	BALLYDAVID,	N/A	N/A
17601251	APPLICATION FINALISED	Fogarty	Fr. Tom	as constructed single storey parish office containing the following (a) office area with disabled WC and meeting room with all associated siteworks and connection to public services	18-01-18	BALLYDAVID,	N/A	N/A
17600440	APPLICATION FINALISED	Commercial Mushroom		the development will consist of a Phase III mushroom substrate (compost) production facility and will involve the construction of an administration building (296.16 sq. m), storage building (8444.04 sq. m), bunker building (9967.59 sq. m), tunnel building (10628.75 sq. m), woodchip bio-filter, wheelwash, weighbridge, 6 no. water storage tanks, 2 no. fuel storage tanks, well, wastewater treatment system, hardstanding areas, internal access roads, parking facilities, boundary fencing, landscaping, and all ancillary works. An Environmental Impact Statement (EIS) will be submitted with the planning application. The application relates to development which comprises or is for the purposes of an activity requiring an Integrated Pollution Prevention and Control Licence or a Waste Licence	23-01-18	KILLORAN, M(	N/A	N/A

				The Tipperary Venue -Mixed use Leisure Campus comprising: A) Demolition of all existing buildings on site comprising 5No. dwelling houses; 1No. derelict dwelling house; 1No. commercial warehouse/storage build; agric. outbuildings.Total GFA of buildings to be demolished is 2,872sq.m. B) Construction of: i) 500 Bedroom Hotel build. (80,577sq.m.) ii) 15,000 person capacity Venue Build. (23,362sq.m.-to accommodate sports, concerts & other events. iii) Equestrian Centre (5,872sq.m.) iv) Heliport (2,383sq.m.) v) 18 Hole Golfcourse & ancillary Golf Club Build. (3,462sq.m.) vi) Driving Range & ancillary build.(484sq.m.) vii) Chapel (255sq.m.) viii) 31No. Retail units (2,883sq.m.) ix) Hoban Memorial Build. (1,984sq.m.) to accommodate banqueting suite & museum with reproduction Lafayette Park & subterranean link to proposed Hotel Build. x) Grade 1 Race Course (c.23.5ha) & Greyhound Track (c.0.36ha) with shared ancillary builds. (40,358sq.m.) xi) Single Storey Energy Centre Build. (1,530sq.m.) xii) Treatment Plant (252sq.m.) C) Provision of all associated landscaping, boundary treatment & site developement works includ.: i) Diversion of existing site services. ii) Revised surface water drainage regime includ. diversion & culverting of parts of Derheen & Clover Rivers. Relocation of an attenuation pond adjacent to the Two Mile Borris Interchange. iii) Drilling for a potable water supply (on site) to serve proposed development. iv) Provision of 5743No. Car Parking spaces; 136 Bus Parking Spaces; 72No. Greyhound box spaces; 100 Horse Box Spaces. v) Provision of new 4-arm roundabout on R639 to serve proposed develop. Provision of emergency only access rd.			
17601350	APPLICATION FINALISED	Quirke	Richard	with priority junction onto R639. vi) Link Rd. to connect R639 (via	10-02-18	NOARD, NEW	N/A	N/A

				(1)modific. to permitted develop. Ref. 05/31/0024 (ABP REF.PL.22.237958) Redesign of layout extent of racecourse to now cover c.33.6 ha;, 18 hole golf course with relocat. of individ. holes as a result of revised racetrack design & assoc. builds; Relocat. of permitted shared grandstand, entran. building, greyhound track, greyhound building, saddling stalls, weighrooms buildings, stables, mainten. builds, park. & assoc. support builds c.300m to sth-east; Redesign of permitted grandstand to now include casino area & new weighing facilities in new basement level (c.3,963sq.m) & new sunken parade ring. Total floor area of build. is now c.36,841sq.m.; Redesign of permitted entran. build. (c1,322sq.m. as per previous permitted build.); Permitted weigh-rooms build. to now be used for new jockey club & ancill. admin use; Redesign & reloc. of permitted exhibit. area c.225m to the sth-east with reduction in exhibit. floorspace by c.247sq.m (now 2,636sq.m); Change of permitted casino use within hotel to ancill. entertainment/conference uses; Relocat. of permitted golf club hse, driving range & assoc. park. c.300m to the sth east; Relocate permitted chapel build. & park. c.140m to the nthwest; Relocate permitted Hoban Memorial build. c.60m to nth & redesign of permitted formal gardens; Diversions/culverting of rivers/streams on site to accomm. revised develop; Redesign & relocate permitted car & coach park. areas across the site to now provide a total of 5731no. car park. spaces, 103no. bus park. spaces & 766no. horse/greyhound box park.spaces; Redesign of internal road system & landscaping to incorp. the above revisions. (2) Replace permitted equestrian				
17601351	APPLICATION FINALISED	Quirke	Richard	centre with larger equestrian centre complex (c.43,718sq.m) now construction of (I) cubicle facilities incorporating slatted tanks with feeding areas and all associated site works. Permission for	10-02-18	NOARD	N/A	N/A
17601389	APPLICATION FINALISED	Darmody	Jerry	Retention is required for (I) milking parlour extension and (ii) two storage sheds	20-02-18	NEW HILL, TW	N/A	N/A
17601407	APPLICATION FINALISED	Killenaule Community E		construction of a) A Community carpark to the rear of St. Mary's Church with circulation road and front gate, access footpaths, public lighting and site boundary fencing b) Widening of portion of site access roadway including adjustments to associated boundary walls c) Localised alteration to stone boundary wall of the old Schoolhouse d) Road markings and signage e) All associated site development works including drainage, storm attenuation, and service ducting. The development includes works on portion of listed building sites Ref. S047 St. Mary's Church, Ref S050 St. Marys National School, and is bounding listed building site Ref. S049 Bailey House Nursing Home	22-02-18	BAILEY STREE	N/A	N/A
18600035	APPLICATION FINALISED	Kinnane	Michael	Construction of a cublicle house with feed passage, loose house, slatted tank, two feed passages, milking parlour, conversion of existing parlour to cow return and associated works within curtilage of a protected structure Kevinsfort (S874)	14-03-18	LISKEVEEN, LI	N/A	N/A
18600062	APPLICATION FINALISED	Bowe	Catherine and Edward	construction of a slatted cubicle shed and all associated site works	19-03-18	LEIGH, TWO-M	N/A	N/A
18600210	APPLICATION FINALISED	Fitzgerald	Martin	building (a) cubicle house with slatted tank (b) loose house extension to existing including associated site works	17-04-18	CURRAHEEND	N/A	N/A
18600222	APPLICATION FINALISED	Spencer	Sarah Jane	existing extensions to house and associated siteworks	19-04-18	GLENGOOLE S	N/A	N/A

18600260	APPLICATION FINALISED	Kennedy	Edward & Aisling	proposed new single storey extension linking existing dwelling with existing shed structure, alterations to existing dwelling, change of use of existing shed structure from storage to residential and all associated site works	29-04-18	GALBOOLY, LI	N/A	N/A
18600020	APPLICATION FINALISED	Maher	Susan	the construction of a new dwelling, domestic garage, entrance and waste water treatment system with all associated site works	02-05-18	CASTLETOWN	N/A	N/A
18600292	APPLICATION FINALISED	Irish Water		development consisting of the construction of 211m of 2.4m high palisade fencing and the installation of one manually operated lockable gate suited to match perimeter fencing	03-05-18	CURRAHEEND	N/A	N/A
18600310	APPLICATION FINALISED	Board of Management	N/A	to extend a classroom, provide additional access and toilet facility and to carry out all associated works	07-05-18	MOYNE, THUI	N/A	N/A
18600350	APPLICATION FINALISED	Doyle	James and Barbara	converting existing garage into a bedroom, replacing the existing garage door with glazed double doors and Permission to demolish 2 no. sheds to the rear of the house and to construct a shower room to our dwelling	16-05-18	CASTLEQUAR	N/A	N/A
18600370	APPLICATION FINALISED	O'Mahony	Martin	the as constructed agricultural shed and Retention of modifications to the existing entrance	20-05-18	DUNGUIB, KIL	N/A	N/A
18600365	APPLICATION FINALISED	Maher	Heidi Higgins and Gea	a change of house/garage design and location from previous planning application numbers ref 10/508 and 16/600580 including all associated site works	20-05-18	GORTNAHOE	N/A	N/A
18600151	APPLICATION FINALISED	Christine Ryan	Anthony Healy &	construction of a single storey detached dwelling, detached garage, site entrance, waste water treatment system and percolation area and all associated site works	04-06-18	TWO MILE BC	N/A	N/A
18600449	APPLICATION FINALISED	McMahon	Deirdre	change of use from health care use to domestic residential use	07-06-18	ST. KEVIN'S P/	N/A	N/A
18600297	APPLICATION FINALISED	Codd	Irene	(1) Construction of a bungalow type dwelling, single storey domestic garage, carport and driveway. (2.) Construction of a new site entrance and removal of existing agriculturial entrance. (3) A septic tank, percolation bed, water bore-hole and associated site works.	11-06-18	DUNGUIB	N/A	N/A
18600525	APPLICATION FINALISED	Moycarkey Coolcroo AC		development of an athletic facility including areas for running, jumping and throwing, the facility will consist of lighting to the perimeter of a hard standing running track and a grass track with 2 no storage containers	21-06-18	BALLYBEG RO	N/A	N/A
18600245	APPLICATION FINALISED	Alpine Windows and Dc		construct a 2 storey semi-detached dwelling with connection to public services and all associated site works	23-06-18	14 & 15 KILCC	N/A	N/A
18600556	APPLICATION FINALISED	Two-Mile-Borris Comm		single storey 248 sqm Community Centre, Playground and Sensory Garden, new car parking spaces, use of existing site entrance plus connection to public water supply and foul mains and all associated site works at site adjacent to Two-Mile-Borris National School	27-06-18	TWO-MILE-BC	N/A	N/A
18600052	APPLICATION FINALISED	Leahy	Caitriona and Blair	building of a dwelling, domestic garage, entrance, bore well, install septic tank including associated site works	28-06-18	GORTNAHOE	N/A	N/A
18600426	APPLICATION FINALISED	Noone & Philip Treacy	Kate	proposed new single storey and two storey extensions to existing dwelling, demolition of existing single storey shed structure, alterations to existing dwelling and all associated site works	16-07-18	COOLCROO, T	N/A	N/A
18600695	APPLICATION FINALISED	Barnaville	Mary Christina	to build an extension to my existing dwelling including associated site works	26-07-18	BOULICK, GOI	N/A	N/A
18600811	APPLICATION FINALISED	Two Mile Borris Grave Y		an extension to the existing grave yard, access road, new entrance, boundary wall, storage shed, columbarium wall and all associated site works	21-08-18	TWO MILE BC	N/A	N/A

18600341	APPLICATION FINALISED	Carey	Patrick	construction of new dwellinghouse, domestic garage, entrance and waste water treatment system with all associated site works	22-08-18	CLOVER LANE	N/A	N/A
18600866	APPLICATION FINALISED	Maher	Pat	construction of an agricultural development consisting of a loose housing shed for cows & the erection of a bulk milk silo with all associated site works. Works are within the curtilage of a Protected Structure S778	30-08-18	COOLEENY, M	N/A	N/A
18600259	APPLICATION FINALISED	Medley & Mary McDon	Eamonn	change of use from commercial retail premises to domestic storage of vintage vehicles and permission to construct an extension to same for storage of large vintage vehicles with all associated site works and internal works	06-09-18	BORRIS, TWO	N/A	N/A
18600512	APPLICATION FINALISED	Power	James	a two storey dwelling, domestic garage, new site entrance, new treatment system and soil polishing filter and all associated site works	19-09-18	LEIGH, TWO-M	N/A	N/A
18600962	APPLICATION FINALISED	Leahy	Blair and Caitriona	to build a dwelling, domestic garage, entrance, install septic tank including associated site works	25-09-18	GORTNAHOE	N/A	N/A
18600992	APPLICATION FINALISED	McCormack	Brigid	the erection of extensions and alterations to existing dwelling comprising of a single storey ground floor extension, a first floor extension over existing lean-to roofed single storey extension, skylights to existing attic roof storage space and all associated site works all to the rear of the dwelling	03-10-18	KILLENAULE	N/A	N/A
18600565	APPLICATION FINALISED	Moran	John & Rita	the construction of new dwelling house, new entrance/septic tank and percolation, double garage	04-10-18	MOYNARD, M	N/A	N/A
18600705	APPLICATION FINALISED	Lanigan	John	construction of an animal house complete with underground slatted tank and associated site works	04-11-18	LEIGH, TWO-M	N/A	N/A
18600794	APPLICATION FINALISED	McMenamin	John	dwelling, garage and entrance and to carry out all associated works including connection to mains sewer	12-11-18	LANESPARK, E	N/A	N/A
18601178	APPLICATION FINALISED	Walsh	Cathriona	construction of extensions and alterations to existing dwelling house, upgrading of existing waste water treatment system and construction of a new garage with all associated site works	22-11-18	CLONCLEIGH,	N/A	N/A
18600343	APPLICATION FINALISED	Troy	Seamus	construction of a concrete silage base, cattle cubicle shed with underground slatted tanks and all associated site works	27-11-18	BALLYNASTICI	N/A	N/A
18601199	APPLICATION FINALISED	Murphy	Pat	construction of a new ancillary building consisting of two toilets in the grounds of St. Mary's Church with all associated site works. Works are within the curtilage of a Protected Structure S775	29-11-18	MOYNETEMP	N/A	N/A
18601206	APPLICATION FINALISED	O Connor	Pat and Mary	existing detached domestic garage/store	02-12-18	LANESPARK, E	N/A	N/A
18601160	APPLICATION FINALISED	Training Board & The B	Tipperary Education a	the following development: a temporary single story prefabricated modular building to the southwest of the existing school comprising 2 classrooms, shared central lobby and toilets, together with access ramps, steps, boundary fence and all associated site works	08-01-19	KILLENAULE	N/A	N/A
18600717	APPLICATION FINALISED	Walsh	Michael	construction of a new, two-storey dwelling with new entrance, waste water treatment system and drainage, landscaping and associated site works	08-01-19	KNOCKBOY, G	N/A	N/A
18600981	APPLICATION FINALISED	Bourke	Michael	to retain the following (a) as constructed domestic garage to rear of dwelling, (b) as constructed porch to front of dwelling (c) retain attic conversion to habitable space (d) as constructed piers to entrance. Permission for 2 no dormers to the front elevation and 1 no dormer to the rear of my dwelling and all associated site works and ancillary works	09-01-19	CLONAMICKL	N/A	N/A
18601437	APPLICATION FINALISED	Shanahan	Gary	existing extension and sheds	08-02-19	MCDONAGH	N/A	N/A

18601495	APPLICATION FINALISED	Delaney	Majella	the construction of a four-bay slatted shed, calf shed, horse stable, farm access road and modifications to an existing entrance, along with connections to all site services and all other associated site works	21-02-19	RAHINCH, LIT	N/A	N/A
18601533	APPLICATION FINALISED	McKenna	Lily	construction of a single storey extension to the side of dwellinghouse, and a single storey extension to the rear of dwellinghouse, a new septic tank and percolation area, fencing of site boundaries and all associated site works	23-02-19	COOLCROO, T	N/A	N/A
19600021	APPLICATION FINALISED	Fogarty	Fr Tom	detached single storey toilet block and ancillary related works to be located to the rear of the existing church. This is a protected structure.	11-03-19	TWO MILE BC	N/A	N/A
19600025	APPLICATION FINALISED	Littleton Development		existing car park, entrance arrangement, roadside public footpath and site boundary fencing, along with Permission to extend and complete existing car park including public lighting and all associated site works	12-03-19	CHURCH VIEV	N/A	N/A
19600031	APPLICATION FINALISED	Smyth	Eddie	(1) demolish extension to rear of existing cottage, (2) construct new single storey extension to the front and rear of the existing cottage, (3) renovate and alter existing cottage, (4) demolish all existing sheds, (5) construct a new detached garage/shed, (6) decommission existing septic tank, (7) install a proprietary wastewater treatment system and soil polishing filter, (8) alter existing vehicular entrance into a pedestrian access and create new vehicular access (9) Retention Permission to retain on-site steel container (10) all associated site works	13-03-19	BALLYMURRE	N/A	N/A
18601084	APPLICATION FINALISED	Quinn	Stella	construction of a bedroom and ensuite extension to dwelling and for retention permission for change of use from garage to a granny flat with all associated site works	26-03-19	BALLYDAVID,	N/A	N/A
19600077	APPLICATION FINALISED	Cignal Infrastructure Lt		the erection of a 30 metre high multi-user lattice telecommunications structure carrying antenna and dishes enclosed within a 2.4 metre high palisade fence compound including new access track together with associated ground equipment cabinets and associated site works	27-03-19	KILBRANNELL	N/A	N/A
18601511	APPLICATION FINALISED	and Jacinta McHugh	Conor Horan	build a 1.5 storey dwelling, domestic garage, combined field and dwelling entrance, install septic tank including associated site works	03-04-19	FOILCAMIN, C	N/A	N/A
19600108	APPLICATION FINALISED	O'Mahoney	Martin	retain the as-constructed silage slab and Permission to complete the walls for same and Permission to construct a hay shed with all ancillary site development works	07-04-19	DUNGUIB, KIL	N/A	N/A
19600138	APPLICATION FINALISED	Phelan & Kate Tobin	James	construction of dwelling house, domestic garage, entrance, driveway, septic tank and percolation area and all associated site works	16-04-19	FENNOR, URL	N/A	N/A
19600188	APPLICATION FINALISED	King	Ciaran & Michelle	construction of a two storey extension to the rear of existing dwellinghouse including single storey entrance porch to the east elevation, minor changes to the existing elevations to east, west and south elevations, including site works	29-04-19	SKEHANA, BO	N/A	N/A
19600200	APPLICATION FINALISED	Ivers	Josephine	to demolish a shed to the rear of my Dwelling and to construct a Shower Room to my Dwelling	01-05-19	CASTLEQUAR	N/A	N/A

				the following: a) minor alteration to pitch layout with ball stops to each end from previously granted permission Ref No. 17/600145, b) to deconstruct and re-construct existing stand in new location as shown on drawings, c) relocate gravel walk track/path around the site with 5m high lamp standards along same, d) relocating additional car parking spaces as proposed from the previous application Ref No. 17/600145 to new location as shown on submitted plans with all associated site works, drainage and ancillary works, Note: the boundary of this development has been altered from the previously submission Ref. No. 17/600145, additional land has been obtained from the adjoining landowner to facilitate the minor adjustments				
19600201	APPLICATION FINALISED	Gortnahoe/Glengoole C			01-05-19	GORTNAHOE	N/A	N/A
				an 18m multi-user free standing support structure carrying telecommunications equipment, together with associated exchange cabinets, fencing and all associated site development works. The development will carry telecommunications apparatus that will form part of the Three Ireland 3G and 4G wireless voice and data broadband network				
19600202	APPLICATION FINALISED	Shared Access Ltd			01-05-19	RATHCUNNIK	N/A	N/A
				(a) construct a two storey extension to the side/north east of my dwelling, (b) construct a single storey extension to the south east of the existing dwelling, (c) construct a single storey extension to the southwest of the existing dwelling, (d) demolition of existing shed adjoining the dwelling (e) replacement of existing dormer windows of dwelling with roof windows, (f) other alterations, refurbishment and upgrading of existing dwelling, minor upgrading of the existing site effluent system as appropriate, modification of external walls and fencing as appropriate, construction of site entrance and all				
19600219	APPLICATION FINALISED	Fanning	Tom	associated works	06-05-19	NEWHILL	N/A	N/A
				a biorefinery facility comprising of a process building with processing areas, plant rooms, stores, personnel & administrative areas; external bunded process & storage areas; vessels and tanks; CHP plant; an effluent & water treatment plant which includes bunded tanks & a building;sewage treatment plant; water storage tanks & site development works including demolition of an existing electrical building, roads, paved areas, parking areas, drains and services, bore well, lighting, fire water retention tank, attenuation pond, site fencing, alterations to the discharge pipeline from the sewage treatment plant, weighbridges & weighbridge office, connection to an existing outfall pipeline and landscaping works. The application is accompanied by an Environmental Impact Assessment Report. This application relates to development which comprises or is for the purpose of an activity requiring an Integrated				
18601296	APPLICATION FINALISED	Glanbia Ireland DAC		Pollution Prevention and Control Licence	13-05-19	KILLORAN, M(	N/A	N/A
				(a)to demolish existing score boards structure (b) to construct new all-weather/astropitch, fencing and hurling wall in location as shown on drawings with 12m high lamp standards with floodlight to				
19600275	APPLICATION FINALISED	Gortnahoe/Glengoole C		same with all associates site works, drainage and ancillary works	21-05-19	GORTNAHOE	N/A	N/A
19600350	APPLICATION FINALISED	Kerwick	Denis	construction of a cubicle house with ancillary effluent storage tank with slats over and all associated site works	04-06-19	EARLSHILL, BA	N/A	N/A

19600433	APPLICATION FINALISED	St Kevins National Scho	BOM	single storey extension and alterations to existing school including all associated site works	23-06-19	LITTLETON TH	N/A	N/A
19600505	APPLICATION FINALISED	Moore	Aiden	the existing agricultural shed in the North West corner of farm yard	08-07-19	KILLORAN, M(	N/A	N/A
18601488	APPLICATION FINALISED	Commins	John and Ann	the construction of 1.) 1 no single storey farm shed for holding livestock 2.) 2 no. single storey Hydroponic Polytunnels to be used as fodder rooms 3.) an open air dungpit and hardcore/hard standing yards and 4.) all associated site works	24-07-19	BLACKCASTLE	N/A	N/A
19600608	APPLICATION FINALISED	Cleary	Michael and Triona	reuse and extend existing un-occupied dwelling, build domestic garage, alter existing entrance, install waste water treatment system including all associated site works	29-07-19	CRABB, GORT	N/A	N/A
19600612	APPLICATION FINALISED	Barry	Rita	all works as completed to dwellinghouse, garage, entrance, septic tank and associated works	30-07-19	CURRAHEEN,	N/A	N/A
19600645	APPLICATION FINALISED	O'Mahony	Seamus	(1) a detached domestic garage/storage shed (2) external garden/boundary walls (3) the roof of the dwelling as constructed and including all associated site works	05-08-19	GRAIGUEPAU	N/A	N/A
19600664	APPLICATION FINALISED	Freeman	Richard	extensions to existing cottage include attached garage, waste water treatment system and associated site works. Retention of existing equestrian facilities and outhousing including stable barn, partially constructed lunging house, stables and outhousing, garden workshop and store, garden shed, round roofed shed, horse enclosure, entrance to site and all associated site works. Planning Permission is sought to upgrade the existing waste water treatment system, complete construction of lunging house and construct new dungstead including all associated site works	11-08-19	CURRAHEEN,	N/A	N/A
19600272	APPLICATION FINALISED	Meagher	Liam	decommission existing septic tank and effluent treatment system serving our medical centre and private dwelling, and to construct a pump chamber with pumped rising main and connection to the local authority foul sewer	12-08-19	KILLENAULE	N/A	N/A
19600714	APPLICATION FINALISED	Niall McCabe	Yvonne Barnaville &	a single storey dwellinghouse, garage, connection to public water scheme, effluent treatment system, percolation area, new site entrance and all associated ground works	21-08-19	LONGFORDPA	N/A	N/A
19600715	APPLICATION FINALISED	Quinlan	Conor & Ciara	to construct a two-storey dwelling house, domestic garage, septic tank and percolation area, entrance and all associated site works	21-08-19	GARRANROE,	N/A	N/A
19600446	APPLICATION FINALISED	Fr Paudie Moloughney	Executors of Estate of	a replacement septic tank and percolation area with all associated site works	25-08-19	LAHARDEN UI	N/A	N/A
19600743	APPLICATION FINALISED	Moore	Fergus and Niamh	build an extension to our existing dwelling including associated site works	27-08-19	KILLORAN, M(	N/A	N/A
19600483	APPLICATION FINALISED	and Martin Watson	Yvonne Slattery	construction of a dwelling, detached domestic garage, septic tank and percolation area, site entrance and all associated site works	28-08-19	COOLDINE	N/A	N/A
19600769	APPLICATION FINALISED	Moore	Seamus & Joan	to retain extension to the side of dwelling house and to retain domestic storage shed	03-09-19	MCDONAGH T	N/A	N/A
19600836	APPLICATION FINALISED	Christine Ryan	Anthony Healy &	alterations to previously approved planning register reference 18/600151; the proposed alterations relate to the relocation of and minor alterations to the previously approved single storey detached dwelling, detached garage, site entrance, wastewater treatment system and percolation area and all associated site works	23-09-19	TWO MILE BC	N/A	N/A

19600491	APPLICATION FINALISED	Butler	PJ & Breda	demolition of existing outbuildings and rear extension, renovate and extend existing dwelling house, re-locate existing entrance, install a new percolation area, construct a domestic garage together with all associated site works	03-10-19	LISKEVEEN, LI	N/A	N/A
19600656	APPLICATION FINALISED	and Edel Lyons	William Hogan	build a two storey dwelling, domestic garage, entrance, install waste water treatment system including associated site works	08-10-19	GORTEEN LOV	N/A	N/A
19600932	APPLICATION FINALISED	Killenaule GAA Club		1 no. 10m high flood light at existing hurling wall including green wire fencing here 2.1m high, also to retain 1 no. 8m high flood light at existing car parking area, also to retain 4 no. ball-stopping nets 12m high on playing pitches. Planning Permission to construct a new covered spectator setting stand The development is also to include new player changing rooms and public toilet facilities pavilion, 2 no. new 20m high flood lights at playing pitch no. 1, 2 no. new 8m high flood lights at existing car parking area, connect to all existing services and all associated site works	16-10-19	CROSSCANNC	N/A	N/A
19600968	APPLICATION FINALISED	Purcell	Valerie	1. a domestic extension to the dwelling, 2. a domestic storage shed, 3. roadside boundary treatment, 4. hard standing areas, and all associated site works	27-10-19	COOLEENEY	N/A	N/A
19600271	APPLICATION FINALISED	Kerwick	John and Thomas	construct A. an extension onto existing cattle house to form a cubicle house, B. an uncovered slurry effluent storage tank with slats over, feed barrier and feed apron C. a 10 unit milking parlour with dairy and dairy washings storage tank and D. Retention of Planning for existing bored well and pump house	31-10-19	GLENGOOLE S	N/A	N/A
19600994	APPLICATION FINALISED	and Heddwen Day	Tom Fitzgerald	demolition of an existing dwelling as well as Planning Permission to construct a new dwelling, new waste water treatment system, reconfigure the existing vehicular entrance and all associated site development works	03-11-19	KNOCKAVARD	N/A	N/A
19601132	APPLICATION FINALISED	Cantwell and Tricia Ral	Joe	construction of extensions and alterations to existing dwelling house, upgrading of existing waste water treatment system and all associated site works	08-12-19	NOARD, TWO	N/A	N/A
19601142	APPLICATION FINALISED	Connolly	John and Anne	single storey extension to side and rear of existing house including all ancillary site works	10-12-19	NOARD, TWO	N/A	N/A
19601145	APPLICATION FINALISED	O'Dwyer	Kevin and Mary	(I) existing extension to rear of existing dwelling and (ii) conversion of the existing attached garage to living accommodation as well as Planning Permission to (iii) construct a new extension and modify existing elevations (iv) construct a new domestic garage and (v) construct a new waste water treatment system and all associated site works	11-12-19	KILLENAULE	N/A	N/A
19601158	APPLICATION FINALISED	Ballysloe Tidy Towns Gr		to develop a sensory garden which will include a meeting room, roadside boundary wall, a thatched roofed shelter and construction of an 1800mm high feature wall including associated site works	15-12-19	COOLE, GORT	N/A	N/A
19601162	APPLICATION FINALISED	O'Shaughnessy	Thomas	existing as constructed dwelling, including attic conversion, and garage to rear of dwelling, including location and orientation.	15-12-19	BOULABEHA,	N/A	N/A
19601176	APPLICATION FINALISED	Flynn	Reps. of Kathleen	(1) extension to rear of dwelling house, (2) a porch to the side of dwelling house (3) entrance gates and boundary walls, (4) a domestic garage and all associated works. Planning permission to upgrade the existing septic tank, to a new septic tank and percolation area and associated works	17-12-19	LISDUFF, THU	N/A	N/A

19601231	APPLICATION FINALISED	Fogarty	Jimmy	construction of a livestock underpass with effluent holding tank and all associated site works	04-01-20	LONGFORDPA	N/A	N/A
19601268	APPLICATION FINALISED	Coillte		the construction of new entrance from public roadway onto forestry lands, to comprise the provision of splayed access, clear visibility sightlines, associated setting back of adjacent roadside boundaries, provision of associated surface water drainage, fences, finished hardcored structure to access area and all associated siteworks	16-01-20	KILMAKILL, M	N/A	N/A
19601278	APPLICATION FINALISED	Ely	Cathal and Regina	alterations and extensions previously made to dwellinghouse and planning permission to construct new alterations and extension to the rear of dwellinghouse with all associated site works, including demolition of existing domestic shed	18-01-20	MOYNETEMP	N/A	N/A
19600523	APPLICATION FINALISED	Phelan	Patrick and Deirdre	build a domestic garage cum fuel store including associated site works	23-01-20	INCHOROURK	N/A	N/A
19600082	APPLICATION FINALISED	Moore	Aidan	agricultural development consisting of a new shed for storing straw/hay and to construct an extension to existing slatted shed with all associated site works	29-01-20	KILLORAN, M(	N/A	N/A
19601374	APPLICATION FINALISED	Webster	Marlena	new two storey extension to rear of existing end of terrace house, part demolition of single storey extension to rear, full planning permission for completion of same two storey extension, use of existing public services and all associated site works	08-02-20	GORTNAHOE	N/A	N/A
19601012	APPLICATION FINALISED	Developments (Ireland)	Engie	construction and operation of solar PV arrays mounted on metal frames on a 38.3 ha site, inclusive of an electrical substation compound, up to 10 no indicative inverter units, a temporary construction area and ancillary facilities (inclusive of gross floor space of proposed works up to 248 sq m). The planning application is accompanied by an environmental report and Natura Impact Statement.	20-02-20	RAHELTY, THL	23-03-20	C
19601475	APPLICATION FINALISED	Healy	Joseph and Anthony	(i) milking parlour extension (ii) two doors and window to milking parlour (iii) extra crush yard (iv) new location for meal bin and all associated site works	26-02-20	NEW HILL, TW	N/A	N/A
2026	APPLICATION FINALISED	Kiely	Liam	construction of extensions and alterations to existing dwelling house with all associated site works including new entrance	12-03-20	CASTLETOWN	N/A	N/A
19601370	APPLICATION FINALISED	Power	Seamus	new two storey dwelling, alterations to existing site entrance, new waste water treatment system and percolation area and all associated site works	15-03-20	CURRAHEEN,	N/A	N/A
2033	APPLICATION FINALISED	Eircom Ltd		construction of new telecommunications support structure (overall height of 22 metres) carrying antennas, dishes, associated equipment, together with ground equipment cabinets, new fencing and landscaping	15-03-20	BALLYMURRE	N/A	N/A
2079	APPLICATION FINALISED	Moycarkey Borris GAA	N/A	conversion of attic store space of existing club house to an open plan fitness room/gym area and new stair to access the first floor with all internal alterations to accommodate these works and all associated site works	26-03-20	BALLYDAVID,	N/A	N/A
20111	APPLICATION FINALISED	Phelan	Brendan	construction of agricultural developments on the farm consisting of: 1. replacement of existing round-roof barn with lean-to roof with alterations to perimeter walls including extension of the barn floor area 2. construction of roofed extension of existing structure containing loose housing and milking parlour 3. construction of new lean-to shed over existing slatted tanks with cubicle housing together with all associated site works	05-04-20	MOYNETEMP	N/A	N/A

20129	APPLICATION FINALISED	Glanbia Ireland DAC		a 10 year planning permission for modifications to Condition No. 1 of previously granted planning permission Ref. No. 18/601296. The modifications comprise an outfall drain and associated pumping station and monitoring chambers to discharge surface water and treated waste water from the Biorefinery site through the townlands of Cooleeny and Derryfadda to the Drish River; a water supply pumphouse and associated site works including access road and security fencing in the townland of Derryville and a water supply pipeline from the pumphouse to the Biorefinery facility site. A Natura Impact Statement (NIS) will accompany the application. This application relates to development which comprises or is for the purpose of an activity requiring an Industrial Emissions Licence.	08-04-20	COOLEENY, M	N/A	N/A
20156	APPLICATION FINALISED	Power	James	as constructed dwelling, previously approved under planning reference 18600512, changes to include: reduced footprint at north west corner of house (omission of bay that previously accommodated a bedroom/play area to ground floor and omission of bedroom no. 2 on first floor), modifications to internal layout over 2 floors to accommodate reduced floor area, omission of stone facing to all areas proposed apart from bay window over 2 floors on south elevation, omission of window to ground floor on south elevation between living room and dining room, omission of 3 no. rooflights and all associated site works	16-04-20	LEIGH, TWO-M	N/A	N/A
20166	APPLICATION FINALISED	Holohan	Stephen and Lorna	extension and carry out renovations to existing dwelling along with proposed new entrance to replace existing entrance	14-06-20	MONSLATT, K	N/A	N/A
19601320	APPLICATION FINALISED	Stokes	Ann	change of use of an attached post office and a garage, to raise the roof and add a second floor over both the post office and garage and to construct an extension to the rear of the garage, all to provide a 2 bed granny flat extension to an existing 4 bed single storey dwelling, 2 of the bedrooms of the dwelling will be relocated to the granny flat, to maintain a total number of 4 bedrooms, and all associated site works	18-06-20	GORTNAHOE	N/A	N/A
19600992	APPLICATION FINALISED	Duggan	Padraig and Siobhan	a) renovation of dwelling including internal alterations and elevational alterations b) single storey extension to rear of dwelling c) renovation of existing rear outbuilding and conversion to provide living space, including elevational alterations d) construct entrance gate to side of dwelling and to block up existing side entrance e) alterations to garden wall including insertion of access gate and door f) relocation of existing septic tank and pump chamber g) all associated site development works. The development consists of carrying out works to Recorded Protected Structures reference numbers S519 two storey house, S520 outbuilding and S521 single storey outbuilding	02-07-20	RIVER STREET	N/A	N/A
20362	APPLICATION FINALISED	Guinan	P.J.	for the erection of 1 no. 500kw wind turbine(hub height 50.00m / blade tip height 73.50m and the construction of a 14.00 sq.m control building / electrical sub-station, site entrance, site access track and hard standing and all ancillary works.	18-07-20	GRAIGAMAN,	N/A	N/A
20463	APPLICATION FINALISED	Cantwell	Annastasia	conversion of existing garage to habitable space and build a bedroom extension to the rear of my existing dwelling including associated site works	18-07-20	KILLENAULE	N/A	N/A

20524	APPLICATION FINALISED	Hickey	Denis & Claire	2 no. as constructed extensions to an existing dwelling and also planning permission to construct a new extension to an existing dwelling and all associated site development works	21-07-20	TWO-MILE-BC	N/A	N/A
20618	APPLICATION FINALISED	Maher	TJ	(1) Retain existing 2 no. meal bins as erected and (2) Permission to construct a new four span A-roof shed comprising of cubicles and slatted underground effluent tank and all associated site works on my farm	12-08-20	MONSLATT, K	N/A	N/A
20641	APPLICATION FINALISED	Quinlan	Conor and Ciara	change of house design and site layout to that previously granted under Planning Reference 19600715	17-08-20	GARRANROE,	N/A	N/A
20757	APPLICATION FINALISED	Ryan	Mary	new entrance and gates to existing premises with all associated site work	06-09-20	BALLYMURRE	N/A	N/A
20340	APPLICATION FINALISED	McGuire	Josephine	a) 3 no. domestic storage sheds, b) hard-standing areas, and c) internal garden walls, and including all associated site works	14-09-20	LISKEVEEN, LI	N/A	N/A
20802	APPLICATION FINALISED	Bord Na Mona Powerge		the erection of a guyed wind monitoring mast, with instruments, up to 100m in height - the purpose of the proposed mast is to assess the suitability of the company's adjacent lands for wind farm development	16-09-20	LONGFORDPA	N/A	N/A
20814	APPLICATION FINALISED	Hayes & Joanne O'Brier	Aidan	a two-storey dwelling house, domestic garage, waste water treatment and disposal system, entrance and all associated site works	20-09-20	BOULABEHA,	N/A	N/A
20846	APPLICATION FINALISED	James and Michael Lan		construction of loose straw shed and all associated site works. Retention for roofless cubicle with flow channel and feeding area also required	23-09-20	POYNSTOWN,	N/A	N/A
20857	APPLICATION FINALISED	Phelan	Brendan and Louise	construction of an extension to house with all associated site works	24-09-20	MOYNETEMP	N/A	N/A
20387	APPLICATION FINALISED	Mockler	Sean	construction of a part 2-storey, part single storey detached dwelling; (b) detached garage; (c) alterations to and continued use of the existing site entrance; (d) new wate-water treatment system and percolation area; (e) all associated site works	28-09-20	GARRAUN, TV	N/A	N/A
20397	APPLICATION FINALISED	Hackett	David & Rosaleen	a) Proposed new single storey bedroom extension to side of the existing dwelling: b) Associated alterations to the existing dwelling external elevations to accomodate proposed new extension and internal layout; c) All associated site works. d) Retention of the existing gable wall and associated roof structure of the previously constructed exempted development extension	28-09-20	BALLYDAVID,	N/A	N/A
20341	APPLICATION FINALISED	Joyce	Pat and Louise	extension to our existing dwelling house, and all associated site works and services	29-09-20	KILBRANNELL,	N/A	N/A
20372	APPLICATION FINALISED	Durnin	Craig	construction of kitchen/living, bedroom extenstion to rear, internal modifications to existing house, convert outbuildings to form new utility room & WC, form new entrance, construct double garage	05-10-20	RATHMANNA	N/A	N/A
19601478	APPLICATION FINALISED	Manton	Anne Marie	construction of three bedroomed bungalow with connection to existing septic tank on site, close up existing entrance on site and construct new site entrance with all associated site works	07-10-20	URARD, URLI	N/A	N/A
20909	APPLICATION FINALISED	Rochford	Patrick	Permission to erect an over ground slurry storage tank and all associated site works	11-10-20	FENNOR	N/A	N/A
20976	APPLICATION FINALISED	Bord na Mona PLC		(i) the erection of a roofed structure to the rear of the existing industrial shed, (ii)the erection of signage on existing screen wall to the front elevation	26-10-20	KILLEENS, BAL	N/A	N/A

20399	APPLICATION FINALISED	Phelan	John & Lisa	construction of dwelling house, domestic garage, entrance, driveway, septic tank and percolation area and all associated site works	17-11-20	INCHIROURKE	N/A	N/A
20949	APPLICATION FINALISED	and Tanya McGahey	Ian Stanley	a dwelling, domestic garage, entrance, install waste water treatment system, including associated site works	01-12-20	URARD, GORT	N/A	N/A
20825	APPLICATION FINALISED	Lisheen III Wind Farm L		works within the boundary of the existing Lisheen 110 kV Substation, the proposed works will comprise: replacement and improvement works to an existing electrical transformer bund; construction of two new concrete plinths for associated electrical infrastructure; installation of electrical infrastructure; and underground cable connection from the electrical infrastructure to the existing substation control building. The application is accompanied by a Planning and Environmental Report and Appropriate Assessment Screening Report	03-12-20	KILLORAN, M(	N/A	N/A
201044	APPLICATION FINALISED	Meighan	John and Annemarie	a rural two storey sustainable dwelling, effluent treatment system and polishing filter, roadside entrance and all associated site works	07-12-20	FOILCAMIN, C	N/A	N/A
20943	APPLICATION FINALISED	Holohan	Frank	(a) Existing single storey living room extension to side of the existing dwelling; (b) Existing single storey domestic garage with part mezzanine storage space; (c) All associated site works	14-12-20	MELLISSON	N/A	N/A
201246	APPLICATION FINALISED	Cahill	Eileen and Michael	1. Demolition of a single storey structure (an extension consisting of residential areas and a portion of a grocery store) to the rear of our two-storey property. 2. Construction of a single storey residential extension to the rear of our two-storey property. 3. Material Change of Use: The rear part of the grocery store is to be demolished and converted to residential areas, as part of the single storey extension.4 Construction of new parking areas, footpaths, planting beds, patio and hard landscaping areas and all associated site works. Notes: The structure to be demolished forms part of the dwelling and grocery store. The front part of the store is located within the perimeter of the two-storey property and as such, is to be retained as a grocery store	17-12-20	GORTNAHOE	N/A	N/A
20171	APPLICATION FINALISED	SMGK Developments Lt		a) 16 no. part two-storey, part single storey detached dwellings, comprising of 5 no. five bedroom dwellings and 11 no. four bedroom dwellings, b) 1 no. part two-storey, part single storey block of 2 no. three bedroom semi-detached dwellings, c) 1 no. single storey detached three bedroom dwelling, d) proposed new site entrance, access roads and footpaths, e) new site boundary treatments, f) new waste, water and utility service connections and all associated site works	22-12-20	BORRIS, TWO	N/A	N/A
201269	APPLICATION FINALISED	Blake	Patrick	signage and support structure	02-01-21	MONARAHEE	N/A	N/A
201268	APPLICATION FINALISED	Blake	Patrick	signage and support structure	02-01-21	MONARAHEE	N/A	N/A
201177	APPLICATION FINALISED	Gerard McGuire & Aine		a) construction of a part 2-storey, part single storey detached dwelling, b) detached garage, c) new site entrance, d) new wastewater treatment system and percolation area, e) new bored well and f) all associated site works	21-01-21	LISKEVEEN, LI	N/A	N/A
201207	APPLICATION FINALISED	Cahill	Richard	domestic garage/fuel store including associated site works	08-02-21	GORTNAHOE	N/A	N/A
201518	APPLICATION FINALISED	Maher	Jim and Breda	build an electricity sub station and carry out all associated works adjacent to Cheese Production Unit, works are within the curtilage of a protected structure S778	18-02-21	COOLEENEY	N/A	N/A

20987	APPLICATION FINALISED	O'Brien	TJ	demolition of a previous dwelling house and retention permission for a replacement dwelling as constructed, also for permission to build an extension to the front of the dwelling house and provide a new septic tank and percolation area	23-02-21	PARKSTOWN,	N/A	N/A
201581	APPLICATION FINALISED	Ryan	Eoin	construction of a livestock underpass, effluent holding tank and all associated site works	24-02-21	GORTNAHOO	N/A	N/A
201592	APPLICATION FINALISED	& Shane Hanrahan	Jessica O'Brien	extension to rear of dwelling, roof light, septic tank with percolation area, shed and all associated siteworks	25-02-21	ARCHESTOWN	N/A	N/A
2143	APPLICATION FINALISED	Flanagan	PJ	dwelling and garage as constructed, previously approved under planning reference 08510121 and all associated site works	14-03-21	GALBOOLA, LI	N/A	N/A
201258	APPLICATION FINALISED	Cantwell Quality Water		demolition existing workshop and replace with a larger workshop area consisting of a 5 bay portal steel frame building and replace grass area with carparking with all associated site works and ancillary works	18-03-21	GRAIGUEPAU	N/A	N/A
2183	APPLICATION FINALISED	Stanley	Howard	a slatted house with underground slurry storage and all associated site works	24-03-21	RATHBEG, GO	N/A	N/A
201284	APPLICATION FINALISED	Patricia Cussen & Gary		a) 2 no. proposed new single storey extensions to side and rear of the existing single storey dwelling, b) Associated alterations to existing dwelling external elevations to accommodate proposed new extensions & internal layout, c) Alterations to previously approved planning application register reference 19/600446 for the relocation of 2 no. existing lines of percolation pipework, d) Demolition of existing shed structure, e) All associated site works	31-03-21	LAHARDAN U	N/A	N/A
21118	APPLICATION FINALISED	Dunne	Eimear	construction of extensions and alterations to existing dwelling house, upgrading of existing waste water treatment system and construction of new garage with all associated site works	31-03-21	BOULABEHA,	N/A	N/A
21140	APPLICATION FINALISED	Power	Cait	demolition of an existing dwelling and adjoining sheds and construction of a new single storey dwelling, new site entrance, new septic tank and percolation area, private well and all associated site works	06-04-21	GORTNAHOE	N/A	N/A
201230	APPLICATION FINALISED	Killeen	Gary and Tracy	two storey dormer dwelling house, domestic garage, treatment tank, percolation area, entrance and ancillary site works	07-04-21	BORRIS, TWO	N/A	N/A
21172	APPLICATION FINALISED	Stokes	James	change the house design only to previously granted Permission Planning Register Reference 16601129	13-04-21	GRAIGAMAN,	N/A	N/A
21196	APPLICATION FINALISED	Stanley	Richard	a slatted house with underground slurry storage and all associated site works	15-04-21	KILCOOLEY, G	N/A	N/A
2165	APPLICATION FINALISED	McCormack	Barry	to build a dwelling, domestic garage, install septic tank including associated site works	21-04-21	TOWNAGHA	N/A	N/A
2112	APPLICATION FINALISED	Power	Eddie	a residential development consisting of the construction of a vehicular entrance, internal roadway, footpaths, foul water pumping station and connection to mains services together with all associated site works to provide for 6 serviced sites, full planning permission is also being sought as part of this application for a single storey dwelling house, detached garage and associated siteworks on site number 1	06-05-21	BORRIS, TWO	N/A	N/A
21319	APPLICATION FINALISED	Drohan	Walter and Monica	construction of new boundary wall to the rear of house with all associated site works	09-05-21	BORRIS, TWO	N/A	N/A

				the following yard areas; hardcore truck parking area yard No. 1; hardcore circulation yard No. 2 & hardcore intermittent overspill parking area yard No. 3. hardcore roadway access to Yard 3 to the North Western Boundary, concrete yard No. 4. Also for the following buildings & structures; existing workshop building no 2 extension with revised roof structure and cladding from a round roof to a portal frame roof structure; flat roof store building no 4; extended roof canopy to the office building no 1; workshop extension building no 5 and open canopy to building no 5; signage & flagpoles; portacabin canteen building no 6; parts storage container no 8; wastewater treamtent plant and associated percolation area. Retention permission for signage on workshop extension building no. 5, signage along public road boundary wall (3no.) and for 7no. flagpoles along front boundary adjacent to main road. Planning permission for the proposed setting back / rebuilding of western boundary wall to achieve sightlines from main entrance. Retention				
20490	APPLICATION FINALISED	Boyle	Micheal	of change of use for the site to light industrial & commercial use construction of 1) a slatted shed and 2) extension of existing silage slab and carry out all associated site works	20-05-21	LEIGH, TWO-M	N/A	N/A
21443	APPLICATION FINALISED	Hayes	Edward	a) internal and external refurbishment to existing cottage dwelling, b) constructed extension to existing cottage dwelling, c) replace existing septic tank with new septic tank system and percolation area, d) demolish existing extension to rear of cottage, e) upgrade and widen existing entrance to make safe the overall dwelling with all associated site works	01-06-21	LEIGH, TWO-M	N/A	N/A
21253	APPLICATION FINALISED	Fogarty (NCP Tiling Ltd.	David	a) construction of a new single storey prefabricated portacabin classroom structure complete with ramped/stepped access routes, b) new play area complete with perimeter fencing, c) connection to existing on site services and d) all associated site works	06-06-21	NEWTOWN, L	N/A	N/A
21492	APPLICATION FINALISED	Board of Management,		construction of a new agricultural building consisting of cattle shed with cubicle and slatted accommodation and underground effluent storage, in addition, with ancillary site works	08-06-21	BORRIS, TWO	N/A	N/A
21503	APPLICATION FINALISED	Broomhill Dairy Ltd		extensions to the main building on site including all other associated site development works above and below ground - the extensions to the main building are to the northern, southern, eastern and western elevations of the existing recycling facility and measure c. 1,015.86 sqm., extensions to the Biofilter that is located to the rear of the building are also sought (c. 43.23 sqm.), staff welfare prefabricated structure located to the north of the site (c. 65.49 sqm.), 2 no. storage/maintenance containers (c. 26.6 sqm.), toilet block (c. 5.1 sqm), Bio-Filter Condenser Tank (c. 72.4 sqm.) and 2 no. Firewater retention ponds (c. 713.17 sqm.) - the development relates to a Biological Waste Treatment Facility which is operated under a Waste Licence (W0259-01) granted by the Environmental Protection Agency	09-06-21	BROOMHILL, I	N/A	N/A
21520	APPLICATION FINALISED	Starrus Eco Holdings Lt		proposed construction of a two storey dwelling house, domestic garage, provision of foul and surface water disposal, site landscaping and all associated site works	13-06-21	BALLYBEG, LIT	09-07-21	C
201374	APPLICATION FINALISED	and Margaret Kelleher	Jamie Crowe		14-06-21	CLONAMICKL	N/A	N/A

20550	APPLICATION FINALISED	Starrus Eco Holdings Ltd		(1) an increase in the annual waste intake from 45000 tonnes/year to 80,000 tonnes; (2) single storey extensions to the east and west of the existing building (having a combined floor area of 6,083m2), (3) relocation of existing firewater lagoon (324m2), (4) construction of new firewater lagoon (401m2) and all associated site works and services to accomodate the biological treatment of the additional organic residues and production of compost. The existing biological treatment of the additional organic residues and production of compost. The existing biological treatment process is carried out in accordance with an Industrial Emissions Licence granted by the Environmental Protection Agency. An Environmental Impact Assessment Report (EIAR) shall be submitted with this planning application	17-06-21	BALLYBEG, LIT	16-07-21	C
21569	APPLICATION FINALISED	Campion	Loughlin	conversion of existing shed to milking parlour, and dairy and build new plant room, holding yards, cattle crush and slatted tank	22-06-21	KILBRAUGH, C	N/A	N/A
201152	APPLICATION FINALISED	O'Mahony	Patricia	a) An extension to existing attached domestic storage shed, b) An existing domestic storage shed/garage, c) elevational amendments to dwelling and attached domestic storage shed, d) a site entrance and all associated site works	23-06-21	LEIGH, TWO-M	N/A	N/A
201261	APPLICATION FINALISED	Quirke	Dan	change of use from car showroom and office/store to light industrial/food production area with all associated site work	01-07-21	BALLYMURRE	N/A	N/A
21630	APPLICATION FINALISED	Bd. of Management, Gc		extensions and alterations to existing school and all associated site works	01-07-21	GORTNAHOE	N/A	N/A
21651	APPLICATION FINALISED	Cantwell	Catriona	dwelling, domestic garage/fuel store, construct entrance, install waste water treatment system including associated site works	06-07-21	NOARD, TWO	N/A	N/A
21709	APPLICATION FINALISED	Revive Environmental H		building (3657 sq m) with a car park and access road, commercial yard area and access road, truck prep building (110 sq m), 2 m high boundary architectural fence, signage, public lighting, solar panels to the building roof, an on-site waste water treatment system and associated polishing filter bed percolation area, rainwater harvesting tank, emergency storage tank, attenuation tank, bored well and all associated site works - application is accompanied by a Natura Impact Statement (NIS)	13-07-21	COOLEENY, M	N/A	N/A
21193	APPLICATION FINALISED	Ryan	Donal	the extension of a dwelling house and the construction of a garage, storage shed and associated site works	18-07-21	BALLYDAVID	N/A	N/A
21752	APPLICATION FINALISED	James and Michael Lani		construction of cubicle facility with underground effluent tanks and all associated site works. Permission for Retention of cubicle facility with underground effluent tanks and all associated site works is also required	20-07-21	CLONAMOND	N/A	N/A
21790	APPLICATION FINALISED	Kelly	Joey	a dwelling, domestic garage, entrance, bore well, install septic tank sewerage system including associated site works	25-07-21	MARDYKE	N/A	N/A
21828	APPLICATION FINALISED	O'Sullivan	Frank	to construct dwelling house with domestic garage, entrance, effluent treatment system together with all associated site works	03-08-21	GARRANROE	N/A	N/A
201603	APPLICATION FINALISED	Hayde	John	construction of a one and a half storey extension to the side of my dwelling, minor modifications to the existing dwelling and all associated site development works	05-08-21	URARD, GORT	N/A	N/A

21269	APPLICATION FINALISED	Power	Cormac & Laura	of existing garage and full Planning Permission for the following works: a) Proposed new single storey extension to rear of the existing dwelling: b) Partial demolition of existing extension to rear of dwelling c) Associated alterations to existing dwelling external elevations to accommodate proposed new extension and packaged wastewater treatment system and polishing filter e) Reconfiguration of 2 no. existing vehicular entrances to provide 1 no. new vehicular entrance f) all associated site works	31-08-21	KILBRENNAL,	N/A	N/A
21739	APPLICATION FINALISED	Eircom Ltd		construction of an 18 metre high free standing communications structure with its associated antennae, communication dishes, ground equipment and all associated site development works, the development will form part of Eircom Ltd existing telecommunications and broadband network	31-08-21	KILCOOLEY, G	09-09-21	C
21794	APPLICATION FINALISED	and Austin Morrow	Ruth Kelly	a dwelling, entrance, bore well, install waste water treatment system including associated site works	09-09-21	MARDYKE	N/A	N/A
21675	APPLICATION FINALISED	Moyne Community Caf		change of use of existing building from health centre to a cafe and shop, works will involve internal layout alterations and some external alterations to the building including outdoor dining area with all associated site works	23-09-21	MOYNETEMP	N/A	N/A
21742	APPLICATION FINALISED	McGuire & Leo Walsh	Siobhan	construction of a new two storey dwelling with garage, entrance and packaged wastewater system and polishing filter/percolation area with all associated siteworks	27-09-21	LISKEVEEN, LI	N/A	N/A
211177	APPLICATION FINALISED	O'Grady	James, Mary Jo and Jo	construction of 2 no. livestock underpasses and effluent holding tanks and all associated siteworks	05-10-21	COOLEENY, M	N/A	N/A
211272	APPLICATION FINALISED	The Reps of James Gild		existing domestic garage with all associated site works	21-10-21	RATHMANNA	N/A	N/A
211275	APPLICATION FINALISED	Coffey	Breda	to retain domestic garage as constructed includng associated site works	21-10-21	KILLENAULE	N/A	N/A
21588	APPLICATION FINALISED	Delaney	Siobhan Majella	construction of a two storey dwelling with a packaged waste water treatment system , raised bed polishing filter and all associated site works	10-11-21	RAHINCH, LIT	N/A	N/A
211390	APPLICATION FINALISED	Stokes	Maureen	the previously constructed single storey extension and alterations carried out to my dwellinghouse	11-11-21	KYLEMAKILL	N/A	N/A
211171	APPLICATION FINALISED	Irish Bioeconomy Foun		1) Demolition of the existing loading bay canopy 2) Change of use from maintenance depot to an agri-food sector Research and Development Unit for light indutrial use with ancillary office space 3) Extension of the existing first floor accomodation by 169 sqm. 4) Construction of an external stair to the rear, additional windows to the front and rear elevations with an external perforated printed mesh screen fixed to the front and south gable elevation, canopy over the front entrance door and an array of PV Panels fixed to the roof 5) Landscape works including a waste water treatment plant and car parking with 4 no. electric vehicle chargers	18-11-21	KILORAN MO\	N/A	N/A
211199	APPLICATION FINALISED	Carroll	Joan	build a dwelling, domestic garage, entrance, bore well, install waste water treatment system including associated site works	18-11-21	INCHIROURKE	N/A	N/A
21524	APPLICATION FINALISED	and Aoife Kelly	Adrian Maher	a dwelling, domestic garage, entrance, install waste water treatment system including associated site works	18-11-21	FOILACAMIN	N/A	N/A
211457	APPLICATION FINALISED	Lanigan	Pat & Eileen	to construct alterations and extensions to house wth all associated site works	25-11-21	ARDLEIGH	N/A	N/A
21868	APPLICATION FINALISED	and Nicole Kerrigan	James Maher	a dwelling, domestic garage, entrance, install waste water treatment system including associated site works	28-11-21	TWO MILE BC	N/A	N/A

211479	APPLICATION FINALISED	Sean Campion	Lyndsay Wall and	development will consist of a proposed ground and first floor extension to the side and rear of existing dwelling, internal modifications to rear of existing dwelling, new treatment system and percolation area, site landscaping and all associated site works. The existing dwelling is noted as a protected structur ref S442 on the South Tipperary County Council Development Plan 2009 record of protected structures	01-12-21	GORTEENRAI	N/A	N/A
211162	APPLICATION FINALISED	Mockler	Sean	alterations and change of use to revert to a residential dwelling to include demolition of existing rear extension and construction of a first floor extension to include dormer windows to the fore, with ancillary site works	07-12-21	BORRIS, TWO	N/A	N/A
211548	APPLICATION FINALISED	Cussen & Paul Dolan	Joann	construction of a dwelling house, domestic garage, proprietary treatment system and percolation area and for all ancillary services and site works	15-12-21	MOYNEARD, I	N/A	N/A
211588	APPLICATION FINALISED	Moycarkey Borris GAA (		construction and erection of 6M high lighting standards with LED Lighting around the walk of the existing pitch with all associated site works	23-12-21	BALLYDAVID,	N/A	N/A
211297	APPLICATION FINALISED	Butler	Niamh	construction of a two-storey dwelling, packaged wastewater treatment system and polishing filter, domestic garage, site entrance and all associated site works	06-01-22	PARKSTOWN,	N/A	N/A
211190	APPLICATION FINALISED	Dwyer	Paul	change of use of agricultural buildings to residential which includes modifications and upgrades in order to provide a single storey dwelling house and also retention of septic tank, polishing filer and all associated site works	08-01-22	RATHMANNA	N/A	N/A
211195	APPLICATION FINALISED	Butler	Orla	construction of a dwelling house, entrance, driveway, treatment system, percolation area and all associated site development works	14-01-22	BALLINASTICK	N/A	N/A
211321	APPLICATION FINALISED	Rochford	Ellen	build a dwelling and domestic garage including associated site works	15-01-22	PIKE STREET, I	N/A	N/A
21915	APPLICATION FINALISED	and Brian Purcell	Oilbhe Cantwell	a dwelling, domestic garage, alter existing agricultural entrance to facilitate agricultural and dwelling entrance, install septic tank including associated site works	15-01-22	CLOONCLEAG	N/A	N/A
211656	APPLICATION FINALISED	Reps of Malachy Cullag		rear single storey extension to existing dwelling house, retention permission is also sought in respect of a domestic garage and fuel store along with all associated site works	18-01-22	KEVIN'S PARK	N/A	N/A
211753	APPLICATION FINALISED	Jamie Crowe	Margaret Kelleher anc	on the grant of outline permission (Ref. No.P20/1374 of outline permission) for development at this site, the development will consist of the proposed construction of a two storey dwelling house, domestic garage and car port, provision of foul and surface water disposal, site landscaping and all associated works.	08-02-22	GORTNAHOE	N/A	N/A
211811	APPLICATION FINALISED	Healy	Joseph & Anthony	construction of a cubicle shed over existing and proposed slurry tank and all associated site works	17-02-22	NEW HILL, TW	N/A	N/A
211831	APPLICATION FINALISED	Heffernan	Ciara	construction of a granny flat to the rear of existing dwelling and permission to demolish part of existing garage/shed and replace/upgrade the existing septic tank and percolation system with all associated site work	18-02-22	GLENGOOLE I	N/A	N/A

211128	APPLICATION FINALISED	Soleirtricity Lisheen Ltd		construction of a Solar PV development with a maximum export capacity (MEC) of up to 122MW comprising of ca. 214,800 no. photovoltaic panels laid out in arrays, the construction of a 38kV substation, (ca.57.31m2 x 4.45m tall) along with associated ancillary development including 30 no. Transformer Stations (ca. 7.27m2 x 2.6m) with an integrated bund, 716 string Inverters, 1 no. DNO Substation Building (16.28m2 x 5.42m), 1 No. Storage and maintenance building (ca. 57.31m2 x 4.45m tall), 38 no. CCTV cameras mounted on ca. 3.8m high poles, perimeter security fenching and all ancillary works, the total development area will be ca. 77ha.	24-02-22	DERRYFADDA	N/A	N/A
211524	APPLICATION FINALISED	O'Dwyer	John	construction of a single storey rear extension to house consisting of additional bedrooms and living area with all associated site works including new connection to public mains and public sewer existing farm access road and existing hard surface yard and PERMISSION to relocate the existing agricultural entrance to provide a new agricultural entrance and for agricultural shed and all associated site works	01-03-22	BLACKCASTLE	N/A	N/A
21910	APPLICATION FINALISED	Darmody	Cyril and Ailish	to build an agricultural storage building over an existing silage base and carry out all associated works	15-03-22	DRUMGOWEI	07-04-22	C
2269	APPLICATION FINALISED	Maher	Pierce	a two storey dwelling, domestic garage, entrance, install waste water treatment system including associated site works	24-03-22	MANSELSTOV	N/A	N/A
211198	APPLICATION FINALISED	Caschera	Lorenzo and Marcelin	extension of existing dwelling house and PERMISSION for relocation of septic tank and percolation area and carry out all associated works	28-03-22	FENNOR, URL	N/A	N/A
211861	APPLICATION FINALISED	McCormack	Maurice	construction of a new dwelling, domestic garage, entrance and waste water treatment system with all associated site works	06-04-22	ARCHESTOWN	N/A	N/A
22169	APPLICATION FINALISED	Ely	Mark and Clodagh	To construct a single storey dwelling house, domestic garage, septic tank and percolation area treatment system, site entrance and all associated site works	24-04-22	COOLEENY, M	N/A	N/A
22207	APPLICATION FINALISED	Tori Butler	Gavin Fitzgerald &	construction of a single storey dwelling with entrance, garage, septic tanks system and percolation area with all associated siteworks	04-05-22	COALBROOK	N/A	N/A
22236	APPLICATION FINALISED	Ely	Patrick & Bernadette	Change of use of existing commercial hairdressing and beauty treatment salon to domestic dwelling	15-05-22	BALLYDAVID,	N/A	N/A
22263	APPLICATION FINALISED	McCormack	Richard	(a) a new single storey prefabricated portacabin classroom structure complete with ramped/stepped access routes; (b) new play area complete with perimeter fencing; c) connection to existing on site services; d) all associated site works	24-05-22	MAIN STREET,	N/A	N/A
2260042	APPLICATION FINALISED	Scoil Mochaomhóg Nac	The Board of Manage	the extension and redesign of the previous granted, permission for extension to workshops (planning ref no. 20/1258), this application related to the enlarging the workshop area of a portal steel frame building and permission for a storage yard area to the rear of this workshop area for storage of both vehicles and materials in connection with our business etc. with all associated site works and ancillary works	22-06-22	BORRIS, TWO	N/A	N/A
2260228	APPLICATION FINALISED	Water Services Ltd	Cantwell Quality	build a dwelling, domestic garage, entrance, install waste water treatment system including associated site works	10-07-22	GRAIGUEPAU	N/A	N/A
211567	APPLICATION FINALISED	Andy Kelly	Niamh Bergin and		19-07-22	KNOCKABRITT	N/A	N/A

2260256	APPLICATION FINALISED	Shortall	Kieran and Orla	a) proposed new single storey extension to the existing dwelling; b) associated alterations to existing dwelling external elevations to accommodate proposed new extension & internal layout; c) replacement of existing septic tank with a proposed new wastewater treatment system and percolation area; d) all associated site works	20-07-22	BALLYDAVID,	N/A	N/A
22406	APPLICATION FINALISED	Bridget Neary	Thomas Ryan &	a dwellinghouse, entrance, septic tank and percolation, new bore well and all associated works. Extension of duration to previous planning ref: 17/600274	04-08-22	RATHBEG, GO	N/A	N/A
22201	APPLICATION FINALISED	Tipperary ETB & Board		(1) a two-storey extension to the front (northeast) of the existing school comprising a new school entrance foyer area at ground floor level, complete with Reception/Admin Room, 3 No. meeting Rooms and all associated sanitary & amp; storage facilities together with an externally accessed Boiler Room. The upper level, accessed via stairs/lift area from Ground Floor, to comprise a 2-class room ASD unit with all associated ancillary accommodation and 5 Mainstream Class rooms, with connections to the existing school building. (2) Internal alterations to the existing school building to include the provision of a new music room and modifications to existing entrance foyer, together with revisions to parking and all associated site works.	08-08-22	KILLENAULE	N/A	N/A
2260297	APPLICATION FINALISED	O' Shea	Rosemary	the elevational and internal layout changes along with minor floor area increase (23.7m2) to that granted under P314479, retention permission is also sought for the construction of 1) domestic garage to side of existing dwelling house, 2) domestic storage shed together with all associated site works	11-08-22	BALLYNASTICI	N/A	N/A
22419	APPLICATION FINALISED	Bourke	Kevin & Delores	the as constructed extensions to existing dwelling	14-08-22	MONSLATT, K	N/A	N/A
22453	APPLICATION FINALISED	Rachael Quinlivan	John O'Dwyer &	a bungalow dormer type residence, vehicular entrance, septic tank system and raised percolation area.	25-08-22	DUNGUIB	N/A	N/A
22389	APPLICATION FINALISED	Lawlor	Elizabeth & John	a.) change of use from nursing home to private residence, b.) internal alterations as constructed. This is a protect Structure ref. S049	04-09-22	BAILEY STREE	N/A	N/A
22488	APPLICATION FINALISED	Duggan	Tommy & Miriam	a dwelling house and septic tank, to refurbish the existing derelict dwelling on site and convert it to a domestic garage and to relocate the existing entrance to the site	19-09-22	GLENGOOLE	N/A	N/A
2260386	APPLICATION FINALISED	Dunne	Jack	(a) existing calf rearing shed (b) Permission to construct an agricultural shed consisting of straw bedded area, cubicles, feeding area and underground slatted slurry storage tanks in place of existing silage slab (c) Permission to construct a silage slab and a maize slab and all associated siteworks	19-09-22	BOOLEBEHA	N/A	N/A
22526	APPLICATION FINALISED	Morris and Caroline Mc	Kieran	extension and renovation of dwelling house (which is connected to existing mains service), demolition of a bay window, alterations to elevations, solar panels on the roof of the dwelling house, landscaping and all associated site works	13-10-22	DUN NA RI, T\	N/A	N/A
22524	APPLICATION FINALISED	Morrissey & Amy Murp	Patrick	renovations and extensions to existing house and to upgrade existing waste water treatment system and all associated site works	13-10-22	BLACKCASTLE	N/A	N/A

2260247	APPLICATION FINALISED	O' Shea	Rory and Therese	(1) the demolition of a dilapidated two-storey dwelling and the subsequent construction of a two-storey dwelling (2) there will be improvement and refurbishment works to a dilapidated outbuilding (single storey in height). A portion of the outbuilding will be demolished to facilitate the correct realignment of new works (3) the installation of a certified wastewater treatment system and a percolation area, to all appropriate standards (4) the construction of a site entrance, driveway, parking areas, footpaths, patio and hard landscaping areas. A detailed proposal has been made for the site entrance to include, entrance gates, hedging, walls and piers and drainage measures (5) the comprehensive landscaping of the site consisting of new grass areas, planting beds, trees and shrubbery, a walled garden and all associated site works. The proposed dwelling will primarily consist of a two storey element however a portion of the dwelling will also consist of single storey elements to the front and rear elevations.	26-10-22	GALBOOLA, LI	N/A	N/A
2260486	APPLICATION FINALISED	Dempsey	Catherine & Shane	extension to side of existing house and full permission to install new septic tank and percolation area	08-11-22	BALLYBEG LIT	N/A	N/A
22561	APPLICATION FINALISED	Ryan	Gearoid and Miriam	alterations and extension to house with all associated site works	09-11-22	BALLYDAVID,	N/A	N/A
22583	APPLICATION FINALISED	Ryan	Martin and Ailish	a dwelling, domestic garage, entrance, install septic tank, including associated site works	23-11-22	FENNOR, URL	N/A	N/A
2260546	APPLICATION FINALISED	Anne Marie Donoghue	Aidan Maher &	a new single storey dwelling house, detached garage, entrance, septic tank together with all associated site works	01-12-22	CLOONCLEAG	N/A	N/A
22622	APPLICATION FINALISED	Doherty	Eddie	an extension to dwelling house and all associated works	04-01-23	LAHARDEN UI	N/A	N/A
22397	APPLICATION FINALISED	Tobin	Adrian and Andrea	a residential unit ancillary to and attached to side of existing dwelling house.	14-01-23	KNOCKABRITT	N/A	N/A
22654	APPLICATION FINALISED	Foley	Joan	(1) the existing first floor living accommodation and associated velux type windows to the rear elevation (2) the existing canopy type open porch to front elevation (3) the existing front door and window fenestration design to front elevation of existing dwelling	01-02-23	CASHEL ROAD	N/A	N/A
22659	APPLICATION FINALISED	O Dwyer	Marie	extension and alterations to existing derelict house and associated site works	04-02-23	RIVER STREET	N/A	N/A
22571	APPLICATION FINALISED	Adam Norton	Kate Howard	the contruction of a combined single and two storey dwelling, garage, entrance, wastewater system, connection to mains water supply, soak pits and all other associated site works	08-02-23	POYNSTOWN,	N/A	N/A
2260683	APPLICATION FINALISED	Generator & Pump Ser	EGPS Ltd (Electrical	1) to construct an open ended single storey extension to the side of the existing premises, 2) permission to construct a stand-alone single storey workshop/store to the rear of our site, and 3) retention permission for as constructed single storey storage shed adjoining existing structure with all associated sitework and ancillary work	11-02-23	NOARD, TWO	N/A	N/A
2260694	APPLICATION FINALISED	Boardman	Reg	development of a first floor to dwelling, alterations to ground floor layout, construction of a domestic garage together with all associated site works	15-02-23	LURGOE, KILLI	N/A	N/A
2260618	APPLICATION FINALISED	Mockler	Ciara	a front extension to existing garage/shed and Permission for a new dwelling and garage, new entrance, new septic tank, percolation area, new well and all associated site works	27-02-23	COLDFIELDS,	N/A	N/A

2360018	APPLICATION FINALISED	Maher	Jim and Breda	alterations from previous planning reference's 16600460 and 211000: a) increased basement area and ground floor area, b) revised orientation of extension, c) alterations to elevations and d) all associated works (works are within the curtilage of a protected structure, S778)	08-03-23	COOLEENEY, I	N/A	N/A
22603	APPLICATION FINALISED	Mockler	Sean	alterations and change of use of existing hall to café. Use to include new shop front, rooflight on front roof, pv panels on the rear roof and raising of height of single storey flat roof to rear, with ancillary site works	30-03-23	BORRIS, TWO	N/A	N/A
2360078	APPLICATION FINALISED	Lipinska	Dariusz and Justyna	to partially demolish existing single storey dwelling house together with permission to extend and renovate existing dwelling with provision of first floor accommodation. Permission is also sought to replace existing septic tank with effluent treatment system and new percolation area. Retention permission is also sought in respect of unauthorised development consisting of construction of domestic garage together with all associated site works	02-04-23	GLENGOOLE I	N/A	N/A
2360101	APPLICATION FINALISED	Costello	Ken & Jennifer	the construction and extension of our dwelling consisting of a home office/ hobby room and home gym/study room with all associated siteworks	12-04-23	CURRAHEEN,	N/A	N/A
2337	APPLICATION FINALISED	Ely	Cathal & Regina	alterations & extensions to the rear of the house, demolish existing shed and install new waste water treatment system with all associated site works	13-04-23	MOYNETEMP	N/A	N/A
2360145	APPLICATION FINALISED	Lanigan	John	a walled dungstead and all associated site works	26-04-23	LEIGH, TWO-I	N/A	N/A
2260632	APPLICATION FINALISED	The Board of Managem		an extension to the rear and alterations to the existing school, including all associated site works	30-04-23	COALBROOK	N/A	N/A
2360155	APPLICATION FINALISED	Condon	Damien	extensions and alterations to existing cottage including outhousing, arched wall and associated siteworks	01-05-23	LISKEVEEN, LI	N/A	N/A
2360174	APPLICATION FINALISED	O'Mahony	Martin	the as-constructed extended yard area and excavated ground and Permission to construct two extensions to the existing agricultural sheds including all ancillary site works	07-05-23	DUNGUIB, KIL	N/A	N/A
2360246	APPLICATION FINALISED	Kelly	John and Margaret	new extension to the front and rear of existing dwelling with a new garage and new percolation area and all associated site works	12-06-23	CLOVER LANE	N/A	N/A
23107	APPLICATION FINALISED	Claffey	PJ and Maureen	single storey, two bedroom, kitchen, living and shower room annex to the side of existing property	18-06-23	BALLYDUFF R	N/A	N/A
2360052	APPLICATION FINALISED	Gleeson Quarries Ltd.		an aggregate storage shed (area 1,675 m²) and associated feed hopper, conveyors and screen located within the permitted quarry area (Plan File Ref. No. P04/1356: ABP PL 23.221792), all within an application area of 0.8 Ha.	06-07-23	MANSERGHSI	14-07-23	D
2360320	APPLICATION FINALISED	Quirke	Debbie	the following: a) Permission to demolish/replace existing dwelling and to construct a new replacement dwelling with treatment plant system and polishing filter percolation area, b) permission to change/convert the existing dwelling house to a garage/store for the new dwelling with all associated site works	09-07-23	NOARD, TWO	N/A	N/A

2360053	APPLICATION FINALISED	Walsh	Michael and Noreen	the demolition of the existing dwelling and construct a new replacement dwelling house with landscaping and driveway, waste treatment and discharge area, to retain and make good existing stone out-building to the front of the site to be used as a garage and bin store, to set back entrance 3 meters from the existing entrance with new steel post and rail fencing and gate and all associated site works	12-07-23	CASTLEQUAR	N/A	N/A
2360417	APPLICATION FINALISED	Fitzgerald	Martin	the construction of (i) a cubicle shed extension with underground effluent tank (ii) a calf shed extension and all associated site works	10-08-23	CURRAHEEND	N/A	N/A
2360469	APPLICATION FINALISED	Murphy	Brendan and Ailshe	the construction of a two storey dwelling house, single storey domestic garage, new site entrance to Pike Street R689 public road, provision of connection to existing wastewater pumphouse and all associated site developments works	23-08-23	CROSSCANNC	N/A	N/A
2360229	APPLICATION FINALISED	Moycarkey Coolcroo At		(1) the construction of a maintenance/tool shed, (2) the relocation of long jumps area, (3) the placement of seating in various locations, (4) adding of an external exercise area including equipment and replacing the existing container with a fully equipped temporary container comprising of a meeting/canteen/toilet area. These are changes/additions to permission under PL ref 18600525	25-09-23	LITTLETON, TI	N/A	N/A
2360593	APPLICATION FINALISED	Phelan	Brendan	the previously constructed extension to my agricultural shed and Planning Permission for (1) a new 4 bay calf shed and (2) a new 8 bay cubicle shed including slatted tanks with all associated site works	27-09-23	MOYNETEMP	N/A	N/A
2360608	APPLICATION FINALISED	Campion	Jim	a single storey metal storage shed (domestic use only) and associated hardstanding, and minor alterations to a domestic garage layout & elevations which was permitted as a part of previous Planning Permission Ref. No. P315508	03-10-23	GRAIGUE, URI	N/A	N/A
2360626	APPLICATION FINALISED	Eireann	Uisce	the construction of a new Booster Pumping Station within a 2.0m x 1.2m Kiosk, Lay-by, and all associated works adjacent to the N75	10-10-23	TWO MILE BO	N/A	N/A
23221	APPLICATION FINALISED	Two Mile Borris Grave	N/A	extension to the existing grave yard, access road, new entrance, boundary wall, storage shed, columbarium wall and all associated site works	11-10-23	TWO MILE BO	N/A	N/A
2360499	APPLICATION FINALISED	Tom Flanagan (Chairma	Moycarkey Borris GAA	the construction of an extension to the existing astro pitch area, which consists of a 2m high boundary fencing to the astro area, 6m high lamp standards with LED floodlighting with all associated site works	22-10-23	BALLYDAVID,	N/A	N/A
2360281	APPLICATION FINALISED	Recycling Ltd	Acorn	development consisting of Workshop Building (1242m2), Truck Washout Building (64m2), commercial yard area, new boundary fence and entrance gates, an on-site Wastewater Treatment System and associated polishing filter bed percolation area, attenuation tank, bored well & water storage tank, rainwater harvesting tank, emergency storage tank, solar panels to roof of existing building and all associated siteworks - application is accompanied by an NIS	05-11-23	KILLORAN	N/A	N/A
23181	APPLICATION FINALISED	Lonergan	Martin	the development of a cattle house incorporating slatted tank with slats laid on	07-11-23	FENNOR, URL	28-11-23	C

23244	APPLICATION FINALISED	Stokes	Emma	demolition of existing shed, part demolition of existing dwelling, carry out alterations to existing dwelling and build new single storey extension to existing dwelling, new septic tank with effluent treatment system, alter position of existing site entrance and associated site works	12-11-23	Garraun, Two	N/A	N/A
2360703	APPLICATION FINALISED	Hourihane	Vincent	(A) the change of use of part site area to commercial shop storage, new entrances in rear boundary stone wall and associated concrete hardstanding. (B) site clearance and removal of rubble from collapsed structure. Planning permission for (A) a new boundary fence and gates of steel and timber construction, domestic garage / store of steel frame and cladding and associated hard standing area and all necessary services. This is within the curtilage of a protected structure ref S537	06-12-23	Main Street, K	N/A	N/A
2360472	APPLICATION FINALISED	Morrissey	Eddie	the side extension previously constructed to my house and also for Retention Permission for the existing garden/storage shed at the rear of my site	12-12-23	BLACKCASTLE	N/A	N/A
23256	APPLICATION FINALISED	Miskella	Dolores	(1) as constructed extension to rear of the existing dwelling and for permission to complete this extension and (2) PERMISSION to construct a pitched roof to replace the flat roof to the existing front porch and all associated site works	11-01-24	Ballynastick, C	N/A	N/A
23292	APPLICATION FINALISED	Cooleeney Cheese	N/A	waste water treatment plant with overground tankage up to 6 metres high on a 0.06 hectare site, within the curtilage of protected structure - S778	20-01-24	Cooleeney, M	N/A	N/A
23297	APPLICATION FINALISED	Norton	Patrick	two bay machinery store extension constructed to the existing shed, including all site development works	25-01-24	Longfordpass	N/A	N/A
2360942	APPLICATION FINALISED	Cantwell and Shauna H	Tony	the following works; a) retention of the existing farm access roadway. Full Planning Permission is also sought for the following works: a) construction of a new, part two-storey, part single-storey detached dwelling; b) new detached garage; c) new connections to existing utilities; d) new waste-water treatment system & percolation area; e) works to improve and upgrade the existing agricultural entrance to allow for domestic and agricultural use; f) all associated site works	31-01-24	Moyneard	N/A	N/A
23320	APPLICATION FINALISED	Moloney	Joseph and Josefa	a single storey extension to two storey dwelling house, a new window on the rear elevation of dwelling house, to decommission existing septic tank, for installation of a new wastewater treatment system and polishing filter and all associated site works	17-02-24	Pouldine	N/A	N/A
2360995	APPLICATION FINALISED	Per Rep of Mary Lahert	Liam Lahert	the detached domestic garage adjacent to the dwelling	17-02-24	Crossogues, G	N/A	N/A
2360127	APPLICATION FINALISED	Cummins	Thomas	a) the construction of a single storey detached dwelling; b) a new detached garage; c) a new site entrance; d) new connections to existing utilities; e) a new waste-water treatment system & percolation area; f) all associated site works. Retention planning permission is also being sought for the following works: g) Temporary retention of the existing mobile home unit all associated site works	28-02-24	URARD, GORT	20-03-24	C
2360934	APPLICATION FINALISED	Bolger & Niamh Hanley	Patrick	a single storey extension and alterations to existing dwelling, new garage, alterations to existing front boundary wall and entrance, removal of existing shed, relocation of existing septic tank and all associated site works	28-02-24	Ballintogher	N/A	N/A

2360645	APPLICATION FINALISED	Ely	Louise	a single storey dwelling house, domestic garage, treatment tank, raise bed percolation area, entrance and ancillary site works	10-03-24	MOYNE, THUI	N/A	N/A
2360935	APPLICATION FINALISED	Mockler	Sean	the demolition of existing residential dwelling with the reconstruction of a two storey terrace building as a pre school facility to include 3 classrooms and outdoor play area with ancillary site works to accommodate up to 60 children at any one time with opening hours between 7am to 7pm	17-03-24	Borris, Two M	N/A	N/A
2460057	APPLICATION FINALISED	O Sullivan	Helen	the as constructed garden living room/home office and storage structure with all associated sitework	24-03-24	Ballydavid, Lit	N/A	N/A
2460070	APPLICATION FINALISED	Corcoran	Roseanne	existing domestic garage together with all associated site works	28-03-24	Borris	N/A	N/A
2360767	APPLICATION FINALISED	Cantwell	Sabrina	a new two storey dwelling, garage house with garage, shared entrance, septic tank and percolation area with all associated siteworks	03-04-24	Leigh	N/A	N/A
2460127	APPLICATION FINALISED	Cathal Walsh	Emer Barry &	a) the construction of a new, part 2-storey, part single-storey detached dwelling; b) a new detached garage; c) a new site entrance; d) a new connections to existing utilities; e) a new waste-water treatment system & percolation area; f) and all associated site works	20-04-24	Springhill, Kill	N/A	N/A
2360998	APPLICATION FINALISED	Cantwell	Pat	a) the existing slatted tank and cubicle shed; b) retention of the existing cattle crush / unroofed structure; c) retention of the existing farm access roadway and all associated site works	24-04-24	Moyneard	N/A	N/A
2460090	APPLICATION FINALISED	Brennan	Carmel and Damien	single storey extension to North and West elevations of dwelling and all associated site works	21-05-24	Knockbritta, K	N/A	N/A
2460226	APPLICATION FINALISED	Cian O'Donnell	Seona Cantwell &	a single storey dwelling, proposed vehicular entrance, detached garage, connection to public water mains, new foul treatment tank & percolation area. including all associated site works	22-05-24	Two Mile Bor	N/A	N/A
2460222	APPLICATION FINALISED	Quinlan	Mary	renovations, extensions & alterations to my existing house, and to install a new waste water treatment system with all associated site works	22-05-24	Cooleeny	N/A	N/A
2460231	APPLICATION FINALISED	O Sulllivan	Helen	the as constructed sunroom to the rear of the dwelling with all associated site works	24-05-24	Ballydavid, Lit	N/A	N/A
2460067	APPLICATION FINALISED	Ely	Robert	the construction of a new house, garage and waste water treatment system utilising existing entrance with all associated site works	03-06-24	Boulabeha Mi	N/A	N/A
2460304	APPLICATION FINALISED	Raleigh	Patrick	(i) Slatted shed with underground slurry tank (ii) Crush yard and all associated site works	17-06-24	Glengoole Sou	05-07-24	C
2460197	APPLICATION FINALISED	Kate Slattery	Niall Russell &	the renovations, extensions & alterations to our existing house, a new garage, and to install a new waste water treatment system with all associated site works	19-06-24	Moyneard, M	N/A	N/A
2360337	APPLICATION FINALISED	Quarries Ltd	Maher	extension of the existing limestone quarry and for continued use of the site entrance, access laneway, lagoons, plant and machinery and ancillary works. The extension area will be 0.869ha in lands directly north of the existing quarry. An Environmental Impact Assessment Report has been prepared and will be submitted with this application	03-07-24	CASTLETOWN	N/A	N/A
2460354	APPLICATION FINALISED	Liam Healy	Roisin O'Dwyer &	proposed part two storey and part single storey dwelling, packaged wastewater treatment system and raised bed soil polishing filter, new entrance and all associated site works	03-07-24	Killenaule	N/A	N/A

2460411	APPLICATION FINALISED	Quality Water Services	Cantwell	the construction of a lean-to storage shed extension to the rear of the existing sheds in connection with our business etc and RETENTION PERMISSION for 2 no. tool sheds to the rear of the same site with all associated site works and ancillary works	22-07-24	Graiguepadee	N/A	N/A
24155	APPLICATION FINALISED	McCormack	Barry	of works as follows which differ from that granted under planning reference 2165. A.) construction of entrance porch; B.) location of sewerage system; C.) provision of a bored well	03-09-24	Townagha	N/A	N/A
2460390	APPLICATION FINALISED	Beatty	Richard	a single storey dwelling, garage, site entrance, waste water treatment system, temporary placement of mobile home and all associated site works	04-09-24	EARLSHILL, BA	N/A	N/A
2460573	APPLICATION FINALISED	Callum Morss	Ciara Mockler &	the change in dwelling design from previous planning application reference number: 2260618 for a new dwelling and garage, a new entrance and new septic tank and percolation area and a new well and all associated site works	08-09-24	Coldfields, Th	N/A	N/A
24178	APPLICATION FINALISED	Trifol Resources Ltd.	N/A	an existing ESB substation and distribution room building and all associated site works	30-09-24	Killeens	N/A	N/A
2460665	APPLICATION FINALISED	Power	Eddie	(1) the construction of the foul water pumping arrangement with rising main for the serviced sites development (originally permitted under planning ref 21-12). The permitted arrangement was for a single pumping station with rising main serving sites 1,2,4,5 & 6. The revised arrangement is for 5 individual pump chambers (one for each site) with associated rising main discharging to permitted foul water manhole on site; (2) the alteration to site boundary of site 6 together with all associated site works	07-10-24	Ashford, Borr	N/A	N/A
2460664	APPLICATION FINALISED	O'Grady	James, Mary Jo and Jo	the construction of an agricultural shed to consist of 6 no. robotic milking units, ancillary rooms, underground slatted slurry and soiled water storage tanks and all associated siteworks	07-10-24	Moyne	N/A	N/A
2460702	APPLICATION FINALISED	Cleere	Justin	refurbishment of existing cottage, along with a two storey extension to the rear with link corridor, waste water treatemnt system and all associated site works	19-10-24	Noard	N/A	N/A
2460751	APPLICATION FINALISED	Kathleen Carroll	James O'Gorman &	a) the existing extensions to the side and rear of the existing dwelling; b) the existing detached garage structure and all associated site works	03-11-24	Clooncleagh T	N/A	N/A
2460772	APPLICATION FINALISED	Cooney	Laura	an extension to the rear of existing dwelling along with retention permission for existing shed to the side of existing dwelling and retention for changes to the front elevation of the existing dwelling and all associated siteworks	10-11-24	Galboola, Littl	N/A	N/A
2460455	APPLICATION FINALISED	Shane Nolan	Trisha Loughman &	the construction of a dwelling house, domestic garage, connection to existing mains services together with all associated site works	17-11-24	Ashford, Two	N/A	N/A
2460844	APPLICATION FINALISED	Nicole Kerrigan	James Maher and	relocation of effluent treatment system and percolation area to that granted under PA21868 together with all associated site works	27-11-24	Two Mile Bor	N/A	N/A
2460860	APPLICATION FINALISED	Martin Hill	Siobhán Troy	the following works: a) proposed new extensions to the existing dwelling; b) associated alterations to existing dwelling external elevations to accommodate proposed new extension & internal layout; c) proposed new wastewater treatment system & percolation area to replace existing septic tank; d) alterations to site boundaries; e) all associated site works	03-12-24	clooncleigh tv	N/A	N/A

24191	APPLICATION FINALISED	Clancy	Eddie	(1) the sun room built to the side of the existing dwelling house; (2) the extension built to the existing shed; (3) the lawnmower shed built at the side boundary wall and (4) all associated site works	08-12-24	Borris, Thurle:	N/A	N/A
2460885	APPLICATION FINALISED	McCullagh	Marie	the as-built changes to dwelling house previously granted planning permission (reference no. PLC/8809) including retention of existing sheds	09-12-24	Ballygemman	N/A	N/A
2460886	APPLICATION FINALISED	Butler	Orla	change the treatment system from that permitted under planning file 211195 to an alternative treatment system which is a septic tank and percolation area	10-12-24	Ballinastick, C	N/A	N/A
2460429	APPLICATION FINALISED	Liam Lanigan	Georgina Crowe &	the construction of a two storey dwelling, domestic garage, septic tank and percolation area, site entrance and all associated site works	11-01-25	Clonamicklon,	N/A	N/A
2460995	APPLICATION FINALISED	Kelly	Joey	a change of the house type from that granted under planning permission reference number 21/790 & all associated site development works	23-01-25	Mardyke, Kille	N/A	N/A
2461041	APPLICATION FINALISED	Kelly	Phil & Claire	the alterations to the house including removal of existing single story section to the side, alterations to front elevation & constructing new 2 story extension to the side & rear of the house with all associated site works	07-02-25	Blackcastle	N/A	N/A
2460769	APPLICATION FINALISED	Purcell	Joana	the change of use to the residential garage/shed for use as a ‘specialist needs/care accommodation'; the extension to the garage/shed and alterations to the elevations; the change of roof from flat roof type to pitched roof and all associated works	11-02-25	Liskeveen Roa	N/A	N/A
2461072	APPLICATION FINALISED	Cantwell	Grainne	a new two storey dwelling, garage house with garage, shared entrance, septic tank and percolation area with all associated siteworks	12-02-25	Leigh, Two Mi	N/A	N/A
2461108	APPLICATION FINALISED	Slattery	Brian and Eimear	a single storey 3 bedroomed house, splayed and recessed entranceway, secondary treatment system with soil polishing filter and all associated site works on and under land	18-02-25	Killeens, Bally	N/A	N/A
24257	APPLICATION FINALISED	Graham	Anthony & Jennifer	revised site boundaries	26-02-25	Ballybeg, Littl	N/A	N/A
24208	APPLICATION FINALISED	Donohoe	Ray	1. construction of single storey dwelling (with part dormer accommodation) and single storey domestic garage, 2. new vehicular entrance and front boundary and 3. septic tank and percolation area	03-03-25	Curraheen, H	N/A	N/A
2460888	APPLICATION FINALISED	Smyth	Eddie	(1) demolition of extension to rear of existing cottage, (2) construction of new single storey extension to the front and rear of the existing cottage, (3) renovation and alterations to existing cottage, (4) demolition of all existing sheds and all associated site works	17-03-25	Ballymureen,	N/A	N/A
2560045	APPLICATION FINALISED	Strapp	Anne	the as-built height of dwelling together with all associated site works	20-03-25	Newhill	N/A	N/A
2460826	APPLICATION FINALISED	Carroll	Diarmuid	a dwelling house, garage, entrance, effluent treatment system together with all associated site works	26-03-25	Borris	N/A	N/A
2460905	APPLICATION FINALISED	Zieba	Ireneusz	indefinitely retain an existing commercial garage for the repair of motor vehicles including all associated site works and Planning permission for external roadside signage	09-04-25	Rathbeg Gortı	N/A	N/A

2524	APPLICATION FINALISED	Murphy	Thomas	an unauthorised shed to the rear of dwelling house. Planning Permission for the demolition of extensions to the rear of dwelling house and for renovation works to dwelling house which include, (a) alterations to elevations, (b) decommissioning of existing septic tank and installing a new wastewater treatment system and polishing filter, (c) construction of new extensions to the front, side and rear of the dwelling house, (d) internal layout changes, (e) landscaping, (f) solar panels and all associated works	22-04-25	Cloncleigh	N/A	N/A
2460978	APPLICATION FINALISED	Tatver Properties Ltd.	N/A	a state-of-the-art healthcare waste treatment and recycling facility and a waste transfer station. The development will include the construction of 3 no. buildings; Building 1 (total gross floor area of circa (ca.) 2,242m2 and ca. 9m tall), Building 2 (total gross floor area of ca. 229m2 and ca. 6m tall) and Building 3 (total gross floor area of ca. 68m2 and ca. 4m tall) along with associated ancillary development including rooftop solar photovoltaic panels, 1no. battery energy storage system (total gross floor area of ca. 34m2 x 2m tall) and inverter, onsite tank with bunding, vehicle parking, rainwater harvesting tank, surface water retention ponds, firewater retention pond, firewater storage pillow tank, an on-site wastewater treatment system and associated polishing filter bed percolation area, dedicated container storage yard for the temporary storage of container units, signage, landscaping, perimeter security fencing and all ancillary works. The total development area will be ca. 3.75 hectares(ha). The development will intake ca. 10,000 tonnes per annum of healthcare waste for treatment and recycling and an additional ca. 15,000 tonnes per annum of hazardous waste will be accepted, temporarily stored, handled and consolidated onsite for onward transfer - an EIAR has been submitted with the application	23-04-25	Killoran	N/A	N/A

				construction of an anaerobic digestion plant comprising: 4 no. primary digester tanks (each measuring c. 7.6 m in height); 3 no. secondary digester tanks (each measuring c. 14.5 m in height); 4 no. feed hoppers; 4 no. technical rooms (ranging in size from c. 35 sq m to c. 95 sq m GFA); 2 no. biogas conditioning units; process, storage and buffer tanks (comprising: 1 no. buffer digestate storage tank (c. 7.5 m in height), 1 no. suspension buffer tank (c. 8 m in height), 1 no. process area runoff storage tank (c. 4.5 m in height); 1 no. buffer digestate process tank (c. 4.5 m in height), 1 no. treated digestate liquids recycle storage tank (c. 4.5 m in height); 1 no. roofed liquids feed-mix tank (c. 3 m in height)); these components will be located within a containment bund constructed c. 3 m below ground level. The proposed development will also consist of: feedstock storage (comprising 3 no. storage clamps (c. 1,050 sq m in area each) and 2 no. storage sheds (c. 500 sq m GFA each)); a biomethane upgrading plant (including natural gas compression unit); a biomethane loading facility (comprising 4 no. loading bays with associated gates and safety features measuring c. 490 sq m in area); a biomass boiler with its associated pellet storage silo (c. 12.5 m in height); Combined Heat and Power (CHP) plant and associated heat exchanger; a single storey bio-based fertiliser processing and storage unit (c. 3,890 sq m GFA) (including digestate dewatering plant, fertiliser pasteurisation plant and bio-based fertiliser loading facilities); a single storey office building (c. 105 sq m GFA) (including					
2460936	APPLICATION FINALISED	Nua Bioenergy Limited	N/A	offices, meeting room, control room, laboratory, welfare facilities, the construction of a maintenance tool shed, construction of a long jump, exercise area with gym equipment, throwing areas with safety nets, completion of the running track and grass track as per previous permission Ref no. 18600525, and RETENTION PERMISSION for as constructed long jump and as constructed running track with all associated siteworks	08-05-25	Killoran, Moyı	30-05-25	C
2560235	APPLICATION FINALISED	Coolcroo AC	Moycarkey	extensions and alterations to existing farmhouse, relevant demolition works to structures attached to house to facilitate the extension and renovation of the house, permission for new septic tank and percolation area, a new vehicular entrance and to include all associated site works	18-05-25	Ballybeg Roac	N/A	N/A
2460918	APPLICATION FINALISED	Hartigan and Manus Bc	Lorraine	the following: a) to demolish existing tool shed and b) to construct an extension to existing packaging agricultural shed on my farm complex with all associated siteworks	28-05-25	Killoran. Tem	N/A	N/A
2560336	APPLICATION FINALISED	Healy	Michael	1) demolition of part of an existing single storey dwelling house, 2) an extension to the side of the remaining dwelling with part in single storey and part in two storey construction, 3) a single storey porch at the rear of the existing dwelling and 4) carry out all associated works including alterations to the layout and elevations of the remaining part of the existing house and extending the site boundaries slightly to accommodate the proposed extension	13-06-25	Ballydavid, Lit	N/A	N/A
24268	APPLICATION FINALISED	McCormack & Katie Tor	Maurice	a single storey dwelling, entrance, effluent treatment system together with all associated site works	17-06-25	Archestown, T	N/A	N/A
2461128	APPLICATION FINALISED	McKenna and Sarah Hic	Jesse		03-07-25	Ballyerk	N/A	N/A

2560426	APPLICATION FINALISED	Lyons	Bernard	to construct renovations & extensions to existing house including the provision of a new waste water treatment system with all associated site works	09-07-25	Moyne	N/A	N/A
2586	APPLICATION FINALISED	Hayes and Noeleen Bre	Martin	traditional style two-storey dwelling, domestic garage, septic tank and percolation area together with new site entrance and carry out all associated site works	20-07-25	Leigh, Two Mi	N/A	N/A
2560542	APPLICATION FINALISED	O'Shaughnessy	John and Connie	construction of a new single storey dwelling, connection to existing mains services together with all associated site works	06-08-25	Ashford	N/A	N/A
2560555	APPLICATION FINALISED	Murphy	Patrice	a) a garage conversion to the side of the house, b) changes to the house elevations, c) a change of use of a doctor's surgery to domestic use and d) a domestic shed	08-08-25	Willmount	N/A	N/A
2560392	APPLICATION FINALISED	Ryan & Robert Cronin	Stephanie	a new house, entrance and waste water treatment system with all associated site works	13-08-25	Garrenroe	N/A	N/A
2560140	APPLICATION FINALISED	Henneberry	Patsy	change of use from former post office to living accommodation, change of use of existing domestic stores to living accommodation along with retention of extension to rear of dwelling together with all associated site works	14-08-25	Borris	N/A	N/A
2560604	APPLICATION FINALISED	Killenaule Community E	N/A	construction of a pedestrian walkway, associated site grading and all associated site development works	18-08-25	Pike Street, Ki	N/A	N/A
2560154	APPLICATION FINALISED	Bord na Móna Energy L	N/A	a recreational shared cycle and walkway to connect into the existing Loch Dhoire Bhile Loop - a) the delivery of a shared cycle and walkway on Bord na Móna lands. This will include the repurposing of 602 meters of existing former rail bed, 2859 meters along existing bog headlands / former high fields, and 721 meters along pre-existing machine access routes, b) the construction of car and / or bicycle parking facilities at a number of gateway locations along the proposed route and the provision of EV charging spaces at the gateway locations. This will include; i. 2 no. Type 2 Gateways, ii. 1 no. Type 4 Gateway, iii. 1 no. Minor Rest Points, c) Upgrade works to 1 no. local access road crossing and 4 no. agricultural access crossings, d) the erection of wayfinding and interpretative signage at Gateway locations along the route, e) the implementation of Sustainable Drainage Systems (SuDS) nature-based drainage proposals at the Gateway locations to cater for surface water drainage at car park locations, f) fencing and screening will be erected where required for health and safety and biodiversity reasons which will include 2250 meters of screening and 1925 meters of boundary treatment fencing, g) all other ancillary and associated site work. This Planning Application is accompanied by a Natura Impact Statement (NIS)	19-08-25	Ballybeg, Derr	17-09-25	C
25119	APPLICATION FINALISED	Barnaville	Paul	existing domestic building containing home gym, home office, store and a separate domestic garage/garden store both at rear of dwelling	09-09-25	Fennor, Gortn	01-10-25	C
2560682	APPLICATION FINALISED	Bowe	Catherine & Edward	construction of loose shed and all associated site works	09-09-25	Leigh, Thurles	N/A	N/A
2560702	APPLICATION FINALISED	O'Grady	James, Mary Jo and Jo	a) a calf rearing shed; b) Planning permission for the dismantling of an existing straw storage shed; c) Planning permission for the construction of a dungstead; d) Planning permission for the construction of a calf rearing shed with straw storage and underground slurry storage tanks and all associated site works	11-09-25	Cooleeney	N/A	N/A

2560697	APPLICATION FINALISED	Kilcourse	Maeve & Michael	a single storey dwelling, domestic garage, packaged waste water treatment system, tertiary treatment system and soil polishing filter, new entrance and all associated site works	11-09-25	Ballynastick	N/A	N/A
2560405	APPLICATION FINALISED	McCormack	Linda	a) new house, b) wastewater treatment system, c) entrance, and d) associated site works	18-09-25	Dunguib	N/A	N/A
2560736	APPLICATION FINALISED	Healy	John and Katrina	as constructed 4m wide agricultural driveway and revised widen entrance and permission to reconstruct widened entrance walls with all associated siteworks	22-09-25	Springhill	N/A	N/A
2560755	APPLICATION FINALISED	Loughnane	Patricia	the existing single storey extension to side of dwelling along with retention for existing front porch. Retention permission is also sought for the as-built location of the dwelling on the site together with all associated site works	25-09-25	Ballydavid	N/A	N/A
2560812	APPLICATION FINALISED	Fogarty	Diarmuid	the construction of a vehicular entrance, dwelling house, domestic garage, proprietary waste water treatment system with polishing filter together with all associated site works	14-10-25	Moyneard, M	N/A	N/A
2560817	APPLICATION FINALISED	Fitzgerald	Lorraine & Martin	the construction of a single storey extension to the rear of the dwelling	15-10-25	Curraheenduf	N/A	N/A
25175	APPLICATION FINALISED	Bergin	Michael	the construction of a 5 bay slatted beef unit, incorporating underground slurry storage tank, easy feeding system, including all associated site works	20-10-25	Kilcooley Roa	N/A	N/A
2560834	APPLICATION FINALISED	Smyth	Eddie	the change of use from garage to temporary living accommodation from previous planning application reference number 19600031, change of design and scale of the existing temporary accommodation with connection to existing septic tank and PERMISSION to revert the building back to a garage on completion of the construction of the proposed extension to the existing cottage and all associated siteworks	20-10-25	Ballymureen,	N/A	N/A
2549	APPLICATION FINALISED	Roadvacs Limited	N/A	demolition of buildings and construction of a new truck sales and service centre with 2 truck service bays, offices, meeting room, canteen, toilets, parts store, solar panels on the roof, signage, entrance, car parking, landscaping, connection to mains water and sewer and all associated works	11-11-25	Two Mile Bor	N/A	N/A
2560939	APPLICATION FINALISED	MaGuire	Gerry	a) 2 no. calf rearing sheds and roofless cubicles and PLANNING PERMISSION FOR b) the demolition of an existing overground slurry storage tank, c) the construction of silage pits, d) the construction of an underground soiled water tank, e) the construction of a cubicle shed with an underground slurry storage tank and all associated site works	13-11-25	Liskeveen	N/A	N/A
2560958	APPLICATION FINALISED	Joseph Campion	Marie McCormack &	construction of a new dwelling, a new garage, a new entrance and a new well, with a new effluent treatment system and all associated siteworks	18-11-25	Gortnahoe	N/A	N/A
2560854	APPLICATION FINALISED	Kinane	David	internal and external refurbishment works to the existing dwelling, a new single storey extension to the rear of the existing dwelling, a new double garage, upgrade works to the existing vehicular entrance and provision of a new driveway and new wastewater treatment system and polishing filter together with all associated site development works	03-12-25	Parkstown	N/A	N/A

2561019	APPLICATION FINALISED	Horan	Brendan	the construction of a slatted shed with feeding area and cubicles and all associated site works. PERMISSION FOR RETENTION for (i) loose shed, (ii) calf shed, (iii) loose shed with slatted feeding area, (iv) dairy plant room, (v) collecting yard, (vi) walled silage slabs and all associated site works	04-12-25	Graigaman	N/A	N/A
2561049	APPLICATION FINALISED	Ryan	Donal	the alterations to an extension previously granted under planning reference PLC/11426; an additional extension to the rear of the original dwelling house; alterations to the front elevation of the dwelling house; and domestic sheds	14-12-25	No. 4 Kevins F	N/A	N/A
2561067	APPLICATION FINALISED	Robert Cronin	Stephanie Ryan &	the construction of a new domestic garage with all associated site works	17-12-25	Garrenroe	N/A	N/A
2561070	APPLICATION FINALISED	Grayden	Philomena	a new extension to the side and rear of existing dwelling along with some minor changes to the existing dwelling and demolition of existing domestic garage and all associated site works	17-12-25	Church View,	N/A	N/A
2560757	APPLICATION FINALISED	Cahill	Sean and Kathleen	1) the change of use of outbuilding to residential use and refurbishment and extension of same, 2) the site entrance, driveway, parking, hard landscaping, garden areas and all ancillary site works. PLANNING PERMISSION is sought for the installation of a certified wastewater treatment system and a percolation area, to all appropriate standards. The existing septic tank and percolation area will be appropriately removed from the site	19-12-25	Lickfinn Ballyr	N/A	N/A
2561107	APPLICATION FINALISED	Bowe	Laura	1) the construction of a detached single storey dwelling and a detached single storey domestic garage, 2) the installation of a certified wastewater treatment system and a percolation area, to all appropriate standards, 3) a number of soakpits will be constructed on the site for drainage purposes and also, a new connection will be formed into the Irish Water network/public water main, 4) the construction of a site entrance, driveway, parking areas, footpaths, patio and hard landscaping areas, 5) the landscaping of the site consisting of new lawn areas, planting beds, trees and shrubbery, hedging, fencing and all associated site works	08-01-26	Gortnahoe	N/A	N/A
2461036	APPLICATION FINALISED	Quarries Ltd	Maher	a) extension of the existing limestone quarry and for continued use of the site entrance, access laneway, lagoons, plant and machinery and ancillary works. The extension area will be 0.869ha in lands directly north of the existing quarry, and b) secondary treatment system and a soil polishing filter 0.05ha in area in lands directly south west of the existing quarry. An Environmental Impact Assessment Report has been prepared and will be submitted with this application	09-01-26	Castletown, M	N/A	N/A
2561124	APPLICATION FINALISED	Kealy and Paula Dunne	Donal	a single storey dwelling house, domestic garage, connection to existing mains services together with all associated site works	10-01-26	Ashford	N/A	N/A
2561127	APPLICATION FINALISED	Ryan	Eddie & Jenny	the construction of a single storey dwelling house, domestic garage, connection to existing mains services together with all associated site works	10-01-26	Ashford, Two	N/A	N/A
2561128	APPLICATION FINALISED	Petriw	David and Yvonne	a single storey dwelling house, domestic garage, connection to existing mains services together with all associated site works	10-01-26	Ashford	N/A	N/A
2561132	APPLICATION FINALISED	Hartigan / Manus Boyc	Lorraine	change of design and subsequent boundary adjustment to granted planning permission Ref: 2460918	12-01-26	Killoran, Tem	N/A	N/A

2561142	APPLICATION FINALISED	Killenaule Community E	N/A	construction of lighting to the previously approved pedestrian walkway (granted under planning reference no. 2560604) and all associated site development works	14-01-26	Pike Street, Ki	N/A	N/A
2561142	APPLICATION FINALISED	Killenaule Community E	N/A	construction of lighting to the previously approved pedestrian walkway (granted under planning reference no. 2560604) and all associated site development works	14-01-26	Pike Street, Ki	N/A	N/A
2560685	APPLICATION FINALISED	Engineering Ltd	Cantwell Electrical	the demolition of existing store buildings and to replace with a larger single storey storage building consisting of an 11 bay portal steel frame building incorporating closed secure storage & open bays storage and a wash bay to the end with all associated site works and ancillary works	15-01-26	Graiguepadee	N/A	N/A
2561252	APPLICATION FINALISED	Hackett	John & Anne	the previously constructed extensions & alterations to our house including the conversion of our garage to living accommodation, rear extension to our house, construction of a garden store & a garage	06-02-26	Thurles	N/A	N/A
2560545	DECISION MADE	Enhancement Group	Killenaule Community	the construction of landscaping, re-surfacing and storm drainage works. The development includes works on the site of the listed building ref TRPS1066	12-02-26	St. Mary Com	N/A	N/A
2561345	DECISION MADE	Ryan	Josephine	the existing domestic sheds	24-02-26	Piercetown	N/A	N/A
2560520	DECISION MADE	Bourke	Alan	a) two domestic sheds, b) a stable shed and c) boundary treatments	26-02-26	Rathroe, Killei	N/A	N/A
261	DECISION MADE	Katie Tormey	Maurice McCormack &	a revised dwelling house design (Permission was previously granted ref 24268). The revised design will involve single storey extensions to existing single storey dwelling house to the front, to the rear and to the side of the building. Also to carry out alterations to the existing front elevation of the dwelling and for alterations to the eastern site boundary, site layout plan and all associated site works	26-02-26	Archerstown	N/A	N/A
2560716	DECISION MADE	Clancy	Edward and Mary	the following works; a) 4no. single storey detached dwellings; b) alterations to existing shed structure; c) removal of existing shed structure and storage containers; d) alteration to existing boundary to provide new site entrance, access road and footpath from the existing Leighton Manor estate; e) new site boundary treatments; f) new waste, water and utility service connections and all associated site works on the land to the rear of the existing dwelling	05-03-26	Borris	N/A	N/A
2660052	NEW APPLICATION	Networks Ltd.	Hibernian Cellular	the development will consist of the erection of a 36m tall Telecommunication Lattice Support Structure carrying antennas and dishes together with associated ground-based equipment all enclosed in security fencing with proposed site access taken from an existing site access from the L-6617 and all ancillary site works	19-03-26	Mellisson	N/A	N/A
2660057	NEW APPLICATION	Kennedy	Aoife and Keith	the alterations to front elevations including new flat roof extension, material finishes, fenestration and front porch and amended carparking to provide safe vehicle circulation within curtilage. New rear extension, rear porch with proposed extended paving and associated site works. Demolition of existing garage office building to be replaced with new garden store, office and games room building	22-03-26	Dunguib	N/A	N/A
2560673	NEW APPLICATION	Dalton	Marguerite	the as-constructed domestic extension & all associated site development works	25-03-26	Killleheen	N/A	N/A

2660066	NEW APPLICATION	Maria Kinane	JJ Darmody &	the relocation of the vehicular entrance serving existing dwelling house. Planning permission is also being sought for the demolition of existing shed to rear of property, relocation of the rear boundary to increase the site size, construction of a single storey extension to rear of house with a new domestic garage and covered carport, alterations to existing house to include new & altered windows to the north, east and west elevations along with associated internal alterations of the layout of the existing house together with all associated site works	25-03-26	Thurles	N/A	N/A
2660074	NEW APPLICATION	Crowe and Emma Burk	Pierre	proposed two storey dwelling, waste water treatment system and soil polishing filter, domestic garage and all associated site works	26-03-26	Clonamicklon	N/A	N/A
2660078	NEW APPLICATION	Kelly	Philip & Jayne	a dwelling house, entrance, garage, effluent treatment system together with all associated site works	30-03-26	Mardyke	N/A	N/A
2660085	NEW APPLICATION	Engelbrecht	Andri	the creation of single storey sunroom/living room to front of existing 2 storey house and ancillary related works. The works are adjacent to Grallagh Castle which is a National Monument	31-03-26	Horse and Joc	N/A	N/A
2561331	NEW APPLICATION	Lorna Walsh	Kevin Pollard and	proposed part storey and a half and part single storey dwelling, domestic garage, packaged waste water treatment system and soil polishing filter and entrance	05-04-26	Lickfinn, Glen	N/A	N/A
2561152	NEW APPLICATION	Stephen Lillis	Lorna Healy and	a new dwelling with garage, entrance, septic tank and percolation area with all associated siteworks	15-04-26	Leigh, Two Mi	N/A	N/A
2660146	NEW APPLICATION	and Brian Purcell	Oilbhe Cantwell	(A) demolition of partially constructed detached domestic garage (as had been granted under original planning reference 21915), and (B) construction of two storey dormer extension to side of existing dwelling. Including all associated site works	16-04-26	Clooncleagh	N/A	N/A
2660190	NEW APPLICATION	Littleton Holdings	N/A	the as-constructed single storey extension to the rear of dwelling consisting of a bedroom, accessible bathroom and kitchen with all associated sitework - this proposed development is within the curtilage of a protected structure ref no: TRPS872	28-04-26	Main Street, E	N/A	N/A
2660204	NEW APPLICATION	Stanley	Paul	a slatted house with underground slurry storage and all associated site works	30-04-26	Urard	N/A	N/A
211000	APPLICATION FINALISED	Maher	Jim and Breda	an extension to cheese production unit, to retain existing storage area and incorporate into the new extension and to retain staff changing area. Also for permission to provide access yard and carry out all associated works. Works are within the curtilage of a protected structure, S778.	11-12-26	COOLEENY, M	N/A	N/A

Planning Ref.	Applicant	Description of Development	ADDRESS	DECISION	YEAR	Received Date	Decision Date
92669	KATEGROVE LTD.	retain as built and complete dev work, restaurant, garage, guest accomodation, car wash, and aux works at Main St, Urlingford	Not available, ,	CONDITIONAL	1992	19920825	19921024
93112	MICHAEL MCKILLEN	Permission for new 'traditional style' shop front & slated 'A' shape roof in place of old flat roof at Main St, Urlingford.	Not available, ,	CONDITIONAL	1993	19930226	19930425
93150	BANK OF IRELAND	Retention of public house, dwellinghouse and stores at 'The Caman Inn', Main Street, Urlingford, Co. Kilkenny.	Not available, ,	CONDITIONAL	1993	19930312	19930511
93618	KATEGROVE LTD.	Retain as built & complete development works namely restaurant garage, guest accommodation, carwash and auxillery works at	Not available, ,	CONDITIONAL	1993	19930908	19931107
945	MARTIN CLOHESSY	Extension to existing slaughter house. Main st. Urlingford.	Not available, ,	CONDITIONAL	1994	19940105	19940304
94894	MARTIN CLOHOSEY	Planning Permission sought for retention of two storey flat roof extension to rear of existing dwelling and completion of	Not available, ,	CONDITIONAL	1994	19941122	19950121
95586	DRAYBO LTD.	Planning perission for an extension to canopy no. 2 underground tanks interceptor trap and planting to front at Main St.	Not available, ,	CONDITIONAL	1995	19950627	19950826
951031	JAMES LEAHY	Permission to build a three bed. bungalow and septic tank at Islands Road, Urlingford.	Not available, ,	CONDITIONAL	1995	19951215	19960214
95511	JAMES LEAHY	Full planning permission to construct 3 bedroomed bungalow with septic tank and percolation system at Islands rd.,	Not available, ,	CONDITIONAL	1995	19950602	19950801
95610	LAURENCE DUNPHY	Planning permission to erect toilets and dressing rooms to rear and provide additional access doorway to front of building	Not available, ,	CONDITIONAL	1995	19950705	19950904
95685	MC CARTHY BROS	Permission for erection of seventeen dwelling houses on lands owned by Kilkenny County Council at Togher Rd., Urlingford.	Not available, ,	CONDITIONAL	1995	19950731	19950929
95903	GUILIO CASHERA	Permission to erect new first floor domestic extension to the rear of my premises at Main Street, Urlingford.	Not available, ,	CONDITIONAL	1995	19951024	19951223
95954	PATRICK PURCELL	Permission to erect cattle shed at Bawnmore, Johnstown, Co. Kilkenny.	Not available, ,	CONDITIONAL	1995	19951110	19960109
96204	MCCARTHY BROS	Permission for four additional houses to previously permissioned development at Togher Road, Urlingford. This includes a	Not available, ,	CONDITIONAL	1996	19960315	19960514
9624	CHARLOTTE COLCHESTOR	Permission to carry out development at The Islands, Urlingford, as described hereunder: Private Burial Ground.	Not available, ,	CONDITIONAL	1996	19960104	19960303
96430	MICHAEL LONG	Permission to erect a 3-bedroomed bungalow and connect same into public sewer at Togher Road, Urlingford.	Not available, ,	CONDITIONAL	1996	19960520	19960719
96516	COLIN AHERN	Outline permission sought for dwelling house and garage at Togher Road, Urlingford, Co. Kilkenny.	Not available, ,	CONDITIONAL	1996	19960610	19960809
97637	DERRICK JENKINS	to retain extension to existing dwelling house	Togher Road, Urlingford,	CONDITIONAL	1997	19970627	19980131
971187	MR JOHN DUNNE	for 15 no. houses	Urlingford, Co Kilkenny,	CONDITIONAL	1997	19971217	19980622
97302	THOMAS MOORE	for construction of office, workshop, showrooms and garage	Main Street, Urlingford, C	CONDITIONAL	1997	19970404	19970804
981352	IRISH & EUROPEAN PROPEF	for a housing estate consisting of 30 detached two-storey houses including new surface water drains and foul sewers with a treatment plant and access off Togher Road	Togher Road, Urlingford,	CONDITIONAL	1998	19981204	19990403
981454	SEAN MOORE	to extend garage	Main Street, Urlingford, C	<Null>	1998	19981231	<Null>
984	PHILIP FOGARTY	to construct slatted tank and ancillary developments	The Islands, Urlingford, C	CONDITIONAL	1998	19980102	19980326
98501	JAMES BUTLER	to widen the side of premises	Main Street, Urlingford, C	CONDITIONAL	1998	19980507	19981219
98639	PAT MCEVOY	to carry out the following works ; build dwelling, entrance, septic tank, build domestic garage and storage shed.	Islands TD,, Urlingford,, C	CONDITIONAL	1998	19980605	19980804
98675	DENIS & KAREN MANTON	for the construction of three bedroomed bungalow, septic tank and percolation area	The Islands,, Urlingford,, (	CONDITIONAL	1998	19980612	19980811
991303	URLINGFORD ACTION GROU	for Millenium Monument in the grounds of the Old School House	Main Street, Urlingford, C	CONDITIONAL	1999	19990917	19991116
991527	DAVID ALLEN HOLDINGS LI	for replacement of one 6m by 3m advertising panel with two 6m by 3m advertising panels	Main Street, Dublin Road	CONDITIONAL	1999	19991103	20000102
99911	SIMON MOLONEY & PRUNE	to demolish existing cottage and construct a dormer dwelling with site entrance and septic tank system on site	The Island, Urlingford, Co	CONDITIONAL	1999	19990630	19990829

1168	JIULIANO CASCHERA	to demolish derelict dwelling and to construct new retail unit with store, office and toilet to ground floor and 2 no. single bedroomed apartments to first floor	Main Street, Urlingford, C	CONDITIONAL	2000	20000802	20010607
1666	WATERCOURSE PROPERTIE	46 no. dwellings, consisting of 10 no. 2 bed bungalows, 2 no. 3 bed bungalows, 2 no. 4 bed bungalows, 6 no. 2 bed 2-storey, 14 no. 3 bed 2-storey, 12 no. 4 bed 2-storey, 5 no. serviced sites, pumping station, recessed entrance and ancillary site work	Mill Street, Urlingford, Co	<Null>	2000	20001031	<Null>
1879	WILLIAM AND MONICA GUI	to retain domestic garage- fuel storage shed at	Togher Road,, Urlingford,	CONDITIONAL	2000	20001208	20010207
347	MATTY WALSH	to construct new bungalow and conservatory, new entrance, with septic tank and percolation area and new agricultural machinery storage shed	Bawnmore, Johnstown, C	CONDITIONAL	2000	20000316	20000515
479	MR. & MRS. MICHAEL LONG	for semi-detached dwelling connected to existing family house, plus sewer connection, Co. Council water connection, new site entrance and associated site works	Togher Road, Urlingford,	CONDITIONAL	2000	20000406	20000819
727	IRISH & EUROPEAN PROPEF	for a 2 st. hotel incl 23 bedrooms, function room, bar, rest. & reception facilities with ancillary accommodation, 13 no. single st. ind./warehse units with ancillary office accommodation & 2 no. single st. general showrooms with ancillary accommodat	Main Street, Urlingford, C	CONDITIONAL	2000	20000515	20001007
11393	JAMES BERGIN	30 no. dwelling houses and asscociated site works off	Main Street, Urlingford, C	CONDITIONAL	2001	20010921	20020504
1587	IRISH AND EUROPEAN PROI	38 two-storey semi-detached and terraced houses with roof space accommodation, 4 single storey houses and 16 terraced single storey retirement houses with associated internal roads, paths, parking, siteworks, landscaping, road entrance and gateways,	Togher Road, Urlingford,	CONDITIONAL	2001	20010424	20020220
11222	MARTIN PURCELL	to erect a new loose shed and associated works	Baunmore, Johnstown, C	CONDITIONAL	2001	20010815	20011014
11470	TIMOTHY CAMPION	conversion of existing derelict workshop to new store and change of use of derelict workshop to new store	Main Street, Urlingford, C	<Null>	2001	20011011	<Null>
1153	PHIL FOGARTY	to erect a dwelling house with garage and septic tank	The Islands, Urlingford, C	<Null>	2001	20010208	<Null>
11562	OWEN SHERIDAN	for retention for extensions to kitchen and additional toilets	Shell Restaurant, Main St	CONDITIONAL	2001	20011102	20020101
11573	ARTHUR CURRAN	for extension to dwelling house	Main Street, Urlingford, C	CONDITIONAL	2001	20011105	20020104
11612	NICHOLAS HEALY	for change of use from private residence to proposed B&B, the provision for 8 car park spaces to the rear and the erection of B&B sign to the front elevation	Ashley House, Main Stree	CONDITIONAL	2001	20011114	20020113
11613	JOHN DILLON	for change of use from private residence to proposed 4 no. apartments and ancillary works	Main Street, Urlingford, C	CONDITIONAL	2001	20011114	20020113
1382	IRISH & EUROPEAN PROPEF	for a single storey restaurant, boundary treatment, planting and ancillary parking	Main Street, Urlingford, C	CONDITIONAL	2001	20010321	20020221
1383	IRISH & EUROPEAN PROPEF	for new petrol station, to include shop, forecourt, canopy, dispensing pumps, underground storage tanks, ground surfaces, boundary treatment and drainage works	Main Street, Urlingford, C	CONDITIONAL	2001	20010321	20020221
21596	JAMES BERGIN	for 30 no. dwelling houses and associated site works off	Main Street, Urlingford, C	CONDITIONAL	2002	20021113	20030423
21606	WILLIAM PURCELL	to retain entrance as constructed	Baunmore, Johnstown, C	CONDITIONAL	2002	20021115	20030109
31484	IRISH & EUROPEAN PROPEF	for a restaurant with drive through facilites together with associated signage, car parking, ancillary services and proposed new entrance	Main Street, Urlingford, C	CONDITIONAL	2003	20030925	20040308
31798	THOMAS, FERGUS & SEAN I	to construct a new three storey building (part of which is two storey) on existing vacant site to facilitate a new creche/retail outlet at ground floor together with 11 two bedroom apartments on ground, first and second floor, vehicular entrance onto public road, bin storage facility, car setdown area, car parking spaces, landscaping, roof garden, connections to public services and associated site works	Main Street, Urlingford, C	CONDITIONAL	2003	20031120	20050206
3268	OWEN SHERIDAN	for a takeaway restaurant that is incorporated in existing restaurant premises	Main Street, Urlingford, C	CONDITIONAL	2003	20030226	20030731
3418	URLINGFORD COMMUNITY	to retain all weather court, lighting standards and store, all to the rear of old school house	Main Street, Urlingford, C	CONDITIONAL	2003	20030321	20040408

3820	IRISH & EUROPEAN PROPEF	for modifications to previously granted permission (Reg. Ref. 00/727) to extend hotel development with additional storeys to give 3 No. storeys in total comprising 45 new bedrooms to achieve 68 no. bedrooms in total, together with elevational changes including revised entrance arrangement to incorporate full height glazed atrium and 2 No. revised gable fire escape stairs, all with hotel associated signage and additional carparking facilities including associated works	Main Street, Urlingford, C	CONDITIONAL	2003	20030523	20031001
41472	COLIN AHERN	for (a) retention of boundary wall as constructed along the eastern boundary of the site; (b) permission for retention of northern front boundary wall and to reduce the hieght of this wall to 1.75m above footpath level; (c) permission to close existing vehicular access entrance to the site and to relocate the site entrance to regional road	Togher Road, Urlingford,	CONDITIONAL	2004	20040916	20041110
41097	IRISH & EUROPEAN PROPEF	for modifications to previously granted permissions (reg. ref. 00/727 and 03/820) to hotel development with additional 10 bedrooms to achieve 78 no. bedrooms in total, together with elevational and boundary changes, and revised carparking facilities providing 144 spaces including associated site works and elimination of basement plant room	Main Street, Urlingford, C	CONDITIONAL	2004	20040716	20041020
41481	LIAM & KAY LOOBY	to retain amended building design, site layout and security perimeter fence at our showrooms premises	Urlingford Business Park,	CONDITIONAL	2004	20040917	20041215
41586	SEAN MOORE	PERMISSION for the retention of a single storey crash repair garage with ancillary office accommodation and planning permission for the demolition of 3 no. out sheds with all ancillary site works	Main Street, Urlingford,	CONDITIONAL	2004	20041004	20050128
41793	JOSEPH HENNESSY	PERMISSION for retention of current unauthorised business development known as Coffee Express. Permission for change of use from previous commercial shop use to current use as a Coffee Shop. Previous Planning Permission was granted dated on 26th September, 1991, Reference No. P91/596. The development is located	Coffee Express, Main Stre	CONDITIONAL	2004	20041116	20050119
41833	JOHN DILLON	PERMISSION for the retention of existing two storey building consisting of 4 no. apartments and planning permission to reduce the four number apartments to two no. apartments and all ancillary site works	Main Street, Urlingford,	CONDITIONAL	2004	20041123	20050126
41870	WOODLOCK DEVELOPMEN	for 70 no. dwelling houses comprising of 14 no. 2-bedroom, 52 no. 3-bedroom and 4 no. 4-bedroom units, together with all associated site works	Urlingford, ,	CONDITIONAL	2004	20041130	20050814
41874	SEAN MOORE	for the demolition of an existing two-storey private dwelling	Main Street, Urlingford,	CONDITIONAL	2004	20041130	20050202
42036	THOMAS KAVANAGH	to construct 92 residential units and 223 sq. metres of commercial/retail units on lands	Mill Road, Urlingford,	CONDITIONAL	2004	20041222	20060308
4351	PAUL MINOGUE	Planning Permission 00/727 relates to the development of a hotel, 13 industrial/warehouse units with ancillary office accommodation and two general showrooms currently being developed at Urlingford Business Park. Permission for retention to retain an industrial unit as constructed, including extension to rear, alterations to elevations, provision of first floor accommodation within section to rear, adjustment to site size, boundary fences and ancillary related works at	Urlingford Business Park,	CONDITIONAL	2004	20040310	20051004
4459	SEAN HENNESSY	to erect an outdoor fenced playground (for use by 4 to 12 year old children) and with all associated site works situated at	The Old School House, M	CONDITIONAL	2004	20040325	20040519
4805	THOMAS O'DWYER & MARI	to build dwelling, entrance, front boundary wall and all associated site works	Urlingford, Co. Kilkenny,	CONDITIONAL	2004	20040521	20040715

51321	BROCKSAN LIMITED	for the following changes to originally granted planning permission - plan ref. 01/587. A:Indefinite retention, of construction to date, of two storey terraced houses nos. 17-20 inclusive (currently at roof level). Terraced houses nos. 22 - 27 inclusive (currently at floor level). Terraced houses nos. 28-33 inclusive, detached house no 34 and terraced houses nos. 35-40 inclusive (all currently at ground floor slab level), and revised site layout plan. B: Permission for completion of above houses and change of house design nos. 17-20. Inclusive from originally granted design to new two storey dwelling house design, also permission for change of house design nos. 23-33 inclusive from original granted design to new two storey and part dormer dwelling house design. Also change of house design to house no. 34 from originally granted design to new bungalow design. Also change of house design nos. 35-40 inclusive from originally granted design to new two storey house design inclusive of	Togher Road, Urlingford,	CONDITIONAL	2005	20050818	20060306
5845	COLIN & CAROLINE AHERN	to modify existing bungalow comprising upgrading of existing single-storey dwelling to a dormer bungalow, construction of a new utility room and sun room to the rear, modifications to existing garage, relocation of vehicular entrance with associated site works	Togher Road, Urlingford,	CONDITIONAL	2005	20050526	20050720
51752	JOSEPH HENNESSY	RETENTION permission for current unauthorised business development known as Coffee Express and for a change of use from previous coffee shop to current use as a fast food take-away. Previous planning permission granted dated on 26th September 1991, reference no. P91/596. The development is located	Coffee Express, Main Stre	CONDITIONAL	2005	20051104	20060107
5224	CATRIONA HOLOHAN	for a two-storey house, domestic garage, septic tank and ancillary works	Islands, Urlingford,	CONDITIONAL	2005	20050221	20050803
5225	DANNY HOLOHAN	for a two-storey house, domestic garage, septic tank and ancillary works	Islands, Urlingford,	CONDITIONAL	2005	20050221	20050627
5391	MARTINA BEEHAN	to build extension to existing dwelling	9 Togher Lawns, Urlingfo	CONDITIONAL	2005	20050318	20050512
593	IRISH & EUROPEAN PROPEF	for (a) the construction of 7 no. ground floor commercial retail units with 24 no. raised, duplex style two storey terraced town houses with private open space (11 no. 3 bed & 13 no. 2 bed) and two storey corner office over, in two separate blocks (three storey in total with new pedestrian access to main street and upgraded pavement along the portion of the N8/main street & modifications to previously granted permissions (reg. ref. 00/727), 98/1352 and 03/1484) to include additional two storey extension to provide offices (three storeys in total over previously approved restaurant and service station (reg. ref. 01/382 and 01/383), all connecting to existing on site pumping station and all with associated site works, public open space, additional 239 car parking spaces, bin storage and ancillary services, (b) the removal of existing structures (previously granted permission reg. erf. 00/727) on sites 5,6,7 and 8 to be replaced by the construction of two new units of warehousing, etc.	Urlingford, ,	CONDITIONAL	2005	20050131	20060619
61298	HENNESSY DEVELOPMENTS	is being sought for the following development comprising of the demolition of existing two-storey dwelling at the corner of Togher Road and Main Street, Urlingford, the change of use of existing retail space into proposed new entrance, the construction of a three-storey extension forming new self-catering apartments comprising: 4 no. 1-bed apartments (GFA 33sq.m) and 2 no. 2-bed. apartments (GFA 60 sq.m.), 1 no. bar/restaurant (GFA 82 sq.m.), 1 no. Kitchen (GFA 24.3 sq.m.), ancillary plant, stores, signage on both north and west elevations, car parking providing 20 no. spaces and all associated landscaping, site and ancillary works on a site of 1516 sq. m. (0.37 acres)	Togher Court, Main Stree	CONDITIONAL	2006	20060728	20070410
61329	IRISH & EUROPEAN PROPEF	for development which consists of the construction of 14 no. 2 storey semi-detached dwellings located within and accessed via Togher Cresent estate, which are proposed in place of 7 no. previously approved detached dwellings permitted under Reg. Ref. 98/1352 in which permission was granted for 30 no. detached 2 storey dwellings	Togher Road, Urlingford,	CONDITIONAL	2006	20060804	20070731

61393	PHILIP & CLAIRE FOGARTY	to construct a two-storey dwelling, a sunroom and attached garage, septic tank, percolation area, entrance wall and gates, and associated site works	The Islands, Urlingford, C	CONDITIONAL	2006	20060817	20061011
61465	HENNESSY DEVELOPMENTS	for the amendment to condition number 9 of planning permission reference 05/1752 for an extension of the business hours to 7am through 1am every day on a continous basis, for the fast food take away known as The Wishing Well	Main Street, Urlingford, C	CONDITIONAL	2006	20060830	20061024
61485	SFT MOORE DEVELOPERS L	for change of use from retail outlet to restaurant, to construct a ground floor extension to the rear together with all associated site works	Main Street, Urlingford, C	CONDITIONAL	2006	20060901	20070126
62174	MARTIN PURCELL	for a loose shed, slatted tank and ancillary concrete	Baunmore, Johnstown , C	CONDITIONAL	2006	20061208	20070210
6356	IRISH & EUROPEAN PROPEF	PERMISSION for additional building height as a result of increased floor to ceiling heights, with associated minor elevational alterations	Main Street, Urlingford, C	CONDITIONAL	2006	20060314	20060508
6442	IRISH & EUROPEAN PROPEF	for reconfiguration of ground floor replacing function room with an additional 18 bedrooms. With the provision 13 third floor bedrooms within the roof space and associated elevational alterations. Providing a total of 31 new bedrooms giving a Hotel Total of 107 en-suite bedrooms	Main Street , Urlingford ,	CONDITIONAL	2006	20060324	20060518
6470	RAYMOND HOLOHAN	for new slatted cattle unit, silage slab, holding pens and crush, new entrance and ancillary works	The Islands, Urlingford, C	CONDITIONAL	2006	20060330	20060524
6597	KATIE KILKENNY & LAR RYA	to construct new dormer-style dwelling, new access entrance, with on-site waste water treatment and disposal system and with all associated siteworks	Baunmore, Johnstown, vi	CONDITIONAL	2006	20060420	20061107
6853	MARTINA RYAN & MICHAEL	to build dwelling, domestic garage, entrance, waste water treatment system and all associated site works	Baunmore, Johnstown, C	CONDITIONAL	2006	20060525	20061107
7132	J. DONOVAN	of alteration of dwelling type (from 4 bedroom to 5 bedroom), orientation, position and site boundary	No. 25 Togher Cresent, U	CONDITIONAL	2007	20070131	20070523
7134	J. DONOVAN	of the alteration of dwelling position, garage position, orientation and site boundary	No. 26 Togher Crescent, U	CONDITIONAL	2007	20070131	20070523
71357	ELAINE MURPHY & KEVIN P	for the following development: Construct new two-storey dwelling, new access entrance with on-site waste water treatment and disposal system and with all associated siteworks situated	Baunmore, Johnstown, Vi	CONDITIONAL	2007	20070705	20071016
71428	JACQUELINE TYNAN	to construct a 3-bedroom dormer-style log house and a single storey, 1-bedroom log cabin, a new vehicular entrance, an effluent treatment system and a percolation area and all associated site works on lands	The Islands, Urlingford, C	CONDITIONAL	2007	20070718	20070911
71793	JOHN O' MAHONY & WILLIA	for the material alteration, change of use and extension of an existing two storey derelict dwelling house to a retail unit at ground floor level and a two bedroomed apartment at first floor level	Main Street, Urlingford, C	CONDITIONAL	2007	20071003	20080507
71821	JOHN MCCARTHY	for the construction of 76 residential units comprising of the following: (i) 4 no. two storey 4 bedroom and 10 no. two storey 3 bedroom terraced town-houses, (ii) 4 no. two storey detached houses, (iii) 57 no. two storey 3 bedroom semi-detached houses and (iv) a mixed-use two storey building comprising of ground floor commercial/retail area and 1 no. 3 bedroom apartment on the first floor, planning permission for the construction of a two storey crèche and sheltered play area and planning permission for the construction of a new access roadway, connections to relevant public services, carparking, landscaping and ancillary site works all	Urlingford, Co. Kilkenny,	CONDITIONAL	2007	20071005	20080619
7581	LIAM KEARNEY	to retain revised building design and site layout at premises	Urlingford Business Park,	CONDITIONAL	2007	20070329	20071205
81002	GLEESONS BOOKMAKERS LI	for change of use of ground floor of premises from retail use to use as a betting office (previous grant of planning permission for the material alteration, change of use and extension of premises to a retail unit at ground floor level and a two bedroom apartment above - Reg.Ref:07/1793)	Main Street, Urlingford, C	CONDITIONAL	2008	20080728	20080921
8405	THOMAS KAVANAGH	PERMISSION for extensions to existing dwelling house and for domestic garage/store	Togher Road, Urlingford,	CONDITIONAL	2008	20080328	20080522

853	JPL CONSTRUCTION	PERMISSION for alterations to House Type A (as part of Planning Ref. No. 01/587), to include removal of third floor bedrooms, removal of single storey section to rear, removal of 1 No. front window per dwelling, minor alterations to roof over bay window, minor alterations to roof roof over bay window, minor alterations to rear elevation and all ancillary site works. Retention Permission for alterations to road layout and open space layout and full Planning Permission for the construction of a new 2.1m high concrete post and concrete infill panel wall to site boundary	Togher Way, Urlingford, (	CONDITIONAL	2008	20080121	20080506
8608	COPYMOORE LTD	PERMISSION of extension to existing workshop and external cladding to 2 elevations of existing storage shed	Main Street, Urlingford, C	CONDITIONAL	2008	20080502	20081218
897	BERNARD KAVANAGH	PERMISSION for development consisting of the relocation of the southern boundary of the site	28 Togher Crescent, Urlin	CONDITIONAL	2008	20080130	20080325
9302	SFT MOORE DEVELOPMENT	to make alterations to the front elevation of the existing building including the provisions of an additional door and the construction of a shop front together with all associated site works	Main Street, Urlingford, C	CONDITIONAL	2009	20090508	20090702
9648	MATTIE WALSH	RETENTION PERMISSION to retain a) Change of use of existing building from agricultural to commercial use. b) Permission to retain small extensions to same. c) Permission to retain entrance, storage yard and all other necessary associated site works	Baunmore, Johnstown, C	CONDITIONAL	2009	20091006	20100414
10145	BORD NA MONA ENERGY LI	for development. The development will consist of eight wind turbines of up to 100m hub height and up to 112m rotor diameter with a total height not exceeding 156m; a transformer and crane hardstand area at each turbine; under-ground electrical and communication cables linking the turbines; internal site tracks, the upgrading of existing access tracks; drainage works; a 38kV substation with associated equipment and control building with associated septic tank and treatment system; a section of the proposed 38kV overhead power line from the proposed 38kV substation in Bruckana to the 110kV Lisheen substation; a permanent meteorological lattice mast 100m high; and associated works. This development is part of a larger development which also extends to parts of County Laois (townland of Baunaghra) and North Tipperary (townlands of Killoran and Tullowmacjames). The development as a whole will consist of a wind farm comprising: 16 wind turbines of up to 100m hub height and up to 112m rotor diameter with a total height not exceeding 156m; a transformer and crane hardstanding area at each turbine; underground electrical and communication cables linking the turbines; internal site tracks; a permanent meteorological lattice mast 100m high; drainage works; a 38kV substation and associated equipment and control building with associated septic tank and treatment system; a 38kV overhead line to the 110kV Lisheen substation; and associated works. An Environmental Impact Assessment accompanies the application. The development is proposed on a site that is the subject of an Integrated Pollution Control Licence (Reg. No. 499) as issued by the EPA in accordance with the provisions of the Environmental Protection Agency Act, 1992	Rathpatrick, Bruckana & I	CONDITIONAL	2010	20100325	20101026
10215	SEAN MOORE	A. Permission to retain demolition of un-habitable dwelling. B. Permission to retain rear and part of side boundary wall. C. Planning Permission to remove front boundary wall and replace with wall and railing similar to adjoining property. D. Planning permission to extend existing crash repair workshop and build new offices including associated site works	Main Street, Urlingford, C	CONDITIONAL	2010	20100423	20100906
10269	ANTHONY MCLOUGHLIN	for the following development: Construct new rear extension to the existing domestic garage on site - to incorporate new fuel store and with all associated site works	No. 23 Togher Crescent ,	CONDITIONAL	2010	20100514	20100708
10439	KEITH BEEHAN	Retention to retain domestic Garage as constructed	9 Togher Lawns, Urlingfor	CONDITIONAL	2010	20100723	20110127

11209	COLIN AHERN	to demolish existing domestic garage and to construct new domestic garage, to widen existing entrance gate and to upgrade existing site boundary to the west and north of the site	Togher Road, Urlingford,	CONDITIONAL	2011	20110427	20110621
11194	IRISH AND EUROPEAN PROI	Extension of Duration of Planning Permission Ref. in Planning Register 06/442	Main Street, Urlingford, C	CONDITIONAL	2011	20110418	20110612
11353	IRISH AND EUROPEAN PROI	Extension of Duration of Planning Permission Ref. in Planning Register 05/93	Urlingford, ,	UNCONDITIONAL	2011	20110714	20111018
11596	JOE HENNESSY	to intensify use as a take away restaurant by extending opening hours from 0700 hours to 0100 hours on any given day as previously allowed under planning application refer P06/1465 on premises	The Wishing-Well, Main S	CONDITIONAL	2011	20111206	20120208
11616	BERNARD KAVANAGH P.P. I	retention permission for well used for washing of buses at pemises	Main Street, Urlingford, C	CONDITIONAL	2011	20111216	20120218
12363	IRISH & EUROPEAN PROPEI	Extension of Duration of Planning Permission Ref. in Planning Register P. 06/1329	Togher Road, Urlingford,	CONDITIONAL	2012	20120808	20121002
14120	BLOCKSTAR BUILDING LIMI	to retain, complete, alter, amalgamate and change the use of 3 no. existing buildings comprising: Completion and change of use of previously approved 4 storey hotel into residential care (nursing home) accommodation, comprising 85 no. bedrooms over 3 storeys and associated ancillary accommodation including non-residential service rooms at fourth floor level: Works will include the reduction in extent of the previously approved 4 storey building and its elevations, roof and entrance area: Amalgamation of 4 storey building with adjacent existing previously approved 2 storey structure by means of a new single storey link building: Retention, completion, alteration and change of use of existing previously approved 2 storey structure (proposed to be amalgamated with existing 4 storey building) from restaurant to residential care (nursing home) accommodation at ground level comprising 7 no. bedrooms and 4 no. staff accommodation units at first floor level: Retention, completion, alteration and change of use of previously approved 2 storey existing stand-alone structure from retail to single storey store room/workshop ancillary to residential care usage: Retention of existing site waste water infra-structure: Installation of ground water well and ancillaries: Installation of fire-fighting water storage tank: Alterations to previously approved site landscaping to include reduction in provision of previously approved parking spaces to now provide 102 no. spaces: Alteration to previously approved site entrance onto road serving Togher Industrial Estate	corner Main Street and, T	CONDITIONAL	2014	20140326	20141211
14178	ELECTRICITY SUPPLY BOAR	for development. The development will consist of the construction of a new 38kV electrical transformer station comprising; installation of 2 no. modular containers for medium voltage (MV) and control equipment; 1 no. bunded 38kV power transformer, 1 no. bunded interface transformer, 1 no. house transformer, associated oil interceptor trap and 1 no. neutral earth resistor; construction of 38kV busbar on concrete plinth, toilet, new hardcore access road; 2.6m high palisade compound fence and 1.2m high concrete post and rail property boundary fence; screen planting and associated site works at site situated	rear of Urlingford Busine	CONDITIONAL	2014	20140430	20140624

		for development. The development will consist of 6 no. wind turbines, to a maximum tip height of 156m; Associated hardstandings at each turbine location; Underground electrical and communication cables, linking the turbines to the substation and control building at the existing 110kV Lisheen Sub-Station, Co. Tipperary; Upgrade of approximately 380m of existing access tracks; Construction of approximately 4.5km of new internal site access tracks; Construction of new drainage system and watercourse crossings; 2 no. borrow pits; associated felling of forestry and replanting; and Related site works and ancillary development. A ten-year permission is sought. The application is accompanied by an Environmental Impact Statement and Natura Impact Statement. The development is part of a larger development and the site also extends into the townlands of Graigueadrisly, Co.Laois and Killoran near Templetuohy, Co. Tipperary. SWS Energy Limited also intends to apply to Laois County Council for planning permission for development at Graigueadrisly, Co. Laois. The development will consist of two wind turbines to a maximum tip height of 156m; Associated hardstandings at each turbine location; Underground electrical and communication cables, linking the turbines to the substation and control building at the existing 110kV Lisheen Sub-Station, Co.Tipperary; Construction of approximately 1.2km of new internal site access tracks; Construction of new drainage system and watercourse crossings; associated felling of forestry and replanting; and Related site works and ancillary development. A ten-year permission is sought. The application is accompanied by an Environmental Impact Statement and Natura Impact statement. SWS Energy Limited also intends to apply to North Tipperary County Council for planning permission for development at Killoran near Templetuohy, Co. Tipperary. The development will consist of underground electrical and communication cables, linking the turbines to the substation and control building at the existing 110kV Lisheen Sub-Station, Co. Tipperary; and Construction of approximately 1.3km of new				
14202	SWS ENERGY LIMITED	internal site access tracks. A ten-year permission is sought. The application is	Baunmor, Bruckana , and	CONDITIONAL	2014	20140516	20150205
14422	MW HIRE SERVICES	to retain a well which supplies our premises with water	Unit 14 Urlingford Busine	CONDITIONAL	2014	20140918	20141112
14488	JAMES LEAHY	retention permission to retain Dog House and Fuel Store - as constructed on site with all associated site works	The Islands, Urlingford, C	CONDITIONAL	2014	20141031	20150103
14592	PATRICIA JOYCE	for the erection of a dwelling house and domestic garage/store with septic tank and soil polishing filter and all associated site works	Islands, Urlingford, Co. Ki	CONDITIONAL	2014	20141223	20150225
15552	RAY AND LORRAINE MCCAR	for reconfiguration of layout to the rear of the premises including new extension (9sqm) and construction of a new roof, all to existing Mary Mac's Pub	Main Street, Urlingford, C	CONDITIONAL	2015	20150916	20151110

15629	BROOKFIELD RENEWABLE II	for development. The development will consist of alterations to a previously permitted wind farm development (Planning Register References 14/202 (Kilkenny), 14/109 (Laois) and 14/510138 (Tipperary)), where the permitted development also extends into the townland of Rathpatrick near Johnstown, County Kilkenny, Killoran County Tipperary and Graigueadrisly, County Laois. The proposed alterations will consist of: relocated vehicular entrance on R502 through widening existing agricultural entrance; alterations to internal access tracks including construction of approximately 572m of new access track with associated drainage and watercourse crossing; the omission of 1.775 km of previously permitted access tracks; Clearfelling of approximately 0.5 Hectares of forestry associated with the new section of internal access track within the Baunmore forestry plantation, County Kilkenny; Amended cable route for underground electrical and communication cables; and all associated works and services. A ten-year permission is sought. The application is accompanied by a Natura Impact Statement. The current application is part of an application for development which extends into the townland of Killoran near Templetuohy, County Tipperary, detailed as follows. Brookfield Renewable Ireland Limited also intends to apply to Tipperary County Council for planning permission for development at Killoran near Templetuohy, County Tipperary. The proposed alterations will consist of: Amended cable route for underground electrical and communication cables; the omission of 1.3 km of previously permitted access track in Tipperary and all associated works and services. A ten-year permission is sought. The application is accompanied by a Natura Impact Statement	Bruckana and Baunmore, CONDITIONAL	2015	20151023	20160804
16843	BERNARD KAVANAGH & SO	for development. The development comprises of - Change of use of a portion of the ground floor from shop/restaurant use to office use and construction of a single storey extension from office reception, - construction of a 2 storey extension containing a stairs and lift to serve the existing first floor guest accommodation, - new windows to rear elevation at first floor level, - upgrade existing external fire escape stairs and provide shelter over stairs, - modifications to existing canopy over fuel pumps, - alterations to front elevation including removal of existing glass porch and applying napped render finish to existing painted brickwork, - associated signage, - associated site development works	Main Street, Urlingford, C	CONDITIONAL	2016	20161216	20170218
17155	STAUNTON ENTERPRISES	for the construction of two number semi detached dwellings, connection to existing watermains, public foul and stormwater sewers with all associated site development works	Togher Way, Urlingford, (	CONDITIONAL	2017	20170314	20170619
17708	STAUNTON ENTERPRISES	for 1) Retention Permission works undertaken to an existing terrace of 6 No. dwellings originally granted permission under Planning Ref: 01587 to include (a) reduction in overall height, (b) elevational alterations to include alterations to ground floor windows to include a bay window, additional brick to the façade, removal of rear single storey extensions and minor window alterations and (c) omission of an attic floor. 2) Full permission for alterations of the internal layout to the 6.No.dwellings originally granted permission under Planning Ref: 01587 to change from 6 No.3 bedroom units to 6 No.2 bedroom units. 3)Full Permission to complete the works referenced above. 4)Full Permission for the construction of 2 No. four bedroom two storey detached dwellings, 2 No. two bedroom single storey detached dwellings, and 4 No. 1 bedroom single storey semi-detached dwellings. 5)Connection to existing watermains, public foul and strom-water sewers, with all associated site development works. All works to take place at the following:	Togher Way, Urlingford, (	CONDITIONAL	2017	20171026	20180806

Planning Authority	Application Number	Development Description	Development Address	Application Status	Application Type	Decision	Received Date	Decision Date	Grant Date	Expiry Date	Appeal Reference Number	Appeal Submitted Date	Appeal Decision	Appeal Decision Date	FI Request Date	FI Received Date
Kilkenny County Council	17708	for 1) Retention Permission works undertaken to an existing terrace of 6 No. dwellings originally granted permission under Planning Ref:	Togher Way , Urlingford , Co. Kilkenny	APPLICATION FINALISED	PERMISSION	CONDITIONAL	26-10-17	01-08-18	03-09-18	02-09-23		N/A		N/A	13-12-17	10-07-18
Tipperary County Council	17601251	as constructed single storey parish office containing the following (a) office area with disabled WC and meeting room with all associated	Ballydavid , Littleton , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	15-11-17	15-01-18	19-02-18	18-02-23		N/A		N/A	N/A	N/A
Tipperary County Council	17601351	(1)modific. to permitted develop. Ref. 09/51/0624 (ABP REF.PL.22.237958) Redesign of layout extent of racecourse to now cover c.33.6	Noard NewhillLeigh and Borris , Two Mile Borris	APPLICATION FINALISED	EXTENSION OF DURATION	UNCONDITIONAL	08-12-17	06-02-18	N/A	22-03-23		N/A		N/A	N/A	N/A
Tipperary County Council	17601350	The Tipperary Venue -Mixed use Leisure Campus comprising: A) Demolition of all existing buildings on site comprising 5No. dwelling hou	Noard , Newhill , Leigh & Borris	APPLICATION FINALISED	EXTENSION OF DURATION	UNCONDITIONAL	08-12-17	06-02-18	N/A	22-03-23		N/A		N/A	N/A	N/A
Tipperary County Council	17601389	construction of (I) cubicle facilities incorporating slatted tanks with feeding areas and all associated site works. Permission for Retention	New Hill , Two-Mile-Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	18-12-17	15-02-18	22-03-18	21-03-23		N/A		N/A	N/A	N/A
Tipperary County Council	17601407	construction of a) A Community carpark to the rear of St. Mary's Church with circulation road and front gate, access footpaths, public lig	St. Mary's Church , Bailey Street , Killenaule Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	20-12-17	19-02-18	26-03-18	25-03-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600020	the construction of a new dwelling, domestic garage, entrance and waste water treatment system with all associated site works	Castletown , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	12-01-18	23-04-18	28-05-18	27-05-23		N/A		N/A	07-03-18	05-04-18
Tipperary County Council	18600035	Construction of a cubicle house with feed passage, loose house, slatted tank, two feed passages, milking parlour, conversion of existing	Kevinsfort , Liskeveen , Littleton	APPLICATION FINALISED	PERMISSION	CONDITIONAL	18-01-18	12-03-18	16-04-18	15-04-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600062	construction of a slatted cubicle shed and all associated site works	Leigh , Two-Mile-Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	23-01-18	15-03-18	19-04-18	18-04-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600151	construction of a single storey detached dwelling, detached garage, site entrance, waste water treatment system and percolation area a	Newhill/Borris , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-02-18	31-05-18	05-07-18	04-07-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600210	building (a) cubicle house with slatted tank (b) loose house extension to existing including associated site works	Currraheenduff , Coalbrook , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	21-02-18	10-04-18	15-05-18	14-05-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600222	existing extensions to house and associated siteworks	Glengoole South , New Birmingham , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	23-02-18	10-04-18	15-05-18	14-05-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600259	change of use from commercial retail premises to domestic storage of vintage vehicles and permission to construct an extension to same	Borris , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	05-03-18	04-09-18	09-10-18	08-10-23		N/A		N/A	17-04-18	10-08-18
Tipperary County Council	18600260	proposed new single storey extension linking existing dwelling with existing shed structure, alterations to existing dwelling, change of use	Galbooly , Littleton , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	05-03-18	18-04-18	23-05-18	22-05-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600292	development consisting of the construction of 211m of 2.4m high palisade fencing and the installation of one manually operated lockabl	Coolbrook Water Treatment Plant , Curraheenduff , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-03-18	27-04-18	01-06-18	31-05-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600297	(1) Construction of a bungalow type dwelling, single storey domestic garage, carport and driveway. (2.) Construction of a new site entrar	Dunguib , Killenaule , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	12-03-18	07-06-18	12-07-18	11-07-23		N/A		N/A	30-04-18	15-05-18
Tipperary County Council	18600310	to extend a classroom, provide additional access and toilet facility and to carry out all associated works	Moyne National School , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	13-03-18	04-05-18	08-06-18	07-06-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600341	construction of new dwellinghouse, domestic garage, entrance and waste water treatment system with all associated site works	Clover Lane , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	21-03-18	17-08-18	21-09-18	20-09-23		N/A		N/A	14-05-18	26-07-18
Tipperary County Council	18600343	construction of a concrete silage base, cattle cubicle shed with underground slatted tanks and all associated site works	Ballynastick , Coalbrook , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	21-03-18	20-11-18	02-01-19	01-01-24		N/A		N/A	02-05-18	31-10-18
Tipperary County Council	18600350	converting existing garage into a bedroom, replacing the existing garage door with glazed double doors and Permission to demolish 2 no	26 Castlequarter , Killenaule , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	22-03-18	02-05-18	06-06-18	05-06-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600365	a change of house/garage design and location from previous planning application numbers ref 10/508 and 16/600580 including all assoc	Gortnahoe , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	26-03-18	17-05-18	21-06-18	20-06-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600370	the as constructed agricultural shed and Retention of modifications to the existing entrance	Dunguib , Killenaule , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	26-03-18	15-05-18	19-06-18	18-06-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600426	proposed new single storey and two storey extensions to existing dwelling, demolition of existing single storey shed structure, alteration	Coolcroo , Two-Mile-Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-04-18	10-07-18	14-08-18	13-08-23		N/A		N/A	29-05-18	19-06-18
Tipperary County Council	18600449	change of use from health care use to domestic residential use	Littleton Health Centre , St. Kevin's Park , Ballybeg Littleton Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	13-04-18	31-05-18	05-07-18	04-07-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600512	a two storey dwelling, domestic garage, new site entrance, new treatment system and soil polishing filter and all associated site works	Leigh , Two-Mile-Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	25-04-18	13-09-18	18-10-18	17-10-23		N/A		N/A	18-06-18	30-07-18
Tipperary County Council	18600525	development of an athletic facility including areas for running, jumping and throwing, the facility will consist of lighting to the perimeter	Ballybeg Road , Littleton , Co Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	27-04-18	19-06-18	24-07-18	23-07-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600556	single storey 248 sqm Community Centre, Playground and Sensory Garden, new car parking spaces, use of existing site entrance plus con	Two-Mile-Borris , Thurles , Co. Tipperary	APPLICATION FINALISED	EXTENSION OF DURATION	UNCONDITIONAL	03-05-18	26-06-18	N/A	27-05-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600565	the construction of new dwelling house, new entrance/septic tank and percolation, double garage	Moyneard , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	08-05-18	01-10-18	05-11-18	04-11-23		N/A		N/A	27-06-18	24-07-18
Tipperary County Council	18600695	to build an extension to my existing dwelling including associated site works	Boulick , Gortnahoe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	01-06-18	23-07-18	27-08-18	26-08-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600705	construction of an animal house complete with underground slatted tank and associated site works	Leigh , Two-Mile-Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	05-06-18	23-10-18	27-11-18	26-11-23		N/A		N/A	24-07-18	08-10-18
Tipperary County Council	18600717	construction of a new, two-storey dwelling with new entrance, waste water treatment system and drainage, landscaping and associated	Knockboy , Gortnahoe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	06-06-18	07-01-19	11-02-19	10-02-24		N/A		N/A	26-07-18	12-10-18
Tipperary County Council	18600794	dwelling, garage and entrance and to carry out all associated works including connection to mains sewer	Lanespark , Ballinunty , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	25-06-18	08-11-18	13-12-18	12-12-23		N/A		N/A	16-08-18	27-09-18
Tipperary County Council	18600811	an extension to the existing grave yard, access road, new entrance, boundary wall, storage shed, columbarium wall and all associated sit	Two Mile Borris Grave Yard , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	27-06-18	10-08-18	14-09-18	13-09-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600866	construction of an agricultural development consisting of a loose housing shed for cows & the erection of a bulk milk silo with all associa	Cooleeney , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	06-07-18	29-08-18	03-10-18	02-10-23		N/A		N/A	N/A	N/A
Tipperary County Council	18600981	to retain the following (a) as constructed domestic garage to rear of dwelling, (b) as constructed porch to front of dwelling (c) retain atti	Clonamicklon , Gortnahoe , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	03-08-18	07-01-19	11-02-19	10-02-24		N/A		N/A	25-09-18	04-12-18
Tipperary County Council	18600992	the erection of extensions and alterations to existing dwelling comprising of a single storey ground floor extension, a first floor extension	Main Street , Killenaule , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-08-18	02-10-18	06-11-18	05-11-23		N/A		N/A	N/A	N/A
Tipperary County Council	18601084	construction of a bedroom and ensuite extension to dwelling and for retention permission for change of use from garage to a granny flat	Ballydavid , Littleton , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	05-09-18	20-03-19	24-04-19	23-04-24		N/A		N/A	17-10-18	27-02-19
Tipperary County Council	18601160	the following development: a temporary single story prefabricated modular building to the southwest of the existing school comprising 2	Scoil Ruain , Killenaule , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	21-09-18	07-01-19	11-02-19	10-02-24		N/A		N/A	14-11-18	03-12-18
Tipperary County Council	18601178	construction of extensions and alterations to existing dwelling house, upgrading of existing waste water treatment system and construct	Cloncleigh , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	28-09-18	19-11-18	01-01-19	31-12-23		N/A		N/A	N/A	N/A
Tipperary County Council	18601199	construction of a new ancillary building consisting of two toilets in the grounds of St. Mary's Church with all associated site works. Work	St. Mary's Church , Moynetemple , Moyne	APPLICATION FINALISED	PERMISSION	CONDITIONAL	05-10-18	27-11-18	09-01-19	08-01-24		N/A		N/A	N/A	N/A
Tipperary County Council	18601206	existing detached domestic garage/store	Lanespark , Ballinulty , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	08-10-18	21-11-18	03-01-19	02-01-24		N/A		N/A	N/A	N/A
Tipperary County Council	18601296	a biorefinery facility comprising of a process building with processing areas, plant rooms, stores, personnel & administrative areas; extern	Killoran , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	26-10-18	13-05-19	17-06-19	16-06-29		N/A		N/A	19-12-18	19-03-19
Tipperary County Council	18601437	existing extension and sheds	No 6 McDonagh Terrace , Littleton , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	06-12-18	05-02-19	12-03-19	11-03-24		N/A		N/A	N/A	N/A
Tipperary County Council	18601488	the construction of 1.) 1 no single storey farm shed for holding livestock 2.) 2 no. single storey Hydroponic Polytunnels to be used as fodd	Blackcastle Farm , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	18-12-18	16-07-19	20-08-19	19-08-24		N/A		N/A	18-02-19	27-06-19
Tipperary County Council	18601495	the construction of a four-bay slatted shed, calf shed, horse stable, farm access road and modifications to an existing entrance, along wit	Rahinch Td. , Littleton , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	19-12-18	18-02-19	25-03-19	24-03-24		N/A		N/A	N/A	N/A
Tipperary County Council	18601511	build a 1.5 storey dwelling, domestic garage, combined field and dwelling entrance, install septic tank including associated site works	Foilacamin , Gortnahoe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	20-12-18	01-04-19	07-05-19	06-05-24		N/A		N/A	21-02-19	N/A
Tipperary County Council	18601533	construction of a single storey extension to the side of dwellinghouse, and a single storey extension to the rear of dwellinghouse, a new s	Coolcroo , Two-Mile-Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	21-12-18	20-02-19	27-03-19	26-03-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600021	detached single storey toilet block and ancillary related works to be located to the rear of the existing church. This is a protected structu	St James Catholic Church , Main Street , Two Mile Borris	APPLICATION FINALISED	PERMISSION	CONDITIONAL	15-01-19	07-03-19	11-04-19	10-04-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600025	existing car park, entrance arrangement, roadside public footpath and site boundary fencing, along with Permission to extend and comp	Moycarkey-Borris Community & Sports Centre , Church View , Littletor	APPLICATION FINALISED	RETENTION	CONDITIONAL	16-01-19	11-03-19	15-04-19	14-04-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600031	(1) demolish extension to rear of existing cottage, (2) construct new single storey extension to the front and rear of the existing cottage,	The Cottage , Ballymurreen , Littleton	APPLICATION FINALISED	PERMISSION	CONDITIONAL	17-01-19	12-03-19	16-04-19	15-04-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600077	the erection of a 30 metre high multi-user lattice telecommunications structure carrying antenna and dishes enclosed within a 2.4 metre	Kilbrannel , Killenaule , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	31-01-19	25-03-19	29-04-19	28-04-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600082	agricultural development consisting of a new shed for storing straw/hay and to construct an extension to existing slatted shed with all as	Killoran , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	01-02-19	27-01-20	02-03-20	01-03-25		N/A		N/A	26-03-19	02-01-20
Tipperary County Council	19600108	retain the as-constructed silage slab and Permission to complete the walls for same and Permission to construct a hay shed with all ancil	Dunguib , Killenaule , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	11-02-19	01-04-19	06-05-19	05-05-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600138	construction of dwelling house, domestic garage, entrance, driveway, septic tank and percolation area and all associated site works	Fennor , Urlingford , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	20-02-19	08-04-19	13-05-19	12-05-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600188	construction of a two storey extension to the rear of existing dwellinghouse including single storey entrance porch to the east elevation,	Avondale , Skehane Borris , Two-Mile-Borris Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	05-03-19	18-04-19	23-05-19	22-05-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600200	to demolish a shed to the rear of my Dwelling and to construct a Shower Room to my Dwelling	No. 10 Saint Mary's Road , Castlequarter , Killenaule Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	07-03-19	30-04-19	04-06-19	03-06-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600201	the following: a) minor alteration to pitch layout with ball stops to each end from previously granted permission Ref No. 17/600145, b) t	Gortnahoe , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	07-03-19	18-04-19	23-05-19	22-05-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600202	an 18m multi-user free standing support structure carrying telecommunications equipment, together with associated exchange cabinets	Rathcunikeen , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	07-03-19	18-04-19	23-05-19	22-05-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600219	(a) construct a two storey extension to the side/north east of my dwelling, (b) construct a single storey extension to the south east of the	Newhill , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	12-03-19	02-05-19	06-06-19	05-06-24		N/A		N/A	N/A	N/A
Kilkenny County Council	19172	to extend and alter externally the existing single storey ground floor rear extension, to connect and convert an existing adjoining shed an	Baunmore , Johnstown , Co. Kilkenny	APPLICATION FINALISED	PERMISSION	CONDITIONAL	20-03-19	13-05-19	14-06-19	13-06-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600271	construct A. an extension onto existing cattle house to form a cubicle house, B. an uncovered slurry effluent storage tank with slats over,	Glengoole South , Glengoole , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	26-03-19	22-10-19	26-11-19	25-11-24		N/A		14-05-19		04-10-19
Tipperary County Council	19600272	decommission existing septic tank and effluent treatment system serving our medical centre and private dwelling, and to construct a pur	Killenaule , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	26-03-19	06-08-19	10-09-19	09-09-24		N/A		15-05-19		16-07-19
Tipperary County Council	19600275	(a)to demolish existing score boards structure (b) to construct new all-weather/astropitch, fencing and hurling wall in location as shown	Gortnahoe , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	27-03-19	16-05-19	20-06-19	19-06-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600350	construction of a cubicle house with ancillary effluent storage tank with slats over and all associated site works	Earls Hill , Ballynonty , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	10-04-19	29-05-19	03-07-19	02-07-24		N/A		N/A	N/A	N/A
Kilkenny County Council	19283	for amendments to existing partially completed nursing home. Amendments include the following: 1/Amendments to all external elevat	Corner Main Street and , Togher Industrial Estate , Urlingford	APPLICATION FINALISED	RETENTION	CONDITIONAL	26-04-19	19-06-19	22-07-19	21-07-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600433	single storey extension and alterations to existing school including all associated site works	St Kevins National School , Littleton , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	29-04-19	19-06-19	24-07-19	23-07-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600446	a replacement septic tank and percolation area with all associated site works	Lahardan Upper , Littleton , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	01-05-19	15-08-19	19-09-19	18-09-24		N/A		20-06-19		29-07-19
Tipperary County Council	19600483	construction of a dwelling, detached domestic garage, septic tank and percolation area, site entrance and all associated site works	Cooldine , Killenaule , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-05-19	27-08-19	01-10-19	30-09-24		N/A		28-06-19		01-08-19
Tipperary County Council	19600491	demolition of existing outbuildings and rear extension, renovate and extend existing dwelling house, re-locate existing entrance, install a	Liskeveen , Littleton , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	10-05-19	30-09-19	04-11-19	03-11-24		N/A		01-07-19		06-09-19
Tipperary County Council	19600505	the existing agricultural shed in the North West corner of farm yard	Killoran , Moyne , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	14-05-19	03-07-19	07-08-19	06-08-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600523	build a domestic garage cum fuel store including associated site works	Inchorourke , Urlingford , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	15-05-19	14-01-20	18-02-20	17-02-25		N/A		05-07-19		18-12-19
Kilkenny County Council	19332	of Planning Permission Reference 14/178	Urlingford Business Park , Urlingford , Co. Kilkenny	APPLICATION FINALISED	EXTENSION OF DURATION	UNCONDITIONAL	17-05-19	08-07-19	N/A	17-11-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600608	reuse and extend existing un-occupied dwelling, build domestic garage, alter existing entrance, install waste water treatment system incl	Crab , Gortnahoe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	04-06-19	22-07-19	26-08-19	25-08-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600612	all works as completed to dwellinghouse, garage, entrance, septic tank and associated works	Curraheen , Horse & Jockey , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	05-06-19	22-07-19	26-08-19	25-08-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600645	(1) a detached domestic garage/storage shed (2) external garden/boundary walls (3) the roof of the dwelling as constructed and includin	Graiguepaudeen , Urlingford , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	11-06-19	24-07-19	28-08-19	27-08-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600656	build a two storey dwelling, domestic garage, entrance, install waste water treatment system including associated site works	Gorteen Lower , Ballysloe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	14-06-19	25-09-19	30-10-19	29-10-24		N/A		30-07-19		14-08-19
Tipperary County Council	19600664	extensions to existing cottage include attached garage, waste water treatment system and associated site works. Retention of existing ec	Curraheen , Horse & Jockey , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	17-06-19	06-08-19	10-09-19	09-09-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600714	a single storey dwellinghouse, garage, connection to public water scheme, effluent treatment system, percolation area, new site entranc	Longfordpass South , Urlingford Via Thurles , Co Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	27-06-19	15-08-19	19-09-19	18-09-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600715	to construct a two-storey dwelling house, domestic garage, septic tank and percolation area, entrance and all associated site works	Garranroe , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	27-06-19	19-08-19	23-09-19	22-09-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600743	build an extension to our existing dwelling including associated site works	Killoran , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	03-07-19	21-08-19	25-09-19	24-09-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600769	to retain extension to the side of dwelling house and to retain domestic storage shed	4 McDonagh Terrace , Littleton , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	10-07-19	29-08-19	03-10-19	02-10-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600836	alterations to previously approved planning register reference 18/600151; the proposed alterations relate to the relocation of and minor	Newhill/Borris , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	30-07-19	16-09-19	21-10-19	20-10-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600932	1 no. 10m high flood light at existing hurling wall including green wire fencing here 2.1m high, also to retain 1 no. 8m high flood light at e	Crosscannon , Killenaule , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	22-08-19	11-10-19	15-11-19	14-11-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600968	1. a domestic extension to the dwelling, 2. a domestic storage shed, 3. roadside boundary treatment, 4. hard standing areas, and all assc	Cooleeney , Moyne , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	02-09-19	24-10-19	28-11-19	27-11-24		N/A		N/A	N/A	N/A
Tipperary County Council	19600992	a) renovation of dwelling including internal alterations and elevational alterations b) single storey extension to rear of dwelling c) renova	River Street , Killenaule , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-09-19	29-06-20	02-08-20	01-08-25		N/A		31-10-19		09-04-20
Tipperary County Council	19600994	demolition of an existing dwelling as well as Planning Permission to construct a new dwelling, new waste water treatment system, recon	Knockavardagh , Killenaule , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-09-19	29-10-19	03-12-19	02-12-24		N/A		N/A	N/A	N/A
Tipperary County Council	19601012	construction and operation of solar PV arrays mounted on metal frames on a 38.3 ha site, inclusive of an electrical substation compounc	Rahelty and Shanballyduff , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	12-09-19	20-02-20	N/A	13-04-26	ABP-30693	18-03-20	CONDITIC	14-04-21	05-11-19	18-12-19
Tipperary County Council	19601132	construction of extensions and alterations to existing dwelling house, upgrading of existing waste water treatment system and all associa	Noard , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	14-10-19	25-11-19	07-01-20	06-01-25		N/A		N/A	N/A	N/A
Kilkenny County Council	19759	to build an extension to my cubicle house and to provide slatted tanks and carry out all associated works. Also for permission to demoli	Baunmore , Johnstown , Co Kilkenny	APPLICATION FINALISED	PERMISSION	CONDITIONAL	15-10-19	05-12-19	16-01-20	15-01-25		N/A		N/A	N/A	N/A
Tipperary County Council	19601142	single storey extension to side and rear of existing house including all ancillary site works	Noard , Two-Mile-Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	16-10-19	25-11-19	07-01-20	06-01-25		N/A		N/A	N/A	N/A
Tipperary County Council	19601145	(I) existing extension to rear of existing dwelling and (ii) conversion of the existing attached garage to living accommodation as well as Pl	Killenaule , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	17-10-19	09-12-19	21-01-20	20-01-25		N/A		N/A	N/A	N/A
Tipperary County Council	19601158	to develop a sensory garden which will include a meeting room, roadside boundary wall, a thatched roofed shelter and construction of a	Coole , Ballysloe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	21-10-19	09-12-19	21-01-20	20-01-25		N/A		N/A	N/A	N/A
Tipperary County Council	19601162	existing as constructed dwelling, including attic conversion, and garage to rear of dwelling, including location and orientation.	Boulabeha , Moyne , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	21-10-19	11-12-19	23-01-20	22-01-25		N/A		N/A	N/A	N/A
Kilkenny County Council	19787	the development will consist of alterations to a previously permitted wind farm development (Planning Register References 14/202 & 15	Bruckana Baunmore and Rathpatrick , Co Kilkenny	APPLICATION FINALISED	PERMISSION	CONDITIONAL	22-10-19	13-12-19	24-01-20	23-01-25		N/A		N/A	N/A	N/A
Tipperary County Council	19601176	(1) extension to rear of dwelling house, (2) a porch to the side of dwelling house (3) entrance gates and boundary walls, (4) a domestic g	Lisduff , Thurles , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	23-10-19	09-12-19	21-01-20	20-01-25		N/A		N/A	N/A	N/A
Tipperary County Council	19601231	construction of a livestock underpass with effluent holding tank and all associated site works	Longfordpass East , Urlingford , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	01-11-19	18-12-19	30-01-20	29-01-25		N/A		N/A	N/A	N/A

Tipperary County Council	19601268	the construction of new entrance from public roadway onto forestry lands, to comprise the provision of splayed access, clear visibility sig	Kilmakill , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	13-11-19	09-01-20	13-02-20	12-02-25	N/A	N/A	N/A	N/A	
Tipperary County Council	19601278	alterations and extensions previously made to dwellinghouse and planning permission to construct new alterations and extension to the	Moynetemple , Moyne , Thurles Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	15-11-19	14-01-20	18-02-20	17-02-25	N/A	N/A	N/A	N/A	
Tipperary County Council	19601320	change of use of an attached post office and a garage, to raise the roof and add a second floor over both the post office and garage and	Gortnahoo , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	27-11-19	05-06-20	09-07-20	08-07-25	N/A	N/A	29-01-20		27-03-20
Tipperary County Council	19601370	new two storey dwelling, alterations to existing site entrance, new waste water treatment system and percolation area and all associate	Curraheen , Horse and Jockey , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	06-12-19	12-03-20	10-06-20	09-06-25	N/A	N/A	05-02-20		17-02-20
Tipperary County Council	19601374	new two storey extension to rear of existing end of terrace house, part demolition of single storey extension to rear, full planning permis	Main Street , Gortnahoe , Co Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	06-12-19	06-02-20	12-03-20	11-03-25	N/A	N/A	N/A	N/A	
Tipperary County Council	19601475	(i) milking parlour extension (ii) two doors and window to milking parlour (iii) extra crush yard (iv) new location for meal bin and all asso	Newhill , Two Mile Borris , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	30-12-19	25-02-20	31-03-20	30-03-25	N/A	N/A	N/A	N/A	
Tipperary County Council	19601478	construction of three bedroomed bungalow with connection to existing septic tank on site, close up existing entrance on site and constru	Urard , Urlingford , via Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	31-12-19	02-10-20	05-11-20	04-11-25	N/A	N/A	25-02-20		31-07-20
Tipperary County Council	2026	construction of extensions and alterations to existing dwelling house with all associated site works including new entrance	Castletown , Moyne , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	17-01-20	10-03-20	08-06-20	07-06-25	N/A	N/A	N/A		
Tipperary County Council	2033	construction of new telecommunications support structure (overall height of 22 metres) carrying antennas, dishes, associated equipmen	Eir Exchange , Ballymoren , Littleton Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	20-01-20	12-03-20	19-06-20	18-06-25	N/A	N/A	N/A		
Tipperary County Council	2079	conversion of attic store space of existing club house to an open plan fitness room/gym area and new stair to access the first floor with a	Ballydavid , Littleton , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	31-01-20	13-03-20	11-06-20	10-06-25	N/A	N/A	N/A		
Tipperary County Council	20111	construction of agricultural developments on the farm consisting of: 1. replacement of existing round-roof barn with lean-to roof with al	Moynetemple , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	10-02-20	20-03-20	18-06-20	17-06-25	N/A	N/A	N/A		
Tipperary County Council	20129	a 10 year planning permission for modifications to Condition No. 1 of previously granted planning permission Ref. No. 18/601296. The n	Cooleeny Derryfadda Derryville and Killoran , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	13-02-20	03-04-20	27-06-20	26-06-25	N/A	N/A	N/A		
Tipperary County Council	20156	as constructed dwelling, previously approved under planning reference 18600512, changes to include: reduced footprint at north west c	Leigh , Two Mile Borris , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	21-02-20	31-03-20	27-06-20	26-06-25	N/A	N/A	N/A		
Tipperary County Council	20166	extension and carry out renovations to existing dwelling along with proposed new entrance to replace existing entrance	Monslatt , Killenaule , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	24-02-20	28-05-20	01-07-20	30-06-25	N/A	N/A	N/A		
Tipperary County Council	20171	a) 16 no. part two-storey, part single storey detached dwellings, comprising of 5 no. five bedroom dwellings and 11 no. four bedroom dw	Borris , Two-Mile-Borris , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	26-02-20	18-12-20	30-01-21	29-01-26	N/A	N/A	29-05-20		25-11-20
Tipperary County Council	20340	a) 3 no. domestic storage sheds, b) hard-standing areas, and c) internal garden walls, and including all associated site works	Liskeveen , Littleton , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	03-04-20	11-09-20	15-10-20	14-10-25	N/A	N/A	01-07-20		18-08-20
Tipperary County Council	20341	extension to our existing dwelling house, and all associated site works and services	Kilbrannel House , Kilbrannel , Killenaule	APPLICATION FINALISED	RETENTION	CONDITIONAL	06-04-20	28-09-20	01-11-20	31-10-25	N/A	N/A	13-07-20		27-07-20
Tipperary County Council	20362	for the erection of 1 no. 500kw wind turbine(hub height 50.00m / blade tip height 73.50m and the construction of a 14.00 sq.m control	Graigaman , Coalbrook , Thurles	APPLICATION FINALISED	EXTENSION OF DURATION	UNCONDITIONAL	07-04-20	11-06-20	N/A	10-06-21	N/A	N/A	N/A		
Tipperary County Council	20372	construction of kitchen/living, bedroom extenstion to rear, internal modifications to existing house, convert outbuildings to form new ut	Rathmanna , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	14-04-20	30-09-20	03-11-20	02-11-25	N/A	N/A	01-07-20		30-07-20
Tipperary County Council	20387	construction of a part 2-storey, part single storey detached dwelling; (b) detached garage; (c) alterations to and continued use of the exi	Garraun , Two-Mile-Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	16-04-20	24-09-20	28-10-20	27-10-25	N/A	N/A	07-07-20		01-09-20
Tipperary County Council	20397	a) Proposed new single storey bedroom extension to side of the existing dwelling: b) Associated alterations to the existing dwelling exter	Ballydavid , Littleton , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	20-04-20	24-09-20	28-10-20	27-10-25	N/A	N/A	06-07-20		01-09-20
Tipperary County Council	20399	construction of dwelling house, domestic garage, entrance, driveway, septic tank and percolation area and all associated site works	Inchirourke , Urlingford , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	20-04-20	13-11-20	17-12-20	16-12-25	N/A	N/A	10-07-20		21-10-20
Tipperary County Council	20463	conversion of existing garage to habitable space and build a bedroom extension to the rear of my existing dwelling including associated s	32 Castlequarter , Killenaule , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	14-05-20	06-07-20	09-08-20	08-08-25	N/A	N/A	N/A		
Tipperary County Council	20490	the following yard areas; hardcore truck parking area yard No. 1; hardcore circulation yard No. 2 & hardcore intermittent overspill parkir	Leigh , Turnpike , Two Mile Borris Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	23-05-20	19-05-21	22-06-21	21-06-26	N/A	N/A	16-07-20		23-04-21
Tipperary County Council	20524	2 no. as constructed extensions to an existing dwelling and also planning permission to construct a new extension to an existing dwelling (1) an increase in the annual waste intake from 45000 tonnes/year to 80,000 tonnes; (2) single storey extensions to the east and west of the existing building (having a combined floor area of 6,083m2), (3) relocation of existing firewater lagoon (324m2), (4) construction of new firewater lagoon (401m2) and all associated site works and services to accomodate the biological treatment of the additional organic residues and production of compost. The existing biological treatment of the additional organic residues and production of compost. The existing biological treatment process is carried out in accordance with an Industrial Emissions Licence granted by the Environmental Protection Agency. An Environmental Impact Assessment Report (EIAR) shall be submitted with this planning	10 Ardleigh , Two Mile Borris , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	27-05-20	15-07-20	18-08-20	17-08-25	N/A	N/A	N/A	N/A	
Tipperary County Council	20550	application	Ballybeg , Littleton , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	04-06-20	14-06-21	N/A	05-10-28	ABP-31078	09-07-21	CONDITIC	06-10-23	28-07-20		23-04-21
Tipperary County Council	20618	(1) Retain existing 2 no. meal bins as erected and (2) Permission to construct a new four span A-roof shed comprising of cubicles and slat	Monslatt , Killenaule , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	18-06-20	30-07-20	02-09-20	01-09-25	N/A	N/A	N/A	N/A	
Tipperary County Council	20641	change of house design and site layout to that previously granted under Planning Reference 19600715	Garranroe , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	23-06-20	11-08-20	14-09-20	13-09-25	N/A	N/A	N/A		
Kilkenny County Council	20408	for the completion of an existing residential development. With development to consist of the provision of 7 new detached dwellings co	Togher Crescent , Urlingford , Co. Kilkenny	APPLICATION FINALISED	PERMISSION	CONDITIONAL	29-06-20	05-10-20	06-11-20	05-11-25	N/A	N/A	20-08-20		09-09-20
Tipperary County Council	20757	new entrance and gates to existing premises with all associated site work	Ballymurreen , Littleton , Tuhrles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	13-07-20	31-08-20	04-10-20	03-10-25	N/A	N/A	N/A		
Kilkenny County Council	20459	The development will consist of alterations to a previously permitted wind farm development (Planning Register References 14/202, 15/	Bruckana , Baunmore and Rathpatrick , County Kilkenny	APPLICATION FINALISED	PERMISSION	CONDITIONAL	16-07-20	01-12-20	12-01-21	11-01-26	N/A	N/A	08-09-20		06-11-20
Tipperary County Council	20802	the erection of a guyed wind monitoring mast, with instruments, up to 100m in height - the purpose of the proposed mast is to assess th	Longfordpass South , Urlingford , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	23-07-20	15-09-20	19-10-20	18-10-25	N/A	N/A	N/A		
Tipperary County Council	20814	a two-storey dwelling house, domestic garage, waste water treatment and disposal system, entrance and all associated site works	Boulabeha , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	27-07-20	18-09-20	22-10-20	21-10-25	N/A	N/A	N/A		
Tipperary County Council	20825	works within the boundary of the existing Lisheen 110 kV Substation, the proposed works will comprise: replacement and improvement	Killoran , Templetuohy , Co Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	28-07-20	02-12-20	14-01-21	13-01-26	N/A	N/A	17-09-20		06-11-20
Tipperary County Council	20846	construction of loose straw shed and all associated site works. Retention for roofless cubicle with flow channel and feeding area also re	Poyntstown , New Birmingham , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	30-07-20	21-09-20	25-10-20	24-10-25	N/A	N/A	N/A		
Tipperary County Council	20857	construction of an extension to house with all associated site works	Moynetemple , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	31-07-20	23-09-20	27-10-20	26-10-25	N/A	N/A	N/A		
Kilkenny County Council	20523	to erect a milking parlour, dairy, plant room, collection and return yards, slatted slurry / dairy washings storage tanks and ancillary concr	Bawnmore , Johnstown , via Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	11-08-20	01-12-20	12-01-21	11-01-26	N/A	N/A	01-10-20		06-11-20
Tipperary County Council	20909	Permission to erect an over ground slurry storage tank and all associated site works	Fennor , Urlingford , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	17-08-20	06-10-20	09-11-20	08-11-25	N/A	N/A	N/A		
Tipperary County Council	20949	a dwelling, domestic garage, entrance, install waste water treatment system, including associated site works	Urard , Gortnahoe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	26-08-20	30-11-20	12-01-21	11-01-26	N/A	N/A	16-10-20		04-11-20
Tipperary County Council	20943	(a) Existing single storey living room extension to side of the existing dwelling; (b) Existing single storey domestic garage with part mezza	Mellisson , Ballysloe , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	26-08-20	11-12-20	23-01-21	22-01-26	N/A	N/A	12-10-20		17-11-20
Tipperary County Council	20976	(i) the erection of a roofed structure to the rear of the existing industrial shed, (ii)the erection of signage on existing screen wall to the fro	Littleton Briquette Factory , Killeens Ballynonty , Thurles Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	01-09-20	19-10-20	22-11-20	21-11-25	N/A	N/A	N/A		
Tipperary County Council	20987	demolition of a previous dwelling house and retention permission for a replacement dwelling as constructed, also for permission to build	Parkstown and Kilnoe , Horse & Jockey , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	02-09-20	18-02-21	24-03-21	23-03-26	N/A	N/A	22-10-20		01-12-20
Tipperary County Council	201044	a rural two storey sustainable dwelling, effluent treatment system and polishing filter, roadside entrance and all associated site works	Foilacamin , Coalbrook , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	16-09-20	04-12-20	16-01-21	15-01-26	N/A	N/A	09-11-20		10-11-20
Kilkenny County Council	20642	for single storey wood cabin dwelling, entrance through existing entrance, connection foul sewerage and water supply and all associated	Togher Road , Urlingford , Co. Kilkenny	APPLICATION FINALISED	RETENTION	CONDITIONAL	29-09-20	22-12-20	02-02-21	01-02-28	N/A	N/A	20-11-20		30-11-20
Kilkenny County Council	20685	for a mixed-use development consisting of A/ the completion of the existing Togher Way residential development at Togher Way, Urlingf	Main Street Togher Road , Togher Way , Urlingford	APPLICATION FINALISED	PERMISSION	CONDITIONAL	12-10-20	05-11-21	08-12-21	07-12-26	N/A	N/A	03-12-20		24-09-21
Tipperary County Council	201177	a) construction of a part 2-storey, part single storey detached dwelling, b) detached garage, c) new site entrance, d) new wastewater tre	Liskeveen , Littleton , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	13-10-20	20-01-21	23-02-21	22-02-26	N/A	N/A	04-12-20		16-12-20
Tipperary County Council	201207	domestic garage/fuel store including associated site works	Gortnahoe , Thurles , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	16-10-20	03-02-21	09-03-21	08-03-26	N/A	N/A	09-12-20		12-01-21
Tipperary County Council	201230	two storey dormer dwelling house, domestic garage, treatment tank, percolation area, entrance and ancillary site works	Borris , Two Mile Borris , Littleton Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	21-10-20	31-03-21	04-05-21	03-05-26	N/A	N/A	14-12-20		05-02-21
Tipperary County Council	201246	1. Demolition of a single storey structure (an extension consisting of residential areas and a portion of a grocery store) to the rear of our	Gortnahoe , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	23-10-20	16-12-20	28-01-21	27-01-26	N/A	N/A	N/A		
Tipperary County Council	201258	demolition existing workshop and replace with a larger workshop area consisting of a 5 bay portal steel frame building and replace grass	Graiguepadeen , Urlingford , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	28-10-20	09-03-21	12-04-21	11-04-26	N/A	N/A	18-12-20		19-02-21
Tipperary County Council	201261	change of use from car showroom and office/store to light industrial/food production area with all associated site work	Ballymurreen , Littleton , Thurles Co. Tipperary E41 RT72	APPLICATION FINALISED	RETENTION	CONDITIONAL	29-10-20	30-06-21	03-08-21	02-08-26	N/A	N/A	17-12-20		15-04-21
Tipperary County Council	201284	a) 2 no. proposed new single storey extensions to side and rear of the existing single storey dwelling, b) Associated alterations to existing	Lahardan Upper , Littleton , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	03-11-20	24-03-21	27-04-21	26-04-26	N/A	N/A	05-01-21		04-03-21
Tipperary County Council	201374	proposed construction of a two storey dwelling house, domestic garage, provision of foul and surface water disposal, site landscaping an	Clonamicklon Castle Farm , Gortnahoe , Thurles	APPLICATION FINALISED	OUTLINE PERMISSION	CONDITIONAL	20-11-20	11-06-21	15-07-21	14-07-24	N/A	N/A	21-01-21		25-03-21
Tipperary County Council	201518	build an electricity sub station and carry out all associated works adjacent to Cheese Production Unit, works are within the curtilage of a	Cooleeney , Moyne , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	16-12-20	16-02-21	22-03-21	21-03-26	N/A	N/A	N/A		
Tipperary County Council	201581	construction of a livestock underpass, effluent holding tank and all associated site works	Gortnahoo , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	22-12-20	19-02-21	25-03-21	24-03-26	N/A	N/A	N/A		
Tipperary County Council	201592	extension to rear of dwelling, roof light, septic tank with percolation area, shed and all associated siteworks	Archerstown , Thurles , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	23-12-20	22-02-21	28-03-21	27-03-26	N/A	N/A	N/A		
Tipperary County Council	201603	construction of a one and a half storey extension to the side of my dwelling, minor modifications to the existing dwelling and all associat	Urard , Gortnahoe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	30-12-20	04-08-21	05-09-21	04-09-26	N/A	N/A	24-02-21		09-07-21
Tipperary County Council	2112	a residential development consisting of the construction of a vehicular entrance, internal roadway, footpaths, foul water pumping statio	Borris , Two Mile Borris , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	08-01-21	04-05-21	07-06-21	06-06-26	N/A	N/A	03-03-21		09-04-21
Tipperary County Council	2143	dwelling and garage as constructed, previously approved under planning reference 08510121 and all associated site works	Galbooly , Littleton , Thurles Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	18-01-21	09-03-21	12-04-21	11-04-26	N/A	N/A	N/A		
Tipperary County Council	2165	to build a dwelling, domestic garage, install septic tank including associated site works	Townagha , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	22-01-21	20-04-21	24-05-21	23-05-26	N/A	N/A	12-03-21		25-03-21
Tipperary County Council	2183	a slatted house with underground slurry storage and all associated site works	Rathbeg , Gortnahoe , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	28-01-21	18-03-21	21-04-21	20-04-26	N/A	N/A	N/A		
Tipperary County Council	21118	construction of extensions and alterations to existing dwelling house, upgrading of existing waste water treatment system and construct	Boulabeha , Moyne , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	04-02-21	30-03-21	03-05-21	02-05-26	N/A	N/A	N/A		
Tipperary County Council	21140	demolition of an existing dwelling and adjoining sheds and construction of a new single storey dwelling, new site entrance, new septic ta	Gortnahoo , Thurles , Co. Tipperary	APPLICATION FINALISED	EXTENSION OF DURATION	UNCONDITIONAL	10-02-21	01-04-21	N/A	15-09-26	N/A	N/A	N/A		
Tipperary County Council	21172	change the house design only to previously granted Permission Planning Register Reference 16601129	Graigaman , Coalbrook , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	17-02-21	12-04-21	16-05-21	06-09-22	N/A	N/A	N/A		
Tipperary County Council	21193	the extension of a dwelling house and the construction of a garage, storage shed and associated site works	Ballydavid , Litteton , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	18-02-21	15-07-21	16-08-21	15-08-26	N/A	N/A	13-04-21		21-06-21
Tipperary County Council	21196	a slatted house with underground slurry storage and all associated site works	Kilcoolyabbey , Gortnahoe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	19-02-21	14-04-21	18-05-21	17-05-26	N/A	N/A	N/A		
Tipperary County Council	21253	a) internal and external refurbishment to existing cottage dwelling, b) constructed extension to existing cottage dwelling, c) replace exist	Newtown , Littleton , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	02-03-21	02-06-21	06-07-21	05-07-26	N/A	N/A	23-04-21		10-05-21
Tipperary County Council	21269	of existing garage and full Planning Permission for the following works: a) Proposed new single storey extension to rear of the existing dw	Kilbrennal , Killenaule , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	04-03-21	25-08-21	28-09-21	27-09-26	N/A	N/A	27-04-21		04-08-21
Tipperary County Council	21319	construction of new boundary wall to the rear of house with all associated site works	No 5 Ardleigh , Two Mile Borris , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	15-03-21	04-05-21	07-06-21	06-06-26	N/A	N/A	N/A		
Tipperary County Council	21443	construction of 1) a slatted shed and 2) extension of existing silage slab and carry out all associated site works	Leigh , Two-Mile-Borris , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	07-04-21	27-05-21	30-06-21	29-06-26	N/A	N/A	N/A		
Tipperary County Council	21492	a) construction of a new single storey prefabricated portacabin classroom structure complete with ramped/stepped access routes, b) ne	Borris , Two Mile Borris , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	14-04-21	02-06-21	06-07-21	05-07-26	N/A	N/A	N/A		
Tipperary County Council	21503	construction of a new agricultural building consisting of cattle shed with cubicle and slatted accommodation and underground effluent s	Broomhill , Killenaule , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	15-04-21	03-06-21	07-07-21	06-07-26	N/A	N/A	N/A		
Tipperary County Council	21520	extensions to the main building on site including all other associated site development works above and below ground - the extensions t	Ballybeg , Littleton , Thurles Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	19-04-21	10-06-21	N/A	05-10-28	ABP-31078	07-07-21	CONDITIC	06-10-23	N/A	N/A	
Tipperary County Council	21524	a dwelling, domestic garage, entrance, install waste water treatment system including associated site works	Foilacamin , Gortnahoe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	19-04-21	16-11-21	20-12-21	19-12-26	N/A	N/A	10-06-21		22-10-21
Tipperary County Council	21569	conversion of existing shed to milking parlour, and dairy and build new plant room, holding yards, cattle crush and slatted tank	Kilbraugh , Grange , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	28-04-21	21-06-21	25-07-21	24-07-26	N/A	N/A	N/A		
Tipperary County Council	21588	construction of a two storey dwelling with a packaged waste water treatment system , raised bed polishing filter and all associated site v	Rahinch , Littleton , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	29-04-21	08-11-21	12-12-21	11-12-26	N/A	N/A	22-06-21		14-10-21
Tipperary County Council	21630	extensions and alterations to existing school and all associated site works	Gortnahoe , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	07-05-21	30-06-21	03-08-21	02-08-26	N/A	N/A	N/A		
Tipperary County Council	21651	dwelling, domestic garage/fuel store, construct entrance, install waste water treatment system including associated site works	Noard , Two-Mile-Borris , Thurles	APPLICATION FINALISED	EXTENSION OF DURATION	UNCONDITIONAL	12-05-21	05-07-21	N/A	21-07-26	N/A	N/A	N/A		
Tipperary County Council	21675	change of use of existing building from health centre to a cafe and shop, works will involve internal layout alterations and some external	Moynetemple , Moyne , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	14-05-21	22-09-21	26-10-21	25-10-26	N/A	N/A	07-07-21		27-08-21
Kilkenny County Council	21417	for the completion of an existing residential development with development to consist of the provision of 14 new semi-detached dwellin	Togher Crescent , Urlingford , Co Kilkenny	APPLICATION FINALISED	PERMISSION	CONDITIONAL	17-05-21	17-11-21	20-12-21	19-12-26	N/A	N/A	08-07-21		22-10-21
Tipperary County Council	21709	building (3657 sq m) with a car park and access road, commercial yard area and access road, truck prep building (110 sq m), 2 m high bo	Cooleeney and Derryfadda , Moyne , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	19-05-21	12-07-21	13-08-21	12-08-26	N/A	N/A	N/A		
Tipperary County Council	21742	construction of a new two storey dwelling with garage, entrance and packaged wastewater system and polishing filter/percolation area	Liskeveen , Littleton , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	24-05-21	24-09-21	28-10-21	27-10-26	N/A	N/A	14-07-21		31-08-21
Tipperary County Council	21752	construction of cubicle facility with underground effluent tanks and all associated site works. Permission for Retention of cubicle facility	Clonamondra , Gortnahoe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	26-05-21	16-07-21	17-08-21	16-08-26	N/A	N/A	N/A		
Tipperary County Council	21790	a dwelling, domestic garage, entrance, bore well, install septic tank sewerage system including associated site works	Mardyke , Killenaule , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	31-05-21	22-07-21	23-08-21	22-08-26	N/A	N/A	N/A		
Tipperary County Council	21794	a dwelling, entrance, bore well, install waste water treatment system including associated site works	Mardyke , Killenaule , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	31-05-21	08-09-21	12-10-21	11-10-26	N/A	N/A	22-07-21		13-08-21
Tipperary County Council	21828	to construct dwelling house with domestic garage, entrance, effluent treatment system together with all associated site works	Garranroe , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-06-21	30-07-21	31-08-21	30-08-26	N/A	N/A	N/A		
Tipperary County Council	21868	a dwelling, domestic garage, entrance, install waste water treatment system including associated site works	Two Mile Borris , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	14-06-21	23-11-21	05-01-22	04-01-27	N/A	N/A	06-08-21		01-11-21
Tipperary County Council	21910	existing farm access road and existing hard surface yard and PERMISSION to relocate the existing agricultural entrance to provide a new	Drumgower , Horse and Jockey , Thurles Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	23-06-21	10-03-22	N/A	28-06-28	ABP-31323	06-04-22	CONDITIC	29-06-23	16-08-21		16-02-22
Tipperary County Council	21915	a dwelling, domestic garage, alter existing agricultural entrance to facilitate agricultural and dwelling entrance, install septic tank includi	Cloncleagh , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	23-06-21	11-01-22	14-02-22	13-02-27	N/A	N/A	16-08-21		10-12-21
Tipperary County Council	211000	an extension to cheese production unit, to retain existing storage area and incorporate into the new extension and to retain staff changi	Cooleeney , Moyne , Thurles Co. Tipperary	APPLICATION FINALISED	EXTENSION OF DURATION	UNCONDITIONAL	09-07-21	01-09-21	N/A	11-12-26	N/A	N/A	N/A		
Tipperary County Council	211128	construction of a Solar PV development with a maximum export capacity (MEC) of up to 122MW comprising of ca. 214,800 no. photovol	Cooleeny , Derryfadda and Killoran , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	30-07-21	23-02-22	29-03-22	28-03-27	N/A	N/A	22-09-21		21-12-21
Kilkenny County Council	21664	for the development. The development consists of the retention of two single storey outbuildings to the rear of the dwelling	Togher Road , Urlingford , Co. Kilkenny	APPLICATION FINALISED	RETENTION	CONDITIONAL	03-08-21	23-09-21	27-10-21	26-10-26	N/A	N/A	N/A		
Tipperary County Council	211162	alterations and change of use to revert to a residential dwelling to include demolition of existing rear extension and construction of a firs	Two-Mile-Borris Community Hall , Borris Two-Mile-Borris , Thurles Co.	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-08-21	06-12-21	18-01-22	17-01-27	N/A	N/A	29-09-21		10-11-21

Tipperary County Council	211171	1) Demolition of the existing loading bay canopy 2) Change of use from maintenance depot to an agri-food sector Research and Develop	Former Maintenance Depot Former Lisheen Mine , Kiloran , Moyne Th	APPLICATION FINALISED	PERMISSION	CONDITIONAL	10-08-21	16-11-21	20-12-21	19-12-26	N/A	N/A		30-09-21		22-10-21
Tipperary County Council	211177	construction of 2 no. livestock underpasses and effluent holding tanks and all associated siteworks	Cooleeney , Moyne , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	11-08-21	04-10-21	07-11-21	06-11-26	N/A	N/A	N/A		N/A	
Tipperary County Council	211190	change of use of agricultural buildings to residential which includes modifications and upgrades in order to provide a single storey dwelli	Rathmanna , Thurles , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	12-08-21	06-01-22	09-02-22	08-02-27	N/A	N/A		05-10-21		03-12-21
Tipperary County Council	211195	construction of a dwelling house, entrance, driveway, treatment system, percolation area and all associated site development works	Ballinastick , Coalbrook , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	12-08-21	10-01-22	13-02-22	12-02-27	N/A	N/A		05-10-21		09-12-21
Tipperary County Council	211198	a two storey dwelling, domestic garage, entrance, install waste water treatment system including associated site works	Fennor , Urlingford , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	13-08-21	24-03-22	27-04-22	26-04-27	N/A	N/A		05-10-21		01-03-22
Tipperary County Council	211199	build a dwelling, domestic garage, entrance, bore well, install waste water treatment system including associated site works	Inchirourke , Urlingford , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	13-08-21	16-11-21	20-12-21	19-12-26	N/A	N/A		06-10-21		22-10-21
Tipperary County Council	211272	existing domestic garage with all associated site works	Rathmanna , Thurles , Co Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	27-08-21	20-10-21	23-11-21	22-11-26	N/A	N/A	N/A		N/A	
Tipperary County Council	211275	to retain domestic garage as constructed includng associated site works	Killenaule , Thurles , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	27-08-21	15-10-21	18-11-21	17-11-26	N/A	N/A	N/A		N/A	
Tipperary County Council	211297	construction of a two-storey dwelling, packaged wastewater treatment system and polishing filter, domestic garage, site entrance and al	Parkstown , Horse and Jockey , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	31-08-21	05-01-22	08-02-22	07-02-27	N/A	N/A		21-10-21		01-12-21
Tipperary County Council	211321	build a dwelling and domestic garage including associated site works	Pike Street , Killenaule , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	03-09-21	11-01-22	14-02-22	13-02-27	N/A	N/A		27-10-21		10-12-21
Tipperary County Council	211390	the previously constructed single storey extension and alterations carried out to my dwellinghouse	Kylemakill , Moyne , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	17-09-21	09-11-21	13-12-21	12-12-26	N/A	N/A	N/A		N/A	
Tipperary County Council	211457	to construct alterations and extensions to house wth all associated site works	6 Ardleigh , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	01-10-21	23-11-21	05-01-22	04-01-27	N/A	N/A	N/A		N/A	
Tipperary County Council	211479	development will consist of a proposed ground and first floor extension to the side and rear of existing dwelling, internal modifications t	Gorteenrainee , Gortnahoe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	07-10-21	30-11-21	12-01-22	11-01-27	N/A	N/A	N/A		N/A	
Tipperary County Council	211524	construction of a single storey rear extension to house consisting of additional bedrooms and living area with all associated site works in	Blackcastle , Two-Mile-Borris , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	15-10-21	28-02-22	03-04-22	02-04-27	N/A	N/A		08-12-21		02-02-22
Tipperary County Council	211548	construction of a dwelling house, domestic garage, proprietary treatment system and percolation area and for all ancillary services and s	Moyneard , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	21-10-21	14-12-21	26-01-22	25-01-27	N/A	N/A	N/A		N/A	
Tipperary County Council	211567	build a dwelling, domestic garage, entrance, install waste water treatment system including associated site works	Knockabritta , Killenaule , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	26-10-21	08-07-22	11-08-22	10-08-27	N/A	N/A		17-12-21		01-06-22
Tipperary County Council	211588	construction and erection of 6M high lighting standards with LED Lighting around the walk of the existing pitch with all associated site w	Ballydavid , Littleton , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	29-10-21	20-12-21	01-02-22	31-01-27	N/A	N/A	N/A		N/A	
Tipperary County Council	211656	rear single storey extension to existing dwelling house, retention permission is also sought in respect of a domestic garage and fuel store	No. 7 Kevin's Park , Littleton , Co Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	15-11-21	13-01-22	16-02-22	15-02-27	N/A	N/A	N/A		N/A	
Tipperary County Council	211753	on the grant of outline permission (Ref. No.P20/1374 of outline permission) for development at this site, the development will consist of	Clonamicklon Castle Farm , Gortnahoe , Thurles	APPLICATION FINALISED	PERMISSION CONSEQUENT	CONDITIONAL	06-12-21	01-02-22	07-03-22	06-03-27	N/A	N/A	N/A		N/A	
Tipperary County Council	211811	construction of a cubicle shed over existing and proposed slurry tank and all associated site works	Newhill , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	15-12-21	16-02-22	22-03-22	21-03-27	N/A	N/A	N/A		N/A	
Tipperary County Council	211831	construction of a granny flat to the rear of existing dwelling and permission to demolish part of existing garage/shed and replace/upgrad	Glengoole North , New Birmingham , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	16-12-21	14-02-22	20-03-22	19-03-27	N/A	N/A	N/A		N/A	
Tipperary County Council	211861	extension of existing dwelling house and PERMISSION for relocation of septic tank and percolation area and carry out all associated work	Archerstown , Thurles , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	21-12-21	04-04-22	08-05-22	07-05-27	N/A	N/A		22-02-22		10-03-22
Kilkenny County Council	2210	To construct new single storey dwelling, new entrance, new double garage. Connection public sewer	Togher Road , Urlingford , Co. Kilkenny	APPLICATION FINALISED	PERMISSION	CONDITIONAL	10-01-22	02-03-22	04-04-22	03-04-27	N/A	N/A	N/A		N/A	
Tipperary County Council	2269	to build an agricultural storage building over an existing silage base and carry out all associated works	Manselstown , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	28-01-22	22-03-22	25-04-22	24-04-27	N/A	N/A	N/A		N/A	
Tipperary County Council	2260042	(a) a new single storey prefabricated portacabin classroom structure complete with ramped/stepped access routes; (b) new play area co	Borris , Two-Mile-Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	02-02-22	20-06-22	24-07-22	23-07-27	N/A	N/A		24-03-22		26-05-22
Kilkenny County Council	22112	for a single-storey dwellinghouse, garage, septic tank with percolation area, entrance and all associated site works	Clonsaul , Johnstown , Co Kilkenny	APPLICATION FINALISED	PERMISSION	CONDITIONAL	25-02-22	20-04-22	23-05-22	22-05-27	N/A	N/A	N/A		N/A	
Tipperary County Council	22169	construction of a new dwelling, domestic garage, entrance and waste water treatment system with all associated site works (1) a two-storey extension to the front (northeast) of the existing school comprising a new school entrance foyer area at ground floor level, complete with Reception/Admin Room, 3 No. meeting Rooms and all associated sanitary & amp; storage facilities together with an externally accessed Boiler Room. The upper level, accessed via stairs/lift area from Ground Floor, to comprise a 2-class room ASD unit with all associated ancillary accommodation and 5 Mainstream Class rooms, with connections to the existing school building. (2) Internal alterations to the existing school building to include the provision of a new music room and modifications to existing entrance	Cooleeny , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	28-02-22	20-04-22	24-05-22	23-05-27	N/A	N/A	N/A		N/A	
Tipperary County Council	22201	foyer, together with revisions to parking and all associated site works.	Scoil Ruain , Killenaule , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-03-22	05-08-22	08-09-22	07-09-27	N/A	N/A		22-04-22		12-07-22
Tipperary County Council	22207	To construct a single storey dwelling house, domestic garage, septic tank and percolation area treatment system, site entrance and all as	Curraheenduff , Coalbrook , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	10-03-22	29-04-22	02-06-22	01-06-27	N/A	N/A	N/A		N/A	
Tipperary County Council	22263	Change of use of existing commercial hairdressing and beauty treatment salon to domestic dwelling	Main Street , Killenaule , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	30-03-22	16-05-22	19-06-22	18-06-27	N/A	N/A	N/A		N/A	
Tipperary County Council	2260228	the extension and redesign of the previous granted, permission for extension to workshops (planning ref no. 20/1258), this application re	Graiguepadeen , Urlingford Thurles , Co Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	16-05-22	04-07-22	07-08-22	11-04-26	N/A	N/A	N/A		N/A	
Tipperary County Council	2260247	(1) the demolition of a dilapidated two-storey dwelling and the subsequent construction of a two-storey dwelling (2) there will be impro	Galboola , Littleton , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	25-05-22	25-10-22	28-11-22	27-11-27	N/A	N/A		13-07-22		29-09-22
Tipperary County Council	2260256	a) proposed new single storey extension to the existing dwelling; b) associated alterations to existing dwelling external elevations to acc	Ballydavid , Littleton , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	26-05-22	20-07-22	23-08-22	22-08-27	N/A	N/A	N/A		N/A	
Tipperary County Council	22389	a.) change of use from nursing home to private residence, b.) internal alterations as constructed. This is a protect Structure ref. S049	Bailey House , Bailey Street , Killenaule Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	01-06-22	01-09-22	05-10-22	04-10-27	N/A	N/A		21-07-22		08-08-22
Tipperary County Council	22397	a residential unit ancillary to and attached to side of existing dwelling house.	Knockabritta , Killenaule , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	03-06-22	06-01-23	09-02-23	08-02-28	N/A	N/A		15-07-22		25-11-22
Tipperary County Council	22406	a dwellinghouse, entrance, septic tank and percolation, new bore well and all associated works. Extension of duration to previous planni	Rathbeg , Gortnahoe , Thurles	APPLICATION FINALISED	EXTENSION OF DURATION	UNCONDITIONAL	10-06-22	29-07-22	N/A	13-06-27	N/A	N/A	N/A		N/A	
Tipperary County Council	2260297	the elevational and internal layout changes along with minor floor area increase (23.7m2) to that granted under P314479, retention perr	Ballynastick , Coalbrook , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	17-06-22	09-08-22	12-09-22	11-09-27	N/A	N/A	N/A		N/A	
Tipperary County Council	22419	the as constructed extensions to existing dwelling	Monslatt , Killenaule , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	20-06-22	09-08-22	12-09-22	11-09-27	N/A	N/A	N/A		N/A	
Tipperary County Council	22453	a bungalow dormer type residence, vehicular entrance, septic tank system and raised percolation area.	Dunguib , Killenaule , CO. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	01-07-22	18-08-22	21-09-22	20-09-27	N/A	N/A	N/A		N/A	
Tipperary County Council	22488	a dwelling house and septic tank, to refurbish the existing derelict dwelling on site and convert it to a domestic garage and to relocate th (a) existing calf rearing shed (b) Permission to construct an agricultural shed consisting of straw bedded area, cubicles, feeding area and underground slatted slurry storage tanks in place of existing silage slab	Glengoole South , Glengoole , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	26-07-22	15-09-22	19-10-22	18-10-27	N/A	N/A	N/A		N/A	
Tipperary County Council	2260386	(c) Permission to construct a silage slab and a maize slab and all associated siteworks	Boolabeha , Moyne , Thurels Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	26-07-22	05-09-22	09-10-22	08-10-27	N/A	N/A	N/A		N/A	
Tipperary County Council	22524	renovations and extensions to existing house and to upgrade existing waste water treatment system and all associated site works	Blackcastle , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	19-08-22	12-10-22	15-11-22	14-11-27	N/A	N/A	N/A		N/A	
Tipperary County Council	2260486	extension to side of existing house and full permission to install new septic tank and percolation area	Ballybeg , Littleton , Thurles Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	14-09-22	07-11-22	11-12-22	10-12-27	N/A	N/A	N/A		N/A	
Tipperary County Council	22561	alterations and extension to house with all associated site works	Ballydavid , Littleton , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	15-09-22	08-11-22	12-12-22	11-12-27	N/A	N/A	N/A		N/A	
Tipperary County Council	22571	the contruction of a combined single and two storey dwelling, garage, entrance, wastewater system, connection to mains water supply,	Poyntstown , New Birmingham , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	22-09-22	19-01-23	22-02-23	21-02-28	N/A	N/A		10-11-22		12-01-23
Tipperary County Council	2260546	a new single storey dwelling house, detached garage, entrance, septic tank together with all associated site works	Clooncleagh , Two Mile Borris , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	07-10-22	01-12-22	13-01-23	12-01-28	N/A	N/A	N/A		N/A	
Tipperary County Council	22603	alterations and change of use of existing hall to café. Use to include new shop front, rooflight on front roof, pv panels on the rear roof an	Two Mile Borris Community Hall , Borris Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	14-10-22	27-03-23	30-04-23	29-04-28	N/A	N/A		06-12-22		03-03-23
Tipperary County Council	22622	an extension to dwelling house and all associated works	Lahardan Upper , Two Mile Borris , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	01-11-22	20-12-22	01-02-23	31-01-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2260618	a front extension to existing garage/shed and Permission for a new dwelling and garage, new entrance, new septic tank, percolation area	Coldfields , Thurles , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	15-11-22	24-02-23	30-03-23	29-03-28	N/A	N/A		12-01-23		31-01-23
Tipperary County Council	2260632	an extension to the rear and alterations to the existing school, including all associated site works	Lisnamrock National School , Coalbrook Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	18-11-22	25-04-23	29-05-23	28-05-28	N/A	N/A		13-01-23		03-04-23
Kilkenny County Council	22741	For change of design of 12 No. Dwellings as previously granted permission under Planning File 21/417; To include 2 No. 3 bed single stor	Togher Crescent , Urlingford , Co. Kilkenny	APPLICATION FINALISED	PERMISSION	CONDITIONAL	18-11-22	19-01-23	N/A	10-04-29	APB-31574	10-02-23	MODIFIE	11-04-24	N/A	N/A
Tipperary County Council	22654	(1) the existing first floor living accommodation and associated velux type windows to the rear elevation (2) the existing canopy type ope	Cashel Road , Killenaule , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	29-11-22	24-01-23	27-02-23	26-02-28	N/A	N/A	N/A		N/A	
Tipperary County Council	22659	extension and alterations to existing derelict house and associated site works	River Street , Killenaule , Co Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	02-12-22	20-01-23	23-02-23	22-02-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2260683	1) to construct an open ended single storey extension to the side of the existing premises, 2) permission to construct a stand-alone singl	Noard , Two Mile Borris , Thurles Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-12-22	09-02-23	15-03-23	14-03-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2260694	development of a first floor to dwelling, alterations to ground floor layout, construction of a domestic garage together with all associate	Lurgoe , Killenaule , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	13-12-22	01-02-23	07-03-23	06-03-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2360018	alterations from previous planning reference's 16600460 and 211000: a) increased basement area and ground floor area, b) revised orie	Cooleeney Cheese Cooleeney , Moyne Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	12-01-23	07-03-23	10-04-23	09-04-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2360052	an aggregate storage shed (area 1,675 m²) and associated feed hopper, conveyors and screen located within the permitted quarry area (	Mansergshill Townland , Ballintogher Graystown , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	26-01-23	28-06-23	01-08-23	31-07-28	ABP-31757	13-07-23	DISMISSE	N/A		04-05-23
Tipperary County Council	2360078	to partially demolish existing single storey dwelling house together with permission to extend and renovate existing dwelling with provis	Glengoole North , New Birmingham , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	06-02-23	21-03-23	24-04-23	23-04-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2360101	the construction and extension of our dwelling consisting of a home office/ hobby room and home gym/study room with all associated s	Curraheen , Horse and Jockey , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	16-02-23	06-04-23	10-05-23	09-05-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2337	alterations & extensions to the rear of the house, demolish existing shed and install new waste water treatment system with all associat	Moynetemple , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	17-02-23	11-04-23	15-05-23	14-05-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2360127	a) the construction of a single storey detached dwelling; b) a new detached garage; c) a new site entrance; d) new connections to existin	Urard , Gortnahoe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	25-02-23	28-02-24	N/A	23-09-29	ABP-31931	15-03-24	CONDITIC	24-09-24	19-04-23	26-09-23
Tipperary County Council	2360145	a walled dungstead and all associated site works	Leigh , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	02-03-23	24-04-23	28-05-23	27-05-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2360155	extensions and alterations to existing cottage including outhousing, arched wall and associated siteworks	Liskeveen , Littleton Thurles , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	07-03-23	27-04-23	31-05-23	30-05-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2360174	the as-constructed extended yard area and excavated ground and Permission to construct two extensions to the existing agricultural she	Dunguib , Killenaule , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	13-03-23	03-05-23	06-06-23	05-06-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2360229	(1) the construction of a maintenance/tool shed, (2) the relocation of long jumps area, (3) the placement of seating in various locations,	Moycarkey Coolcroo Athletic Club Ballybeg Road , Littleton , Thurles C	APPLICATION FINALISED	PERMISSION	CONDITIONAL	07-04-23	25-09-23	28-10-23	27-10-28	N/A	N/A		30-05-23		29-08-23
Tipperary County Council	2360246	new extension to the front and rear of existing dwelling with a new garage and new percolation area and all associated site works	Beech Lodge , Clover Lane , Two Mile Borris Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	18-04-23	01-06-23	05-07-23	04-07-28	N/A	N/A	N/A		N/A	
Tipperary County Council	23107	single storey, two bedroom, kitchen, living and shower room annex to the side of existing property	Ballyduff Road , Two-Mile-Borris , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	24-04-23	13-06-23	17-07-23	16-07-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2360281	development consisting of Workshop Building (1242m2), Truck Washout Building (64m2), commercial yard area, new boundary fence an	Killoran , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	28-04-23	01-11-23	05-12-23	04-12-28	N/A	N/A		19-06-23		11-09-23
Tipperary County Council	2360320	the following: a) Permission to demolish/replace existing dwelling and to construct a new replacement dwelling with treatment plant sy	Noard , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	15-05-23	03-07-23	06-08-23	05-08-28	N/A	N/A	N/A		N/A	
Kilkenny County Council	23138	for the following works: The extension to the rear of an existing storehouse thereby converting into a residential property. The propose	Main Street , Urlingford , Co Kilkenny	APPLICATION FINALISED	PERMISSION	CONDITIONAL	02-06-23	25-07-23	25-08-23	24-08-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2360417	the construction of (i) a cubicle shed extension with underground effluent tank (ii) a calf shed extension and all associated site works	Curraheenduff , Coalbrook , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	16-06-23	31-07-23	03-09-23	02-09-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2360469	the construction of a two storey dwelling house, single storey domestic garage, new site entrance to Pike Street R689 public road, provis the side extension previously constructed to my house and also for Retention Permission for the existing garden/storage shed at the	Crosscannon Killenaule , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	29-06-23	23-08-23	26-09-23	25-09-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2360472	rear of my site	Blackcastle , Two Mile Borris , Thurles Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	29-06-23	06-12-23	18-01-24	17-01-29	N/A	N/A		16-08-23		15-11-23
Tipperary County Council	23181	the development of a cattle house incorporating slatted tank with slats laid on	Fennor House Fennor , Urlingford , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	30-06-23	03-11-23	N/A	15-01-30	ABP-31853	27-11-23	CONDITIC	16-01-25	18-08-23	11-10-23
Tipperary County Council	2360499	the construction of an extension to the existing astro pitch area, which consists of a 2m high boundary fencing to the astro area, 6m higl	Ballydavid , Littleton , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-07-23	17-10-23	20-11-23	19-11-28	N/A	N/A		28-08-23		25-09-23
Tipperary County Council	2360593	the previously constructed extension to my agricultural shed and Planning Permission for (1) a new 4 bay calf shed and (2) a new 8 bay c	Moynetemple , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	03-08-23	26-09-23	29-10-23	28-10-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2360608	a single storey metal storage shed (domestic use only) and associated hardstanding, and minor alterations to a domestic garage layout &	Graigue , Urlingford , Thurles Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	09-08-23	28-09-23	01-11-23	31-10-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2360626	the construction of a new Booster Pumping Station within a 2.0m x 1.2m Kiosk, Lay-by, and all associated works adjacent to the N75	Rathmanna , Two Mile Borris , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	16-08-23	10-10-23	13-11-23	12-11-28	N/A	N/A	N/A		N/A	
Tipperary County Council	23221	extension to the existing grave yard, access road, new entrance, boundary wall, storage shed, columbarium wall and all associated site w	Two Mile Borris Grave Yard , Two Mile Borris , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	17-08-23	10-10-23	13-11-23	12-11-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2360645	a single storey dwelling house, domestic garage, treatment tank, raise bed percolation area, entrance and ancillary site works	Cooleeny , Moyne Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	22-08-23	07-03-24	10-04-24	09-04-29	N/A	N/A	N/A		12-10-23	12-02-24
Tipperary County Council	2360703	(A) the change of use of part site area to commercial shop storage, new entrances in rear boundary stone wall and associated concrete h	Old AIB Bank , Main Street , Killenaule	APPLICATION FINALISED	RETENTION	CONDITIONAL	06-09-23	05-12-23	17-01-24	16-01-29	N/A	N/A		26-10-23		09-11-23
Tipperary County Council	23244	demolition of existing shed, part demolition of existing dwelling, carry out alterations to existing dwelling and build new single storey ext	Garraun , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	18-09-23	09-11-23	13-12-23	12-12-28	N/A	N/A	N/A		N/A	
Tipperary County Council	2360767	a new two storey dwelling, garage house with garage, shared entrance, septic tank and percolation area with all associated siteworks	Leigh , Two Mile Borris , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	25-09-23	28-03-24	01-05-24	30-04-29	N/A	N/A	N/A		17-11-23	07-03-24
Tipperary County Council	23256	(1) as constructed extension to rear of the existing dwelling and for permission to complete this extension and (2) PERMISSION to constr waste water treatment plant with overground tankage up to 6 metres high on a 0.06 hectare site, within the curtilage of protected structure - S778	Ballynastick , Coalbrook , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	26-09-23	09-01-24	12-02-24	11-02-29	N/A	N/A		17-11-23		06-12-23
Tipperary County Council	23292		Cooleeney , Moyne , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	17-11-23	19-01-24	22-02-24	21-02-29	N/A	N/A	N/A		N/A	
Tipperary County Council	23297	two bay machinery store extension constructed to the existing shed, including all site development works	Longfordpass North , Urlingford , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	22-11-23	19-01-24	22-02-24	21-02-29	N/A	N/A	N/A		N/A	
Tipperary County Council	2360934	a single storey extension and alterations to existing dwelling, new garage, alterations to existing front boundary wall and entrance, remo	Balllintogher , Killenaule , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	24-11-23	27-02-24	01-04-24	31-03-29	N/A	N/A		23-01-24		01-02-24
Tipperary County Council	2360935	the demolition of existing residential dwelling with the reconstruction of a two storey terrace building as a pre school facility to include 3	Borris , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	24-11-23	15-03-24	18-04-24	17-04-29	N/A	N/A		25-01-24		19-02-24

		the following works; a) retention of the existing farm access roadway. Full Planning Permission is also sought for the following works: a) construction of a new, part two-storey, part single-storey detached dwelling; b) new detached garage; c) new connections to existing utilities; d) new waste-water treatment system & percolation area; e)																
Tipperary County Council	2360942	works to improve and upgrade the existing agricultural entrance to allow for domestic and agricultural use; f) all associated site works	Moyneard , Moyne , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	28-11-23	31-01-24	05-03-24	04-03-29	N/A	N/A	N/A	N/A				
Tipperary County Council	23320	a single storey extension to two storey dwelling house, a new window on the rear elevation of dwelling house, to decommission existing	Pouldine , , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	15-12-23	15-02-24	20-03-24	19-03-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2360995	the detached domestic garage adjacent to the dwelling	Crossogues , Gortnahoe , Thurles Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	15-12-23	14-02-24	19-03-24	18-03-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2360998	a) the existing slatted tank and cubicle shed; b) retention of the existing cattle crush / unroofed structure; c) retention of the existing farr	Moyneard , Moyne , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	15-12-23	31-05-24	04-07-24	03-07-29	N/A	N/A	15-02-24		14-03-24			
Kilkenny County Council	2460005	to construct (I) Milking parlour building incorporating dairy, plant, storage, Milk tank, Meal Bin, water tank, holding yard with crush/ dra	Baunmore , Johnstown , Co. Kilkenny	APPLICATION FINALISED	PERMISSION	CONDITIONAL	05-01-24	27-02-24	02-04-24	01-04-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2460057	the as constructed garden living room/home office and storage structure with all associated sitework	Ballydavid , Littleton , Thurles Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	29-01-24	20-03-24	23-04-24	22-04-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2460067	the construction of a new house, garage and waste water treatment system utilising existing entrance with all associated site works	Boulabeha , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	01-02-24	29-05-24	02-07-24	01-07-29	N/A	N/A	21-03-24		07-05-24			
Tipperary County Council	2460070	existing domestic garage together with all associated site works	Borris , Two Mile Borris , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	02-02-24	21-03-24	24-04-24	23-04-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2460090	single storey extension to North and West elevations of dwelling and all associated site works	Knockabritta , Killenaule , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	09-02-24	21-05-24	24-06-24	23-06-29	N/A	N/A	03-04-24		17-04-24			
Tipperary County Council	2460127	a) the construction of a new, part 2-storey, part single-storey detached dwelling; b) a new detached garage; c) a new site entrance; d) a r	Springhill , Killenaule , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	25-02-24	17-04-24	21-05-24	20-05-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2460197	the renovations, extensions & alterations to our existing house, a new garage, and to install a new waste water treatment system with a	Moyneard , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	21-03-24	12-06-24	16-07-24	15-07-29	N/A	N/A	14-05-24		23-05-24			
Tipperary County Council	2460222	renovations, extensions & alterations to my existing house, and to install a new waste water treatment system with all associated site w	Cooleeny , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	28-03-24	21-05-24	24-06-24	23-06-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2460226	a single storey dwelling, proposed vehicular entrance, detached garage, connection to public water mains, new foul treatment tank & pe	Cloonclegh , Two Mile Borris , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	28-03-24	20-05-24	23-06-24	22-06-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2460231	the as constructed sunroom to the rear of the dwelling with all associated site works	Ballydavid , Littleton , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	30-03-24	22-05-24	25-06-24	24-06-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2460304	(i) Slatted shed with underground slurry tank (ii) Crush yard and all associated site works	Glengoole South , New Birmingham , Thurles Co Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	23-04-24	13-06-24	N/A	01-12-29	ABP-32008	04-10-23	CONDITIC	02-12-24	N/A			
Tipperary County Council	2460354	proposed part two storey and part single storey dwelling, packaged wastewater treatment system and raised bed soil polishing filter, ne	Killenaule , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-05-24	02-07-24	05-08-24	04-08-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2460390	a single storey dwelling, garage, site entrance, waste water treatment system, temporary placement of mobile home and all associated s	Earlshill , Ballynonty , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	21-05-24	02-09-24	06-10-24	05-10-29	N/A	N/A	11-07-24		08-08-24			
Tipperary County Council	2460411	the construction of a lean-to storage shed extension to the rear of the existing sheds in connection with our business etc and RETENTION	Graiguepadeen , Urlingford , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	28-05-24	22-07-24	25-08-24	24-08-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2460429	the construction of a two storey dwelling, domestic garage, septic tank and percolation area, site entrance and all associated site works	Clonamicklon , Gortnahoe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	31-05-24	07-01-25	10-02-25	09-02-30	N/A	N/A	22-07-24		06-12-24			
Tipperary County Council	2460455	the construction of a dwelling house, domestic garage, connection to existing mains services together with all associated site works	Serviced site 6 , Ashford Twomileborris , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	06-06-24	07-11-24	09-12-24	08-12-29	N/A	N/A	25-07-24		21-10-24			
Tipperary County Council	24155	of works as follows which differ from that granted under planning reference 2165. A.) construction of entrance porch; B.) location of sev	Townagha , Thurles , Co Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	10-07-24	22-08-24	25-09-24	24-09-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2460573	the change in dwelling design from previous planning application reference number: 2260618 for a new dwelling and garage, a new entr	Coldfields , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	15-07-24	04-09-24	08-10-24	07-10-29	N/A	N/A	N/A	N/A				
Tipperary County Council	24178	an existing ESB substation and distribution room building and all associated site works	Killeens , Ballynonty , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	06-08-24	27-09-24	31-10-24	30-10-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2460664	the construction of an agricultural shed to consist of 6 no. robotic milking units, ancillary rooms, underground slatted slurry and soiled w	Cooleeney , Moyne , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	13-08-24	26-09-24	30-10-24	29-10-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2460665	(1) the construction of the foul water pumping arrangement with rising main for the serviced sites development (originally permitted un	Ashford , Borris Twomileborris , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	13-08-24	26-09-24	30-10-24	29-10-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2460702	refurbishment of existing cottage, along with a two storey extension to the rear with link corridor, waste water treatemnt system and all	Noard , Two-Mile-Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	25-08-24	08-10-24	11-11-24	10-11-29	N/A	N/A	N/A	N/A				
Tipperary County Council	24191	(1) the sun room built to the side of the existing dwelling house; (2) the extension built to the existing shed; (3) the lawnmower shed bui	Borris , Thurles , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	26-08-24	04-12-24	07-01-25	06-01-30	N/A	N/A	17-10-24		11-11-24			
Tipperary County Council	2460751	a) the existing extensions to the side and rear of the existing dwelling; b) the existing detached garage structure and all associated site w	Clooncleagh , Two-Mile-Borris , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	09-09-24	31-10-24	04-12-24	03-12-29	N/A	N/A	N/A	N/A				
Tipperary County Council	24208	1. construction of single storey dwelling (with part dormer accommodation) and single storey domestic garage, 2. new vehicular entrance and front boundary and 3. septic tank and percolation area	Curraheen , Horse and Jockey , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	13-09-24	27-02-25	02-04-25	01-04-30	N/A	N/A	06-11-24		06-12-24			
Tipperary County Council	2460769	the change of use to the residential garage/shed for use as a 'specialist needs/care accommodation'; the extension to the garage/shed a	Liskeveen Road Littleton , Thurles , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	13-09-24	11-02-25	17-03-25	16-03-30	N/A	N/A	06-11-24		10-12-24			
Tipperary County Council	2460772	an extension to the rear of existing dwelling along with retention permission for existing shed to the side of existing dwelling and retenti	Galbooly Little , Littleton , Thurles Co Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	16-09-24	06-11-24	10-12-24	09-12-29	N/A	N/A	14-01-25		N/A			
Tipperary County Council	2460826	a dwelling house, garage, entrance, effluent treatment system together with all associated site works	Borris , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	27-09-24	25-03-25	28-04-25	27-04-30	N/A	N/A	18-11-24		14-02-25			
Tipperary County Council	2460844	relocation of effluent treatment system and percolation area to that granted under PA21868 together with all associated site works	Two Mile Borris , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	03-10-24	21-11-24	25-12-24	04-01-27	N/A	N/A	N/A	N/A				
Tipperary County Council	2460860	the following works: a) proposed new extensions to the existing dwelling; b) associated alterations to existing dwelling external elevator	Clooncleigh , Two-Mile-Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-10-24	27-11-24	31-12-24	30-12-29	N/A	N/A	N/A	N/A				
Tipperary County Council	2460885	the as-built changes to dwelling house previously granted planning permission (reference no. PLC/8809) including retention of existing sl	Ballygemmane , Thurles , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	15-10-24	05-12-24	08-01-25	07-01-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2460886	change the treatment system from that permitted under planning file 211195 to an alternative treatment system which is a septic tank a	Ballinastick , Coalbrook , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	16-10-24	10-12-24	22-01-25	21-01-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2460888	(1) demolition of extension to rear of existing cottage, (2) construction of new single storey extension to the front and rear of the existing	The Cottage , Ballymureen , Littleton Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	16-10-24	11-03-25	14-04-25	13-04-30	N/A	N/A	03-12-24		16-01-25			
Tipperary County Council	2460918	extensions and alterations to existing farmhouse, relevant demolition works to structures attached to house to facilitate the extension a	Killoran , Templetuohy Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	25-10-24	22-05-25	25-06-25	24-06-30	N/A	N/A	10-12-24		01-05-25			
		construction of an anaerobic digestion plant comprising: 4 no. primary digester tanks (each measuring c. 7.6 m in height); 3 no. secondary digester tanks (each measuring c. 14.5 m in height); 4 no. feed hoppers; 4 no. technical rooms (ranging in size from c. 35 sq m to c. 95 sq m GFA); 2 no. biogas conditioning units; process, storage and buffer tanks (comprising: 1 no. buffer digestate storage tank (c. 7.5 m in height), 1 no. suspension buffer tank (c. 8 m in height), 1 no. process area runoff storage tank (c. 4.5 m in height); 1 no. buffer digestate process tank (c. 4.5 m in height), 1 no. treated digestate liquids recycle storage tank (c. 4.5 m in height); 1 no. roofed liquids feed-mix tank (c. 3 m in height)); these components will be located within a containment bund constructed c. 3 m below ground level. The proposed development will also consist of: feedstock storage (comprising 3 no. storage clamps (c. 1,050 sq m in area each) and 2 no. storage sheds (c. 500 sq m GFA each)); a biomethane upgrading plant (including natural gas compression unit); a biomethane loading facility (comprising 4 no. loading bays with associated gates and safety features measuring c. 490 sq m in area); a biomass boiler with its associated pellet storage silo (c. 12.5 m in height); Combined Heat and Power (CHP) plant and associated heat exchanger; a single storey bio-based fertiliser processing and storage unit (c. 3,890 sq m GFA) (including digestate dewatering plant, fertiliser pasteurisation plant and bio-based fertiliser loading facilities); a single storey office building (c. 105 sq m GFA) (including offices, meeting room, control room, laboratory, welfare facilities, storeroom and a first-aid facility); bin storage; 9 no. car parking spaces (including 5 no. standard parking spaces, 2 no. electric vehicle (EV) spaces and 1 no. accessible car parking space); electric vehicle (EV) charging infrastructure; 10 no. bicycle parking spaces; vehicular, cyclist and pedestrian access / egress and associated circulation routes; 2 no. weighbridges; a vehicle steam wash area; fuel storage tank and associated bund; an emergency flare (c. 7.6 m in height); a process area runoff lagoon; an attenuation pond; an ESB sub-station; boundary treatments [including gates, piers and fencing]; site lighting; all hard and soft landscaping; provision of sustainable urban drainage systems (SUDS); and all other associated site excavation,																	
Tipperary County Council	2460936	infrastructural and all other associated site excavation	Former Lisheen Mine Site , Killoran Moyne , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	02-11-24	06-05-25	N/A	04-12-30	ABP-32264	29-05-25	CONDITIC	05-12-25		03-01-25		05-03-25
Tipperary County Council	24257	revised site boundaries	Ballybeg , Littleton , Thurles Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	12-11-24	20-02-25	26-03-25	25-03-30	N/A	N/A	13-01-25		16-01-25			
Kilkenny County Council	24137	and planning permission for the following works: (a) Retention permission for a boundary wall in excess of 2m in height (b) Planning perr	Main Street , Urlingford , Co Kilkenny	APPLICATION FINALISED	RETENTION	CONDITIONAL	14-11-24	19-02-25	24-03-25	23-03-30	N/A	N/A	14-01-25		27-01-25			
Tipperary County Council	2460978	a state-of-the-art healthcare waste treatment and recycling facility and a waste transfer station. The development will include the constr	Killoran , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	14-11-24	23-04-25	27-05-25	26-05-30	N/A	N/A	17-01-25		27-02-25			
Tipperary County Council	2460995	a change of the house type from that granted under planning permission reference number 21/790 & all associated site development wo	Mardyke , Killenaule , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	20-11-24	22-01-25	25-02-25	24-02-30	N/A	N/A	N/A	N/A				
Tipperary County Council	24268	1) demolition of part of an existing single storey dwelling house, 2) an extension to the side of the remaining dwelling with part in single	Archerstown & Townagha , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	26-11-24	16-06-25	20-07-25	19-07-30	N/A	N/A	23-01-25		21-05-25			
Tipperary County Council	2461036	a) extension of the existing limestone quarry and for continued use of the site entrance, access laneway, lagoons, plant and machinery a	Castletown Moyne , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	04-12-24	06-01-26	09-02-26	08-02-31	N/A	N/A	05-02-25		06-11-25			
Tipperary County Council	2461041	the alterations to the house including removal of existing single story section to the side, alterations to front elevation & constructing ne	Blackcastle , Two Mile Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	05-12-24	05-02-25	11-03-25	10-03-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2461072	a new two storey dwelling, garage house with garage, shared entrance, septic tank and percolation area with all associated siteworks	Leigh , Two Mile Borris , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	10-12-24	11-02-25	17-03-25	16-03-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2461108	a single storey 3 bedroomed house, splayed and recessed entranceway, secondary treatment system with soil polishing filter and all assc	Killeens , Ballynonty , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	16-12-24	18-02-25	24-03-25	23-03-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2461128	a single storey dwelling, entrance, effluent treatment system together with all associated site works	Ballyerk , Two Mile Borris , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	19-12-24	25-06-25	29-07-25	28-07-30	N/A	N/A	17-02-25		05-05-25			
Kilkenny County Council	2460666	for an upgrade to the existing Togher Crescent Wastewater Pumping Station, comprising; a new 5.2m3 below-ground water storage tank	Togher Crescent Wastewater Pumping Station , in the Townland of Url	APPLICATION FINALISED	PERMISSION	CONDITIONAL	20-12-24	20-02-25	25-03-25	24-03-30	N/A	N/A	N/A	N/A				
Kilkenny County Council	2460673	for an extension to the side of existing dwelling, to include connection and incorporation of garage into house to provide utility/gym spa	6 Togher Cresent , Urlingford , Co. Kilkenny	APPLICATION FINALISED	PERMISSION	CONDITIONAL	23-12-24	21-02-25	26-03-25	25-03-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2560045	the as-built height of dwelling together with all associated site works	Newhill , Two Mile Borris , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	24-01-25	10-03-25	13-04-25	12-04-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2560140	change of use from former post office to living accommodation, change of use of existing domestic stores to living accommodation along	Borris , Two Mile Borris , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	25-02-25	08-08-25	11-09-25	10-09-30	N/A	N/A	15-04-25		24-06-25			
Tipperary County Council	2524	an unauthorised shed to the rear of dwelling house. Planning Permission for the demolition of extensions to the rear of dwelling house a	Clonclegh , Two Mile Borris , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	26-02-25	10-04-25	14-05-25	13-05-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2560154	a recreational shared cycle and walkway to connect into the existing Loch Dhoire Bhile Loop - a) the delivery of a shared cycle and walkw	Bord Na Móna lands , within the townlands of Ballybeg Derryvella and	APPLICATION FINALISED	PERMISSION	CONDITIONAL	28-02-25	18-08-25	N/A	26-01-31	ACP-32366	15-09-25	CONDITIC	27-01-26		24-04-25		25-06-25
Tipperary County Council	2560235	the construction of a maintenance tool shed, construction of a long jump, exercise area with gym equipment, throwing areas with safety	Ballybeg Road , Littleton , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	24-03-25	09-05-25	12-06-25	11-06-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2549	demolition of buildings and construction of a new truck sales and service centre with 2 truck service bays, offices, meeting room, canteer	Dempsey and Harold Motors , Borris , Two Mile Borris	APPLICATION FINALISED	PERMISSION	CONDITIONAL	04-04-25	06-11-25	10-12-25	09-12-30	N/A	N/A	23-05-25		15-10-25			
Tipperary County Council	2560336	the following: a) to demolish existing tool shed and b) to construct an extension to existing packaging agricultural shed on my farm comp	Ballydavid , Littleton , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	19-04-25	05-06-25	09-07-25	08-07-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2560392	a new house, entrance and waste water treatment system with all associated site works	Garrenroe , Thurles , Co.Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-05-25	11-08-25	14-09-25	13-09-30	N/A	N/A	23-06-25		17-07-25			
Tipperary County Council	2560405	a) new house, b) wastewater treatment system, c) entrance, and d) associated site works	Dunguib , Killenaule , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	12-05-25	16-09-25	20-10-25	19-10-30	N/A	N/A	03-07-25		22-08-25			
Tipperary County Council	2560426	to construct renovations & extensions to existing house including the provision of a new waste water treatment system with all associate	Kylemakill , Moyne , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	15-05-25	03-07-25	06-08-25	05-08-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2586	traditional style two-storey dwelling, domestic garage, septic tank and percolation area together with new site entrance and carry out al	Leigh , Two-Mile-Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	26-05-25	10-07-25	13-08-25	12-08-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2560520	a) two domestic sheds, b) a stable shed and c) boundary treatments	Rathroe , Killenaule , Co. Tipperary	DECISION MADE	RETENTION	CONDITIONAL	08-06-25	20-02-26	N/A	N/A	N/A	N/A	29-07-25		30-01-26			
Tipperary County Council	2560542	construction of a new single storey dwelling, connection to existing mains services together with all associated site works	Serviced Site No.3 , Ashford Two-Mile-Borris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	12-06-25	05-08-25	08-09-25	07-09-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2560545	the construction of landscaping, re-surfacing and storm drainage works. The development includes works on the site of the listed buildin	St. Mary Community Hall Bailey Street , Killenaule , Co. Tipperary	DECISION MADE	PERMISSION	CONDITIONAL	13-06-25	10-02-26	N/A	N/A	N/A	N/A	30-07-25		16-12-25			
Tipperary County Council	2560555	a) a garage conversion to the side of the house, b) changes to the house elevations, c) a change of use of a doctor's surgery to domestic u	Willmount , Killenaule , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	14-06-25	07-08-25	10-09-25	09-09-30	N/A	N/A	N/A	N/A				
Tipperary County Council	25119	existing domestic building containing home gym, home office, store and a separate domestic garage/garden store both at rear of dwellir	Fennor , Gortnahoe , Co. Tipperary	APPLICATION FINALISED	RETENTION	REFUSED	23-06-25	09-09-25	N/A	01-01-31	ACP-32376	29-09-25	CONDITIC	02-01-26		01-08-25		13-08-25
Tipperary County Council	2560604	construction of a pedestrian walkway, associated site grading and all associated site development works	Killenaule Community Field , Pike Street Killenaule , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	24-06-25	15-08-25	18-09-25	17-09-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2560665	the installation of a compact modular substation and ancillary site development works to facilitate 3 no. shared electric vehicle charging	The Horse and Jockey Hotel , Horse and Jockey , Thurles Co. Tipperary	FURTHER INFORMATION	PERMISSION	N/A	11-07-25	N/A	N/A	N/A	N/A	N/A	27-08-25		11-02-26			
Tipperary County Council	2560673	the as-constructed domestic extension & all associated site development works	Killleheen , Ballingarry Thurles , Co. Tipperary	NEW APPLICATION	RETENTION	N/A	14-07-25	N/A	N/A	N/A	N/A	N/A	29-08-25		26-02-26			
Tipperary County Council	2560682	construction of loose shed and all associated site works	Leigh , Thurles , Co Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	16-07-25	09-09-25	13-10-25	12-10-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2560685	the demolition of existing store buildings and to replace with a larger single storey storage building consisting of an 11 bay portal steel fr	Graiguepadeen , Urlingford , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	16-07-25	12-01-26	15-02-26	14-02-31	N/A	N/A	05-09-25		10-12-25			
Tipperary County Council	2560697	a single storey dwelling, domestic garage, packaged waste water treatment system, tertiary treatment system and soil polishing filter, ne	Ballynastick , Coalbrook , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	18-07-25	11-09-25	15-10-25	14-10-30	N/A	N/A	N/A	N/A				
Tipperary County Council	2560702	a) a calf rearing shed; b) Planning permission for the dismantling of an existing straw storage shed; c) Planning permission for the constr	Cooleeney , Moyne , Thurles Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	18-07-25	11-09-25	15-10-25	14-10-30	N/A	N/A	N/A	N/A				

Tipperary County Council	2560716	the following works; a) 4no. single storey detached dwellings; b) alterations to existing shed structure; c) removal of existing shed structu	Borris , Two-Mile-Borris , Thurles	DECISION MADE	PERMISSION	CONDITIONAL	23-07-25	02-03-26	N/A	N/A	N/A	N/A	11-09-25	09-01-26					
Tipperary County Council	2560736	as constructed 4m wide agricultural driveway and revised widen entrance and permission to reconstruct widened entrance walls with all	Springfield , Killenaule , Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	29-07-25	19-09-25	23-10-25	22-10-30	N/A	N/A	N/A	N/A					
Tipperary County Council	2560755	the existing single storey extension to side of dwelling along with retention for existing front porch. Retention permission is also sought f	Ballydavid , Littleton , Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	01-08-25	25-09-25	29-10-25	28-10-30	N/A	N/A	N/A	N/A					
Kilkenny County Council	2560528	for the construction of 2 No. two storey detached four bedroom dwellings, landscaping and boundary treatments and new planting; wat	Togher Road , Urlingford , Co. Kilkenny	DECISION MADE	PERMISSION	CONDITIONAL	15-08-25	11-02-26	N/A	N/A	N/A	N/A	09-10-25	16-01-26					
Tipperary County Council	2560812	the construction of a vehicular entrance, dwelling house, domestic garage, proprietary waste water treatment system with polishing filte	Moyneard , Moyne Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	20-08-25	08-10-25	11-11-25	10-11-30	N/A	N/A	N/A	N/A					
Tipperary County Council	2560817	the construction of a single storey extension to the rear of the dwelling	Curraheenduff , Coalbrook , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	21-08-25	13-10-25	16-11-25	15-11-30	N/A	N/A	N/A	N/A					
Tipperary County Council	25175	the construction of a 5 bay slatted beef unit, incorporating underground slurry storage tank, easy feeding system, including all associatec	Kilcooley Road , Gortnahoe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	26-08-25	13-10-25	16-11-25	15-11-30	N/A	N/A	N/A	N/A					
Tipperary County Council	2560834	the change of use from garage to temporary living accommodation from previous planning application reference number 19600031, cha	The Cottage , Ballymureen , Littleton Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	26-08-25	17-10-25	20-11-25	19-11-30	N/A	N/A	N/A	N/A					
Tipperary County Council	2560854	internal and external refurbishment works to the existing dwelling, a new single storey extension to the rear of the existing dwelling, a ne	Parkstown Horse and Jockey , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	30-08-25	28-11-25	01-01-26	31-12-30	N/A	N/A	17-10-25	06-11-25					
Tipperary County Council	2560939	a) 2 no. calf rearing sheds and roofless cubicles and PLANNING PERMISSION FOR b) the demolition of an existing overground slurry stora	Liskeveen , Littleton , Thurles Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	19-09-25	07-11-25	11-12-25	10-12-30	N/A	N/A	N/A	N/A					
Tipperary County Council	2560958	construction of a new dwelling, a new garage, a new entrance and a new well, with a new effluent treatment system and all associated s	Graiguepadeen , Gortnahoe , Co Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	24-09-25	07-11-25	11-12-25	10-12-30	N/A	N/A	N/A	N/A					
Tipperary County Council	2561019	the construction of a slatted shed with feeding area and cubicles and all associated site works. PERMISSION FOR RETENTION for (i) loose	Graigaman , Gortnahoe , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	10-10-25	25-11-25	29-12-25	28-12-30	N/A	N/A	N/A	N/A					
Tipperary County Council	2561049	the alterations to an extension previously granted under planning reference PLC/11426; an additional extension to the rear of the origina	No. 4 Kevins Park , Littleton , Thurles Co. Tipperary	APPLICATION FINALISED	RETENTION	CONDITIONAL	20-10-25	08-12-25	20-01-26	19-01-31	N/A	N/A	N/A	N/A					
Tipperary County Council	2561067	the construction of a new domestic garage with all associated site works	Garrenroe , Thurles , Co.Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	23-10-25	09-12-25	21-01-26	20-01-31	N/A	N/A	N/A	N/A					
Tipperary County Council	2561070	a new extension to the side and rear of existing dwelling along with some minor changes to the existing dwelling and demolition of exist	9 Church View , Littleton , Thurles Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	23-10-25	09-12-25	21-01-26	20-01-31	N/A	N/A	N/A	N/A					
Tipperary County Council	2561096	the construction of Two new buildings, ancillary to the existing light industrial building use on site. These will consist of Building A - a ne	Derryhogan Ballybeg , Littleton Thurles , Co. Tipperary	FURTHER INFORMATION	PERMISSION	N/A	31-10-25	N/A	N/A	N/A	N/A	N/A	19-12-25	N/A					
Tipperary County Council	2561107	1) the construction of a detached single storey dwelling and a detached single storey domestic garage, 2) the installation of a certified wa	Gortnahoe , Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	05-11-25	16-12-25	28-01-26	27-01-31	N/A	N/A	N/A	N/A					
Tipperary County Council	2561124	a single storey dwelling house, domestic garage, connection to existing mains services together with all associated site works	Serviced site 4 , Ashford Twomileborris Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	07-11-25	06-01-26	09-02-26	08-02-31	N/A	N/A	N/A	N/A					
Tipperary County Council	2561127	the construction of a single storey dwelling house, domestic garage, connection to existing mains services together with all associated sit	Serviced site number 2 , Ashford Twomileborris , Thurles	APPLICATION FINALISED	PERMISSION	CONDITIONAL	07-11-25	06-01-26	09-02-26	08-02-31	N/A	N/A	N/A	N/A					
Tipperary County Council	2561128	a single storey dwelling house, domestic garage, connection to existing mains services together with all associated site works	Serviced site 5 , Ashford Twomileborris Thurles , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	07-11-25	06-01-26	09-02-26	08-02-31	N/A	N/A	N/A	N/A					
Tipperary County Council	2561132	change of design and subsequent boundary adjustment to granted planning permission Ref: 2460918	Killoran , Templetuohy Thurles , Co.Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	09-11-25	06-01-26	09-02-26	08-02-31	N/A	N/A	N/A	N/A					
Tipperary County Council	2561142	construction of lighting to the previously approved pedestrian walkway (granted under planning reference no. 2560604) and all associate construction of (i) commercial storage shed (ii) wastewater treatment system upgrade and all associated site works. RETENTION PERMISSION of (i) commercial storage building with office structure within comprising of ground floor toilets, hall and offices. First floor containing, storage area, hall, canteen, and offices (ii) two commercial storage building (iii) weighbridge (iv) container office (v) two oil storage tanks (vi) water storage tank (vii) two storage containers (viii) wastewater treatment system with percolation area. EPA Waste	Killenaule Community Field , Pike Street Killenaule , Co. Tipperary	APPLICATION FINALISED	PERMISSION	CONDITIONAL	11-11-25	12-01-26	15-02-26	14-02-31	N/A	N/A	N/A	N/A					
Tipperary County Council	2561145	Licence (Reg. No. W0267-01)	Piercetown , Thurles , Co. Tipperary	FURTHER INFORMATION	PERMISSION	N/A	12-11-25	N/A	N/A	N/A	N/A	N/A	14-01-26	N/A					
Tipperary County Council	2561152	a new dwelling with garage, entrance, septic tank and percolation area with all associated siteworks	Leigh , Two Mile Borris , Thurles	NEW APPLICATION	PERMISSION	N/A	13-11-25	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
Tipperary County Council	2561255	1) continued use of the existing permitted quarry (planning file ref. no. 04/1356 & ABP PL23.221792) which includes: a block manufactur	Mansergh shill and Graystown townlands , Laffansbridge , Co. Tipperar	FURTHER INFORMATION	PERMISSION	N/A	04-12-25	N/A	N/A	N/A	N/A	N/A	06-02-26	N/A					
Tipperary County Council	2561252	the previously constructed extensions & alterations to our house including the conversion of our garage to living accommodation, rear e proposed part storey and a half and part single storey dwelling, domestic garage, packaged waste water treatment system and soil	Grawn , Two-Mile-Borris , Thurles	APPLICATION FINALISED	RETENTION	CONDITIONAL	04-12-25	30-01-26	05-03-26	04-03-31	N/A	N/A	N/A	N/A					
Tipperary County Council	2561331	polishing filter and entrance	Lickfinn , Glengoole , Thurles	NEW APPLICATION	PERMISSION	N/A	19-12-25	N/A	N/A	N/A	N/A	N/A	20-02-26	09-03-26					
Tipperary County Council	2561334	the as-constructed commercial entrance and agricultural entrance, boundary walls, boarding kennels, grooming facility, storage sheds, d	Mellisson , New Birmingham , Thurles. Co. Tipperary	FURTHER INFORMATION	RETENTION	N/A	19-12-25	N/A	N/A	N/A	N/A	N/A	20-02-26	N/A					
Tipperary County Council	2561345	the existing domestic sheds	Piercetown , Thurles , Co. Tipperary	DECISION MADE	RETENTION	CONDITIONAL	22-12-25	18-02-26	N/A	N/A	N/A	N/A	N/A	N/A					
Tipperary County Council	2561359	1) the extensive refurbishment of a single storey dwelling to include interior alterations, new roof structure and various alterations/upgr	Mill Road , Ballinunty , Thurles	FURTHER INFORMATION	PERMISSION	N/A	23-12-25	N/A	N/A	N/A	N/A	N/A	20-02-26	N/A					
Tipperary County Council	261	a revised dwelling house design (Permission was previously granted ref 24268). The revised design will involve single storey extensions t	Archerstown & Townagha , Thurles , Co Tipperary	DECISION MADE	PERMISSION	CONDITIONAL	02-01-26	20-02-26	N/A	N/A	N/A	N/A	N/A	N/A					
Tipperary County Council	2660052	the development will consist of the erection of a 36m tall Telecommunication Lattice Support Structure carrying antennas and dishes tog	Mellisson , Glengoole South Thurles , Co. Tipperary	NEW APPLICATION	PERMISSION	N/A	23-01-26	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
Tipperary County Council	2660057	the alterations to front elevations including new flat roof extension, material finishes, fenestration and front porch and amended carpar	Dunguib Killenaule , Thurles , Co. Tipperary	NEW APPLICATION	PERMISSION	N/A	26-01-26	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
Tipperary County Council	2660066	the relocation of the vehicular entrance serving existing dwelling house. Planning permission is also being sought for the demolition of ex	Borris , Twomileborris Thurles , Co. Tipperary	NEW APPLICATION	RETENTION	N/A	29-01-26	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
Tipperary County Council	2660074	proposed two storey dwelling, waste water treatment system and soil polishing filter, domestic garage and all associated site works	Clonamicklon , Gortnahoe , Thurles	NEW APPLICATION	PERMISSION	N/A	30-01-26	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
Tipperary County Council	2660078	a dwelling house, entrance, garage, effluent treatment system together with all associated site works	Mardyke , Killenaule , Co. Tipperary	NEW APPLICATION	PERMISSION	N/A	03-02-26	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
Tipperary County Council	2660085	the creation of single storey sunroom/living room to front of existing 2 storey house and ancillary related works. The works are adjacent	Grallagh , Horse and Jockey , Thurles	NEW APPLICATION	PERMISSION	N/A	04-02-26	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
Tipperary County Council	2660146	(A) demolition of partially constructed detached domestic garage (as had been granted under original planning reference 21915), and (B the as-constructed single storey extension to the rear of dwelling consisting of a bedroom, accessible bathroom and kitchen with all associated sitework - this proposed development is within the curtilage of a protected structure ref no: TRPS872	Clooncleagh , Two Mile Borris Thurles , Co Tipperary	NEW APPLICATION	PERMISSION	N/A	20-02-26	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
Tipperary County Council	2660190		Main Street , Ballydavid , Littleton Thurles Co. Tipperary	NEW APPLICATION	RETENTION	N/A	04-03-26	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
Tipperary County Council	2660204	a slatted house with underground slurry storage and all associated site works	Urard , Gortnahoe Thurles , Co. Tipperary	NEW APPLICATION	PERMISSION	N/A	06-03-26	N/A	N/A	N/A	N/A	N/A	N/A	N/A					

ACP Case Number	Development Description	Development Address	Date of Receipt of Case	ACP Decision Status	Decision Date	Planning Authority
14-01-34	Biorefinery Facility	Killoran, Moyne, Thurles County Tipperary	06-06-19	Application for leave to appeal refused	28-06-19	Tipperary County Council
08-05-40	Construction and operation of solar PV arrays, inclusive of an electrical substation compound. Planning application is accompanied by an environmental report and NIS	Rahelty and Shanballyduff, Thurles, Co. Tipperary.	18-03-20	Grant permission with revised conditions	14-04-21	Tipperary County Council
23-01-41	New telecommunications support structure carrying antennas, dishes, associated equipment, together with ground equipment cabinets, new fencing and landscaping.	Eir Exchange, Ballymoren, Littleton, Co. Tipperary.	18-05-20	Application for leave to appeal refused	17-06-20	Tipperary County Council
20-01-43	Wind Farm	Knockanattin and Broomhill, Ballingarry, Co. Tipperary.	13-08-20	Refuse Exemption	08-03-21	Tipperary County Council
25-11-50	1) an increase in the annual waste intake from 45000 tonnes/year to 80,000 tonnes; (2) single storey extensions to the east and west of the existing building (having a combined floor area of 6,083m2), (3) relocatic	Ballybeg, Littleton, Co. Tipperary.	07-07-21	Grant permission with revised conditions	06-10-23	Tipperary County Council
26-11-50	Extensions to the main building on site including all other associated site development works above and below ground - the development relates to a Biological Waste Treatment Facility which is operated under a	Ballybeg, Littleton, Thurles Co. Tipperary.	07-07-21	Grant permission with revised conditions	06-10-23	Tipperary County Council
04-06-52	18 Metre mast with associated antennae, dishes, ground equipment and associated site works.	Eircom Exchange, Kilcooley Way, Gortnahoe, Thurles, Co Tipperary	08-09-21	Grant Permissions with Conditions	27-01-23	Tipperary County Council
12-08-57	Relocation of existing agricultural entrance	Drumgower, Horse and Jockey, Thurles, Co. Tipperary	06-04-22	Grant permission with revised conditions	27-06-23	Tipperary County Council
25-06-64	Change of design to previously granted permission of 12 houses.	Togher Crescent , Urlingford , Co. Kilkenny	10-02-23	Grant permission with revised conditions	11-04-24	Kilkenny County Council
25-06-69	Construction of an aggregate storage shed and associated feed hopper.	Manserghshill Townland, Ballintogher, Graystown, Killenaule, Co. Tipperary	13-07-23	Invalid Fee	26-07-23	Tipperary County Council
08-02-72	Development of a cattle house incorporating slatted tank with slats laid on.	Fennor House, Fennor, Urlingford, Co. Tipperary	27-11-23	Grant permission with revised conditions	16-01-25	Tipperary County Council
02-04-74	The construction of a single storey detached dwelling and all associated site works. Temporary retention planning permission of the existing mobile home unit and all associated site works.	Urard, Gortnahoe, Thurles, Co. Tipperary	15-03-24	Grant permission with revised conditions	24-09-24	Tipperary County Council
08-11-75	18 metre mast with associated antennae, dishes, ground equipment and associated site works.	Eircom Exchange, Kilcooley Way, Gortnahoe, Thurles, Co. Tipperary	12-06-24	Refuse Permission	19-03-25	Tipperary County Council
11-05-76	Slatted shed with underground slurry tank, crush yard and all associated site works.	Glengoole South, New Birmingham, Thurles, Co. Tipperary.	04-07-24	Grant permission with revised conditions	02-12-24	Tipperary County Council
11-05-83	Construction of an anaerobic digestion plant and all other associated site excavation, infrastructural and site development works and associated site servicing. An Environmental Impact Assessment Report (EIAR) a	Former Lisheen Mine Site, Killoran, Moyne, Thurles, Co. Tipperary.	29-05-25	Grant permission with revised conditions	05-12-25	Tipperary County Council
25-02-86	A recreational cycle and walk way to connect into the existing Loch Dhoire Bhile Loop which will include the repurposing of 602 meters of existing former rail bed, 2859 meters along existing bog headlands / forme	Bord Na M?na lands , within the townlands of Ballybeg Derryvella and Lanespark , in County Tipperary	15-09-25	Grant permission with revised conditions	27-01-26	Tipperary County Council
323765	RETENTION: existing domestic building containing home gym, home office, store and a separate domestic garage/garden store both at rear of dwelling.	Fennor, Gortnahoe, Co. Tipperary.	29-09-25	Refuse Permission	02-01-26	Tipperary County Council

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