Appropriate Assessment Screening Report &

Natura Impact Statement

for proposed

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residential development
at
Mulkear view, Newport, County Tipperary

in accordance with the requirements of
Article 6(3) of the EU Habitats Directive

by

CAAS Ltd

for

Tipperary County Council

Comhairle Contae Thiobraid Árann
Tipperary County Council

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1. Introduction

1.1. Background

CAAS has been appointed by Tipperary County Council to prepare this Appropriate Assessment Screening Report (AASR) and Natura Impact Statement for proposed residential development at 85 and 86 Mulkear view, Newport, County Tipperary (the proposed development). This report has been prepared to assist the competent authority in conducting Appropriate Assessment for the proposed development.

1.2. Report structure

This report sets out an overview of the methodology utilised for this assessment. It then describes the proposed development and associated works, followed by a description of receiving environment of the lands to which the proposed development relates, and any relationships to European sites. Subsequently the factors that determine which European sites are included in the report are described and the selected European sites are identified.

The proposed development and its potential sources for effect are then examined in the context of the receiving environment, connectivity to the relevant European site and their sensitive ecological features i.e. screening for AA. Subsequently, sites that are identified as having a likelihood for significant effects advanced to the next stage of the assessment process and a Natura Impact Statement is advised where mitigation measures need to be applied to prevent adverse effects to European sites. The proposed development is also assessed for in-combination effects arising from other plans and/or projects is also taken into account as part of this report.

This report is produced in view of the Conservation Objectives, known sensitivities and threats and pressures on the Qualifying Interests and Special Conservation Interests for each European site, which are provided in Appendices II, III and IV. Appendix VI provides supporting information on the AA process and legislative background. Appendix VII provides information on author competencies.

2. Methodology

2.1. Screening for AA overview

Screening for AA identifies any likely significant effects on European sites arising from the project (for the purposes of this report, the “project” is herein referred to as the “proposed development”), either alone or in combination with other projects or plans (see Appendix VI for supporting information on the AA process and legislative background). The proposed development and receiving environment of the proposed development are examined in order to determine:

- Whether the project can be excluded from AA requirements because it is directly connected with or necessary to the management of a European site.
- Whether the project will have a potentially significant effect on a European site, either alone or in combination with other projects or plans, in view of the site’s conservation objectives or if residual uncertainty exists regarding potential impacts.

The proposed development is not directly connected with or necessary to the management of a European site and therefore will be considered as to whether it may have a potentially significant effect on any European site in screening for AA.

2.2. Relevant guidance

This AASR is prepared in line with the relevant legislation (ref s1.3), is based on best scientific knowledge, and has utilised ecological expertise, with consideration of the relevant guidance, including the following:

- *Practice Note PN01: Appropriate Assessment Screening for Development Management,* Office of the Planning Regulator, 2021;
- *Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC,* European Commission Notice, Journal of the European Union, 2021;
- *Commission Notice: Managing Natura 2000 sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC",* European Commission 2018; and
- *Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities,* Department of the Environment, Heritage and Local Government, 2009.

2.3. Assessment

2.3.1. Desktop review

The desktop review provides supporting information for conducting the SPR model and establishing a ZoI. The identification of the "'Conservation Objectives" (COs), "Qualifying Interests" (QIs) and/or "Special Conservation Interests" (SCIs) of European sites requiring assessment as part of this review, is an integral part of the screening for AA process.

QIs are the habitats and species (flora and fauna) listed in Annexes I and II of the Habitats Directive respectively, for which each Special Area of Conservation (SAC) has been designated under the Habitats Directive. SCIs are bird species listed within Annexes I and II of the Birds Directive for which each Special Protection Area (SPA) has been designated under the Habitats Directive. Under the requirements of the Habitats Directive, the threats and pressures on the ecological / environmental conditions that are required to support QIs and SCIs, with specific regard to the COs of each site, are considered as part of the assessment.

The COs or Site-Specific Conservation Objectives (SSCOs) for each site aim to achieve and maintain the favourable conservation status[1] for a particular habitat or species at that site. COs define the requirements for the favourable conservation condition of the QIs or SCIs at a given European site by setting targets for attributes which define the healthy characteristics of a given habitat or species.

Note: where detailed SSCOs have not been prepared for any European site, the below First Order Site-specific Conservation Objectives apply:

European site type	First Order Site-specific Conservation Objective[2]
SAC	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected
SPA	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for the SPA

The following databases are utilised in the preparation of this AASR: the National Biodiversity Data Centre[3]; the NPWS[4]; the EPA[5]; data collected for the most recent Article 12 and 17 conservation

[1] Favourable conservation status of a species can be described as being achieved when:
'*population data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.*'
Favourable conservation status of a habitat can be described as being achieved when:
'*its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable*'.

[2] NPWS Conservation Management Planning website.

[3] NBDC datasets available here

[4] NPWS European sites information and mapping available here and here respectively

[5] EPA datasets available here

status reporting cycle, 2019; and, *The Status of Protected EU Habitats and Species in Ireland* report (NPWS, 2019). Based on these resources, the desktop review is also comprised of the following elements:

- Identification of European sites within one or several zones of Influence (as defined in s 2.3.3) established using the source -pathway-receptor model (as defined in s 2.3.2);
- Review of the NPWS site synopses and Conservation Objectives for European sites within the zone(s) of influence for which potential pathways from the proposed development area have been identified; and
- Examination of available data on protected species' and habitats' distribution, trends and abundances – where relevant.

Supporting information on threats to individual sites and vulnerability of habitats and species is also reviewed in the following documents where relevant:

- Ireland's Article 17 Report to the European Commission *"Status of EU Protected Habitats and Species in Ireland"* (NPWS, 2019);
- Ireland's Article 12 Report to the European Commission *"Bird species' status and trends reporting format for the period 2008-2012-"* (NPWS, 2012)
- Site Synopses[6]; and
- NATURA 2000 Standard Data Forms[13].

2.3.2. Source-pathway-receptor model

The assessment of potential for significant effects on European sites is conducted following a standard source-pathway-receptor (SPR) model, where, in order for an effect to be established, all three elements of this mechanism must be in place. EC guidance[7] outlines the types of effects that may affect European sites. These include effects from the following activities:

- Land take
- Resource requirements (drinking water abstraction etc.)
- Emissions (disposal to land, water or air)
- Excavation requirements (removal of soil and vegetation)
- Transportation requirements
- Duration of construction, operation, decommissioning

This guidance is taken into consideration when applying the SPR model to this AASR.

Examples of a source, pathway and receptor are:

- Source(s) – e.g., pollutant run-off from proposed development
- Pathway(s) – e.g., groundwater connecting to nearby qualifying wetland habitats; and,
- Receptor(s) – e.g., qualifying habitats and species of European sites

Thus, in the context of this report, a receptor is a QI or SCI, or an ecological feature that is known to be utilised by the QIs or SCIs of a European site. A source is any identifiable element of the proposed development that is known to interact with the QI, SCI, or any ecological processes underpinning a QI or SCI. A pathway is any connection or link between the source and the receptor[8], for example a river.

When all three elements of the SPR model are in place, a pathway for potential effect is identified to that European site. The pathway, receptor and source for effect are then examined further by

[6] NPWS (2019); NPWS Database of protected site data and associated documents for each European site; available here. Accessed November 2025

[7] Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission Environment DG, 2001

[8] Receptor example: a Qualifying Interest or Special Conservation Interest of the European site in question in the context of their known sensitivities and Conservation Objectives

conducting a desktop review, in the context of the receiving environment and the characteristics of the proposed development, in order to establish a Zone of Influence for potential significant effects.

2.3.3. Zone of Influence

The Zone of Influence (ZoI) (as defined in the relevant guidance[9,10]) is informed by the SPR model and is the geographical area over which a proposed development could affect the ecological receiving environment in any way that could result in potential significant effects on the Qualifying Interests or Special Conservation Interests of a given European site, in view of the Conservation Objectives of each site.

2.3.4. Characterising potential significant effects

The characterisation of a given effect as significant or not involves the consideration of several factors. The terms and factors used to characterise potential effects[11] in this report, in accordance with the relevant guidelines, are:

- Positive or Negative:
    - Positive - a change that improves the quality of the environment e.g. by increasing species diversity, extending habitat or improving water quality (may also include halting or slowing an existing decline in the quality of the environment).
    - Negative - a change which reduces the quality of the environment (e.g. destruction of habitat, removal of foraging habitat, habitat fragmentation, pollution).

- Extent: the spatial or geographical area over which the impact/effect may occur under a suitably representative range of conditions (e.g. noise transmission under water).
- Magnitude: the size, amount, intensity and volume of an impact/effect. Magnitude is quantified where possible and expressed in absolute or relative terms (e.g. the amount of habitat lost, percentage change to habitat area, percentage decline in a species population).
- Duration: defined in relation to ecological characteristics (such as the lifecycle of a species) as well as human timeframes (e.g., five years, may be short-term in the human context or other long-lived species, but would span at least five generations of some invertebrate species). In addition, the duration of an activity may differ from the duration of the resulting effect caused by the activity (e.g., if short-term construction activities cause disturbance to birds during their breeding period; longer-term implications could be failure to reproduce that season). The Duration of impacts and effects may be described as the following, defined in months/years:
    - Short
    - Medium
    - Long-Term and Permanent, or
    - Temporary.

- Frequency: The number of times that an activity or impact occurs. This will influence the magnitude and/or duration of the resulting effect (e.g., a single person walking a dog will have very limited impact on nearby waders using wetland habitat, but numerous walkers will subject the waders to frequent disturbance and could affect feeding success, leading to displacement of the birds and knock-on effects on their ability to survive).

[9] *Practice Note PN01: Appropriate Assessment Screening for Development Management, Office of the Planning Regulator, 2021.*

[10] CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.3, updated September 2024. Chartered Institute of Ecology and Environmental Management, Winchester.

[11] Parameters adapted from CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.3 (updated Sept 2024). Chartered Institute of Ecology and Environmental Management, Winchester.

- Timing: The timing of an activity or change may result in an impact, or have different magnitude of impact if it occurs at different times of a given year versus others (e.g., if it coincides with critical life-stages such as a bird species bird nesting season)
- Reversibility: An irreversible effect is one from which recovery is not possible within a reasonable timescale or there is no reasonable chance of action being taken to reverse it. A reversible effect is one from which spontaneous recovery is possible or which may be counteracted by mitigation. It is possible that certain activities can cause both reversible and irreversible effects.

2.3.5. Assessment of significant effects

The CIEEM (2018)[10] guidelines for Ecological Impact Assessment define an ecologically significant effect based on a variety of questions and factors, such as:

- is the project and associated activities likely to undermine the conservation objectives of the site, or positively or negatively affect the conservation status of species or habitats for which the site is designated, or may it have positive or negative effects on the condition of the site or its interest/qualifying features?
- is the project likely to result in a change in ecosystem structure and function?

The guidance also recommends that consideration should be given to whether:

- any processes or key characteristics will be removed or changed
- there will be an effect on the nature, extent, structure and function of component habitats
- there is an effect on the average population size and viability of component species.

The OPR Guidance[12] on conducting Appropriate Assessment for developments defines likely significant effects as the following:

Likely means a risk or possibility of effects occurring that cannot be ruled out based on objective information.
Significant effects are those that would undermine the conservation objectives of the European sites, either alone or in-combination with other plans and projects. The significance of ecological impacts depends on:

- the ecological characteristics of the species or habitat, including their structure, function, conservation status and sensitivity to change, and/or
- the character, magnitude, duration, consequences and probability of the impacts occurring.

When the SPR models is conducted and the Zone of Influence is established; European sites (and their respective QIs and SCIs) that occur within this zone are examined with supporting surveys conducted, if necessary, to ultimately determine whether or not there is a *likelihood of significant effect* on a given European site. This is carried out by assessing objective information such as: the nature of the source for effect; the nature of the pathway; the distances involved; the QIs/SCIs (or 'receptors') involved, their threats, pressures and sensitivities; and consulting best scientific evidence/literature when required.

As such, the presence of all three elements and the identification of a pathway for potential effect, does not automatically constitute the likelihood of significant effect to a European site, and is dependent on factors such as character, magnitude, duration etc. However, the absence or removal of one of the elements of the mechanism is sufficient to conclude that there is no potential effect(s) and thus no further consideration required.

[12] OPR (2021). Practice Note PN01 on Appropriate Assessment Screening for Development Management.

Where a likelihood for significant effects to any European site is established to be present, and/or the lack of significant effect cannot be ruled out based on the precautionary principle[13], mitigation measures are required and the project must proceed to Stage 2 AA, where a Natura Impact Statement (NIS) is compiled in order to apply relevant and / or tailored mitigation measures intended to prevent adverse effects to the QIs/SCIs of the European sites involved, in view of their Conservation Objectives.

2.4. Supporting survey

An ecological walkover of the proposed site was conducted on the 20th of October 2025. Given the proximity of the proposed site to a highly sensitive watercourse that is also an SAC, the ecological walkover gave particular focus on an examination of any evidence of invasive species within and/or surrounding the proposed site.

2.4.1. Survey limitations

The ecological walkover was not carried out within the optimum summer period for vegetative surveys. However, considering the nature of the proposed project combined with small size and nature of the existing site (i.e. mostly composed of hard surface existing buildings – half of which will be retained), and the need to focus on the presence of invasive species due to the proximity to a sensitive SAC watercourse; a survey in October is still a sufficient time of year to gather evidence of presence of most problematic invasive species that could potentially affect the conservation objectives of the Lower River Shannon SAC. Therefore, it is considered that the survey effort is sufficient to support this AA report for the proposed development.

3. Description of Proposed Development

The proposed development site is located within an existing housing estate adjacent to the Newport (Tipperary) River [040] in Newport Town (Figure 3.1).The proposed development composed of a small-scale demolition and removal of one residential house, No.85, Mulkear View, and the construction of a ground floor extension of 18m^2 for No.86, Mulkear View in its place (Figure 3.2). The main components are outlined below:

- The footprint of the area to be demolished and removed is 62m^2, and the extension to be constructed in its place will be 18m^2.
- There will be no drainage or services alterations required as all surface drainage, stormwater drainage, and foul sewer drainage will connect to the existing infrastructure on site (Figure 3.3).
- There will be no change in the site use or site capacity for existing drainage and wastewater infrastructure.
- Wastewater will continue to be treated at the local Newport WWTP.
- All earthworks will be contained within the site boundary.

3.1. Drainage (wastewater and surface water)

There will be no alteration of water services, surface water drainage or wastewater infrastructure as part of the proposed development. All services are already installed on site as part of the current residential buildings and wider housing estate present. Wastewater will continue to be treated at the local Newport WWTP and capacity is accounted for via the permitted Mulkear View residential development within which the proposed development is located (Figure 3.1 and Figure 3.3).

[13] With regard to Article 6(3) of the Habitats Directive, and case law C127/02 Waddenzee

Figure 3.1. Location of the proposed development

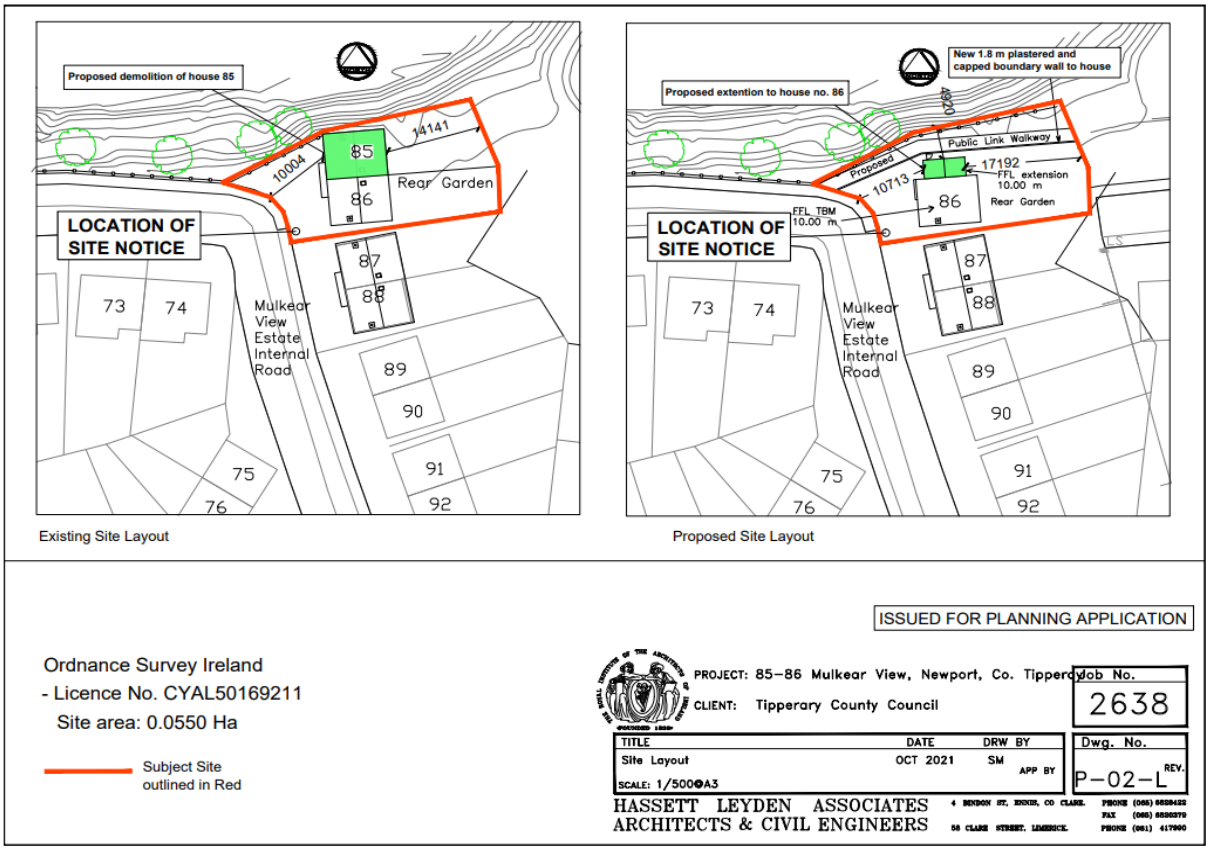


Figure 3.2 Plan of the proposed development[14]

[14] Source: Tipperary County Council - see accompanying drawing set for full scale version.

Figure 3.3 Existing drainage layout for connection of FWD and SWD[15]

4. Receiving Environment

4.1. Overview

The proposed development is located within Mulkear View housing estate on the southside of Newport town, County Tipperary. This site is 0.055 ha in area and consists of 2 (no.) two story, unoccupied residential dwellings, with a small driveway and back garden for each., and the Newport (Tipperary) River [040] borders the proposed site boundary along its northern boundary (Figure 3.1). The proposed site is located adjacent to a number of other occupied residential dwellings within the Mulkear View residential estate (Figure 3.1).

In the wider context, as the proposed site is within the environs of the small town of Newport, there are residential developments, roadways and retail centres surrounding the proposed site. Beyond this there is a majority of agricultural lands in all directions.

4.2. Habitats and invasive species

Part of the proposed site is composed of Buildings and artificial surfaces [BL3] (i.e., the hard surface driveway in front of both 85 and 86 Mulkear View and the buildings themselves). There is minimal vegetative growth at the front of both buildings (the western side of the proposed site), being composed mostly of hard surface / gravel driveway. The private gardens to the rear of both residences (the eastern side of the proposed site) are composed of a what was likely previously Flower beds and borders [BC4], but has overgrown and is now Scrub [WS1] habitat containing species such as; willow *(Salix sp.),* bramble *(Rubus fructicosus),* nettle (*Urtica dioica*), *Clematis sp*. and ivy (*Hedera helix*), in addition to a significant stand of Japanese knotweed (*Reynoutria japonica)* (or possible hybrid with giant knotweed (*Reynoutria sachalinensis*); *Fallopia x bohemica)* (Figure 4.1). Smaller stands of Japanese knotweed were also recorded in the locality surrounding the proposed development site, along with two stands of Giant hogweed (*Heracleum mantegazzianum*) on the opposing banks of the Newport River.

[15] Source: Tipperary County Council - adapted from original drawing for clarity. See accompanying drawings set for full scale version.

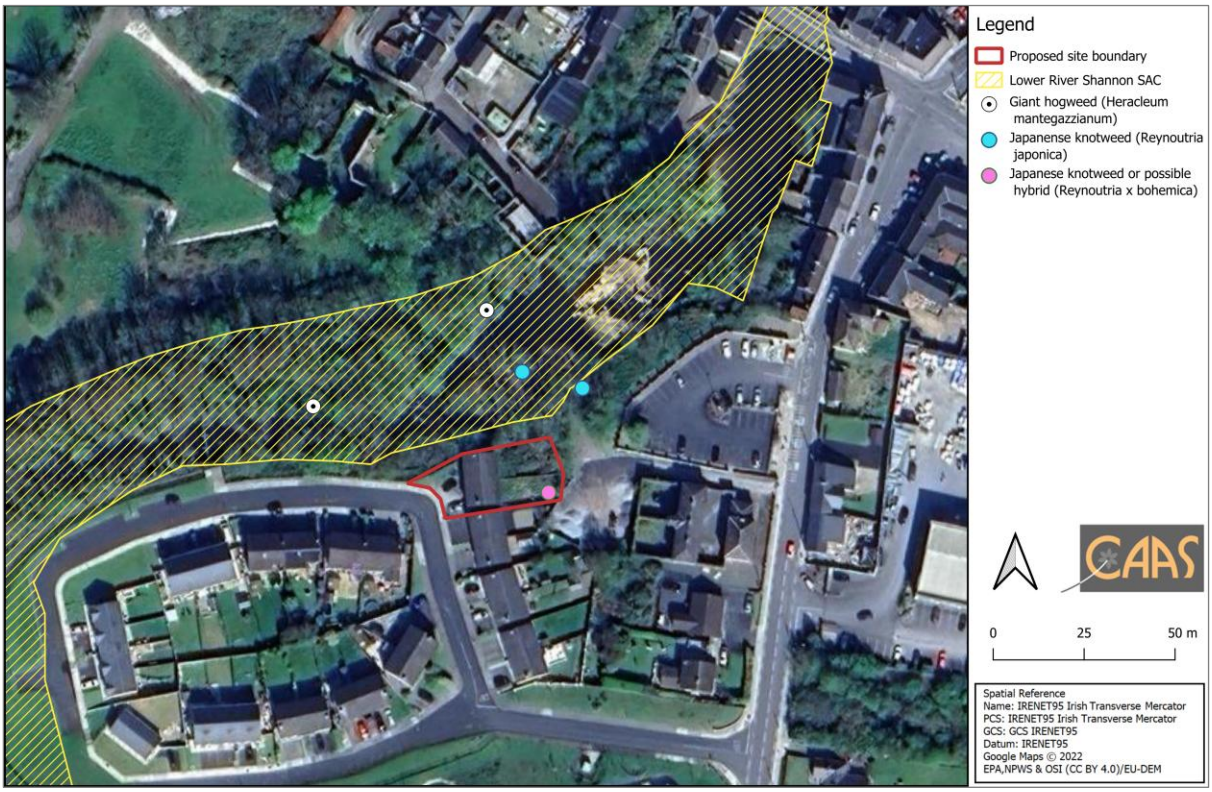


Figure 4.1 Invasive species recorded within, and in the vicinity of, the proposed site

4.3. Hydrology and flood risk

Directly bordering the north of the proposed site is the Newport (Tipperary) River [040]. This river is a tributary to the River Shannon and is part of the Lower River Shannon SAC (Figure 4.1). This river has a WFD[16] water quality status of "Good". The proposed site is not located within a flood risk area (Figure 4.2).

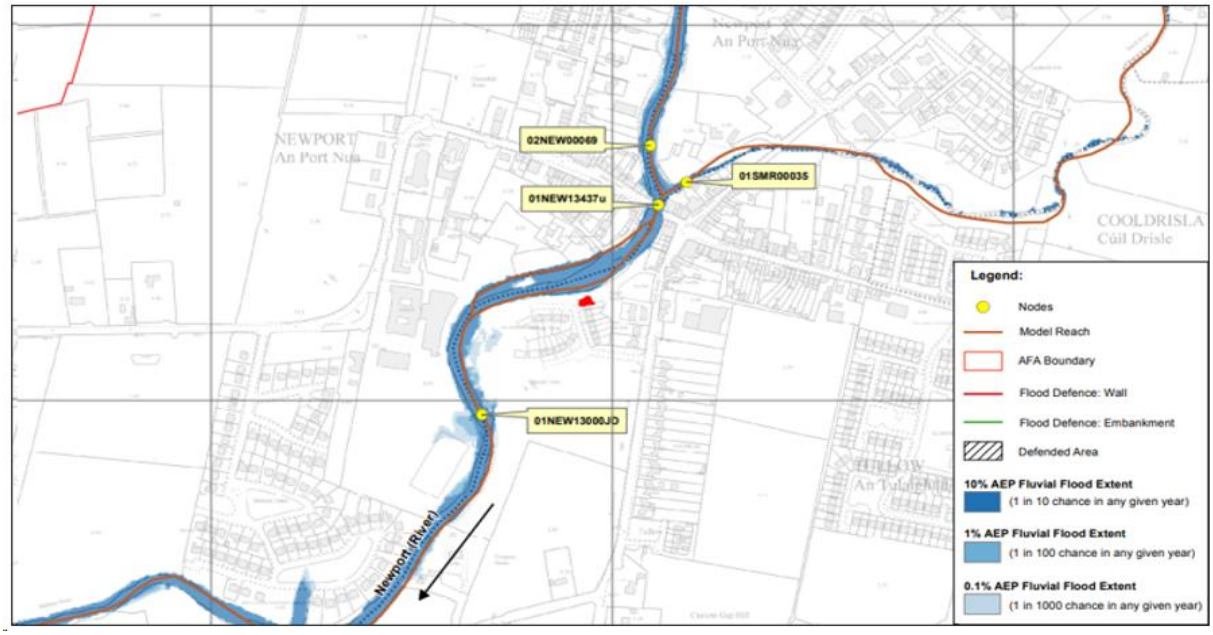


Figure 4.2 Flood risk mapping for the proposed development area[17,18]

[16] EPA, Ireland's National Water Framework Directive Monitoring Programme 2019–2024. Data accessed November 2025 at https://gis.epa.ie/EPAMaps/

[17] Proposed development site marked in red

[18] Source: Tipperary County Council - adapted from original drawing for clarity. See accompanying drawings set for full scale version.

4.4. Relationship to European sites

As mentioned, the Newport (Tipperary) River [040] which runs along the northern boundary of the proposed site is also part of the Lower River Shannon SAC [002165] (Figure 4.3). The Newport River is a tributary to the Mulkear River, and part of the Mulkear catchment, which support spawning grounds and adult populations of several species designated for the Lower River Shannon (i.e., Qualifying Interests) such as, otter (*Lutra lutra*), sea lamprey (*Petromyzon marinus*), salmon (*Salmo salar*). Therefore, the proposed site is adjacent to and upstream of several hydrologically sensitive habitats and spawning grounds for several QU species of the Lower River Shannon SAC.

Figure 4.3 Relationship of the proposed development with watercourses and European sites [19]

5. Identification of European sites for assessment

5.1. Source-pathway-receptor model

Pathways with sources for potential significant effects

The proposed development consists of a small-scale demolition of one residential house (No.85, Mulkear View) and construction phase of a ground floor bedroom for No.86, Mulkear View (Figure 3.2). The proposed site for these works lies directly adjacent to the Newport River along a steep section of riverbank. Therefore, there is a direct pathway from the proposed site to the Newport River and Lower River Shannon SAC via runoff down the riverbank edge. As result sources with a pathway for potential significant effect are the introduction of particulates, dust, soil, pollutants (such as cement, fuel etc.) and general surface run-off, into the Newport River during both the demolition and construction phases of the proposed development.

Japanese knotweed (*Reynoutria japonica)* (or possible hybrid with giant knotweed (*Reynoutria sachalinensis*); *Fallopia x bohemica)*, was identified within the proposed development boundary as part of an ecological walkover (Figure 4.1). Other stands of Japanese knotweed were recorded in the area surrounding the proposed site, in addition to a stand of giant hogweed (*Heracleum*

[19] Source: NPWS Protected Sites and EPA River Scheme areas (datasets accessed November 2025)

mantegazzianum), however these are not located within the boundary of the proposed development (Figure 4.1). Japanese knotweed is a high impact invasive species readily transported on land or water and as a result is listed on the Third Schedule of the European Communities (Birds and Natural Habitats Regulations 2011 (S. I. No. 477 of 2011) and is therefore subject to legislative restrictions[20] on its management and dispersal.

As the proposed site has all services (i.e., operational phase water, drainage and wastewater) already installed as it is an existing residential development, and the development proposed is in line with the surrounding residential developments of Mulkear View, there are no sources for effect identified as arising from the operational phase as a result of the proposed development. Regarding ex-situ foraging potential for SCI species of surrounding SPAs; the proposed site consists of a mix of buildings and artificial surfaces and bare ground and therefore is not identified here as holding any potential supporting habitat for SCI species of SPAs in terms of ex-situ foraging.

In summary, the proposed development is identified as having sources with pathways for likely significant effects to European sites from the demolition and construction phases via:

- Earthworks, dust and pollutants,
- Surface water run-off, and
- Invasive species (Japanese knotweed and soil management)

5.2. Zone of influence

Considering the nature of the proposed development and sources for effect identified above, in the context of the surrounding urban context and the sensitivity and proximity of the Newport River and Lower River Shannon; the following ZoIs are considered appropriate for the proposed development:

- Earthworks, dust and pollutants and surface water runoff: 200 m radius from the proposed development boundary
- Invasive species (Japanese knotweed seed dispersal and soil management): from the proposed development site to the Shannon estuary; encompassing all hydrologically connected sites downstream of the proposed development site which contain habitats or species that could be impacted by the spread of Japanese knotweed. There is also the possibility of spread of Japanese knotweed rhizomes and seeds via inappropriate or unlicenced disposal of the soil from the proposed site itself. This has the possibility to impact part of the surrounding landscape should the soil not be disposed of correctly in a licenced facility and the source appropriately treated.

[20] As per Regs 49 and 50 of the European Communities (Birds and Natural Habitats Regulations 2011 (S. I. No. 477 of 2011).

5.3. European sites identified for screening assessment

The ZoIs for sources with pathways for potential effect that were identified in s5.2 encompass the European sites listed in the table below.

Receptor/ European site and code	Qualifying features[21]	Distance [22] (km)	Pathway(s) for potential significant effect	Source(s) for potential effect	SPR link present?	Screening required?
Lower River Shannon SAC 002165	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Mudflats and sandflats not covered by seawater at low tide [1140], Large shallow inlets and bays [1160], Alluvial forests with Alnus glutinosa and Fraxinus excelsior *(Alno-Padion, Alnion incanae, Salicion albae)* [91E0], Salicornia and other annuals colonising mud and sand [1310], Sandbanks which are slightly covered by sea water all the time [1110], Freshwater pearl mussel *(Margaritifera margaritifera)* [1029], River lamprey *(Lampetra fluviatilis)* [1099], Estuaries [1130], Mediterranean salt meadows *(Juncetalia maritimi)* [1410], Sea lamprey *(Petromyzon marinus)* [1095], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Molinia meadows on calcareous, peaty or clayey-silt-laden soils *(Molinion caeruleae)* [6410], Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)* [1330], Otter *(Lutra lutra)* [1355], Perennial vegetation of stony banks [1220], Atlantic salmon *(Salmo salar)* [1106], Reefs [1170], Bottlenose dolphin *(Tursiops truncatus)* [1349], Brook lamprey *(Lampetra planeri)* [1096], Coastal lagoons [1150]	Directly adjacent	Newport (Tipperary) River [040]	Earthworks, dust and pollutants, Surface water run-off, and Invasive species (Japanese knotweed and soil management)	Yes	Yes
River Shannon and River Fergus Estuaries SPA 004077	Pintail *(Anas acuta)* [A054], Teal *(Anas crecca)* [A052], Wigeon *(Anas penelope)* [A050], Greenshank *(Tringa nebularia)* [A164], Shoveler *(Anas clypeata)* [A056], Scaup *(Aythya marila)* [A062], Redshank *(Tringa totanus)* [A162], Dunlin *(Calidris alpina)* [A149], Black-tailed Godwit *(Limosa limosa)* [A156], Bar-tailed Godwit *(Limosa lapponica)* [A157], Curlew *(Numenius arquata)* [A160], Ringed Plover *(Charadrius hiaticula)* [A137], Golden Plover *(Pluvialis apricaria)* [A140], Black-headed Gull *(Chroicocephalus ridibundus)* [A179], Wetland and Waterbirds [A999], Knot *(Calidris canutus)* [A143], Cormorant *(Phalacrocorax carbo)* [A017], Grey Plover *(Pluvialis squatarola)* [A141], Lapwing *(Vanellus vanellus)* [A142], Shelduck *(Tadorna tadorna)* [A048], Whooper Swan *(Cygnus cygnus)* [A038], Light-bellied Brent Goose *(Branta bernicla hrota)* [A046]	16	Newport (Tipperary) River [040]	Earthworks, dust and pollutants, Surface water run-off, and Invasive species (Japanese knotweed and soil management)	Yes	Yes

[21] Term used to encompass both Qualifying Interests of SACs and Special Conservation Interests of SPAs
[22] From proposed site boundary to European site (closest point) directly across land

6. Screening of European sites

This section of the report concerns the final stage of the screening process. Information has been collected and is presented on the proposed project, its relationship to European sites, the sensitivity of each relevant European site identified, and potential significant effects on European site(s) resulting from the proposed development have been identified, which assumed the absence of any controls, conditions, or mitigation measures, as required in the AA screening process.

The European sites identified by the SPR model as being within a ZoI for potential significant effects, are assessed for the likelihood of significant effects, in view of their sensitivities, threats and pressures (Appendix III and IV), Conservation Objectives, and taking into account the precautionary principle[23], in Table 6.1 below. Should a likelihood of significant effects be identified for any European site, a Natura Impact Statement (otherwise knowns as Stage 2 AA) will be required.

The Conservation Objectives for the European sites which were considered throughout this report are included in the following NPWS/Department of Culture, Heritage and the Gaeltacht documents:

- NPWS (2012) Conservation Objectives for Lower River Shannon SAC [IE0002165] Version 1.
- NPWS (2012) Conservation Objectives for River Shannon and River Fergus Estuaries SPA [IE0004077] Version 1.

Table 6.1 Screening assessment of the potential effects arising from the proposed development

European site and code	Qualifying feature[24]	Analysis for likely significant effects	Likelihood of significant effects
Lower River Shannon SAC 002165	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Mudflats and sandflats not covered by seawater at low tide [1140], Large shallow inlets and bays [1160], Alluvial forests with Alnus glutinosa and Fraxinus excelsior *(Alno-Padion, Alnion incanae, Salicion albae)* [91E0], Salicornia and other annuals colonising mud and sand [1310], Sandbanks which are slightly covered by sea water all the time [1110], Freshwater pearl mussel *(Margaritifera margaritifera)* [1029], River lamprey *(Lampetra fluviatilis)* [1099], Estuaries [1130], Mediterranean salt meadows *(Juncetalia maritimi)* [1410], Sea lamprey *(Petromyzon marinus)* [1095], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Molinia meadows on calcareous, peaty or clayey-silt-laden soils *(Molinion caeruleae)* [6410], Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)* [1330],	Considering the Qualifying Interests and known sensitivities of this European site (detailed in Appendix III of this AASR), in view of their Conservation Objectives, and the potential effects identified in s5, this SAC is sensitive to hydrological interactions, land use management, and groundwater interactions. This SAC is directly adjacent to the proposed development with a direct pathway for effects via the riverbank adjacent to the proposed site. There are sources with a pathway for significant effects from surface water runoff in the demolition and construction phases of the proposed project. There are also sources with pathways for potential significant effects via invasive species, as Japanese knotweed was recorded within the proposed site. Considering the nature of the proposed development's construction phase with the hydrogeological characters of the site, and the proximity of this SAC, there is a risk of significant effects the Qualifying Interest of this SAC in the absence of mitigation. As sources and pathways with a likelihood for significant effects to this European site have been	Yes

[23] Case law: (C127/02 Waddenzee).
[24] Term used to encompass both Qualifying Interests of SACs and Special Conservation Interests of SPAs

European site and code	Qualifying feature[24]	Analysis for likely significant effects	Likelihood of significant effects
	Otter *(Lutra lutra)* [1355], Perennial vegetation of stony banks [1220], Atlantic salmon *(Salmo salar)* [1106], Reefs [1170], Bottlenose dolphin *(Tursiops truncatus)* [1349], Brook lamprey *(Lampetra planeri)* [1096], Coastal lagoons [1150]	identified, mitigation is required and under Article 6(3), a Natura Impact Statement must be prepared.	
River Shannon and River Fergus Estuaries SPA 004077	Pintail *(Anas acuta)* [A054], Teal *(Anas crecca)* [A052], Wigeon *(Anas penelope)* [A050], Greenshank *(Tringa nebularia)* [A164], Shoveler *(Anas clypeata)* [A056], Scaup *(Aythya marila)* [A062], Redshank *(Tringa totanus)* [A162], Dunlin *(Calidris alpina)* [A149], Black-tailed Godwit *(Limosa limosa)* [A156], Bar-tailed Godwit *(Limosa lapponica)* [A157], Curlew *(Numenius arquata)* [A160], Ringed Plover *(Charadrius hiaticula)* [A137], Golden Plover *(Pluvialis apricaria)* [A140], Black-headed Gull *(Chroicocephalus ridibundus)* [A179], Wetland and Waterbirds [A999], Knot *(Calidris canutus)* [A143], Cormorant *(Phalacrocorax carbo)* [A017], Grey Plover *(Pluvialis squatarola)* [A141], Lapwing *(Vanellus vanellus)* [A142], Shelduck *(Tadorna tadorna)* [A048], Whooper Swan *(Cygnus cygnus)* [A038], Light-bellied Brent Goose *(Branta bernicla hrota)* [A046]	Considering the Special Conservation Interests and known sensitivities of this European site (detailed in Appendix III of this AASR), in view of their Conservation Objectives, and the potential effects identified in s5, this SPA is sensitive to hydrological interactions, disturbance interactions and groundwater interactions. As above, there are sources for significant effect via hydrogeology during the construction phase due to the proximity of the proposed site to a tributary of the Lower River Shannon, which is directly upstream of this SPA. This SPA is designated for species that are sensitive to changes in water quality of their breeding and/or foraging habitat. There are also sources with pathways for potential significant effects via invasive species, as Japanese knotweed was recorded within the proposed site. Considering the nature of the proposed development's construction phase and proximity to hydrogeological connectivity with this SPA, the potential for significant effects cannot be ruled out in the absence of mitigation. As sources and pathways with a likelihood for significant effects to this European site have been identified, mitigation is required and under Article 6(3), a Natura Impact Statement must be prepared.	Yes

7. Appropriate Assessment Screening Conclusion

This Appropriate Assessment screening report produced to inform the competent authority on the AA process has examined the likelihood of significant effects on European sites arising from the proposed development. In utilising the best scientific information and data available, and with regard to the precautionary principle[23], it has been found that the proposed development has a likelihood of resulting in significant effects on 2 (no.) European sites in the absence of mitigation measures, namely:

- Lower River Shannon SAC [002165]
- River Shannon and River Fergus Estuaries SPA [004077]

Therefore, in accordance with Article 6(3) of the Habitats Directive, the potential for significant effects on the above specified European site(s) as a result of the implementation of the proposed development cannot be ruled out, and Stage 2 AA and the production of a Natura Impact Statement is required.

8. Natura Impact Statement

The objective of the Natura Impact Statement is to analyse the likely significant effects identified and determine whether the proposed development would have any residual adverse effects on the European site(s) identified, alone or in-combination with other plans or projects upon the application of appropriate and tailored mitigation measures. The following documents have been reviewed for the European sites identified to inform the appropriate application of mitigation measures for the effects identified:

- NPWS Site Synopses;
- *NPWS Natura 2000 Standard Data Forms; and*
- *NPWS Conservation Objectives and supporting documents.*

8.1. Potentially affected European sites

In the absence of mitigation measures, and in view of each site's qualifying interests, site sensitivities and conservation objectives, potential for significant effects due to the implementation of the proposed development has been identified for the following European sites:

Table 8.1 European site(s) potentially affected by the proposed development

Site Code	Site Name	Distance (km)[25]
002165	Lower River Shannon SAC	Directly adjacent
004077	River Shannon and River Fergus Estuaries SPA	16

The above listed European sites require mitigation measures that are tailored to the sources for effects identified, nature of the proposed development and proposed site, in order to prevent adverse effects to these European sites as a result of the implementation of the proposed development. The mitigation measures to be applied are outlined in s9 below.

9. Mitigation measures

The below specified mitigation measures will be applied throughout the construction, demolition phases for the proposed development to address the potential effects identified in this report (see section 5).

This section outlines measures that need to be incorporated into the proposed development in order to mitigate against potential significant effects on European sites identified above.

In order to demonstrate that there will be no adverse effects from the implementation of the proposed development, the below stated mitigation measures have been devised and tailored for the proposed site, to be applied during the construction phase in order to reduce or avoid potential effects on the integrity of European sites.

In addition, upon implementation of the below stated mitigation measures, there will be no risk of in-combination effects with the proposed development and the projects identified for potential in-combination effects in the AASR, namely: ABP ID 302644 and ABP ID 302960, which have both undergone Appropriate Assessment also, resulting in tailored mitigation measures provided in separate NIS documents which ensure no residual effects on any European sites.

[25] From proposed site boundary to European site (closest point) directly across land

9.1. Demolition of 85 Mulkear View

The demolition of No. 85 will be conducted with the following low impact method, integrating the following manual demolition methods in order to reduce risk of any part of the demolition process interacting with the adjacent Mulkear River and bank:

- Hand removal of all roof tiles;
- Hand removal of all roof trusses;
- Consaw cutting of all of gable wall (i.e., on the north side of the house that is adjacent to the Mulkear River bank) in manageable sections to allow the blockwork to be removed inwards (i.e., towards the south of the projects side) into the existing house and in the opposite direction to the Mulkear River bank;
- Temporary propping of walls by the installation of support buttresses in order to ensure their stability during demolition; and
- Once the first-floor walls have been removed, the first-floor joists can be removed by hand and the operation stated above repeated for the ground floor walls.

Note: The below mitigation sections regarding Earthworks, Dust and Water Quality apply for both the demolition and construction phase (unless where otherwise stated).

9.2. Earthworks and soil

Any temporary stockpiles will comply with setback conditions outlined in the requirements of Inland Fisheries Ireland (2016) "Guidelines on protection of fisheries during construction works in and adjacent to waters". In particular the following specific measures will apply to stockpile management:

- The excavations of soil and soil additions of infilling for site levelling and foundations will be minimised where possible in order to reduce the earthworks activities on site.
- A suitable area (i.e., at least 10m in distance from the boundary / banks of the Mulkear River and on flat ground) will be allocated for temporary stockpiling of excavated materials pending removal for reuse which will be located away from any surface water bodies or other sensitive receptors.
- Temporary storage of removed / excavated soil will be carefully managed to prevent environmental impact, impact on soil structure and generation of dust. For example: storing stockpiles away from any open surface water drains, managing height and slope of stockpile and minimising soil movement.
- Soils and bedrock taken off site will be removed and disposed of by contractors licensed under the Waste Management Act of 1996 and amendments.

Although there is no evidence of historical contamination in the area, all excavated materials will be visually assessed for signs of possible contamination such as staining or strong odours.
Should any unusual staining or odour be noticed, the following procedure will be put in place:

- Samples of this soil will be analysed for the presence of possible contaminants in order to ensure that historical pollution of the soil has not occurred.
- Should it be determined that any of the soil excavated is contaminated, this will be appropriately disposed of by a licensed waste disposal contractor.
- Any contaminated soil or suspected contaminated soil will be isolated from clean soil pending testing to confirm its classification.
- Contaminated material stockpiles, if required, will be bunded to ensure any liquid run-off is

retained prior to removal from site.

9.3. Dust

Hard surface access roads will be swept to remove mud and aggregate materials from their surface while any un-surfaced access roads will be restricted to essential site traffic only apart from the contractor's car park which will be hardcore only.
Furthermore, any road that has potential to give rise to fugitive dust will be regularly watered, as appropriate, during dry and / or windy conditions.
Vehicles using site roads will have their speed restricted and this speed restriction must be enforced rigidly. On any unsurfaced site road, this will be 20kph and on hard surfaced roads as site management dictates.
Vehicles delivering material with dust potential (soil, aggregates) will be completely enclosed or covered with tarpaulin where practicable in consideration of relevant health and safety restrictions, to restrict the escape of dust.
Public roads outside the site will be regularly inspected for cleanliness and spillages and cleaned as necessary.
Material handling systems and stockpiling of materials will be designed and laid out to minimise exposure to wind. Water misting or sprays will be used as required if particularly dusty activities are necessary during dry or windy periods.
During movement of materials both on and off site, trucks will be stringently covered with tarpaulin at all times. Before entrance onto public roads, trucks will be adequately inspected to ensure no potential for dust emissions.
At all times, these procedures will be strictly monitored and assessed. In the event of dust nuisance occurring outside the site boundary, movements of materials likely to raise dust would be curtailed and satisfactory procedures implemented to rectify the problem before the resumption of construction operations.

9.4. Water quality / surface run-off

Protective Berm
Due to the proximity of the proposed house for demolition (No. 85) to the bank of the Mulkear River, it is not practicable to install a berm for the demolition phase (see above s9.1) for specific mitigation measures for the demolition phase due to the proximity of the house to the river bank). However, a berm will be installed for the construction phase of the proposed project. The area of land within the redline boundary along the northern boundary of the proposed development site (i.e., the side which borders the Lower Shannon SAC) in the construction phase must be bordered by a raised berm (minimum height of 1m) composed of inert soils. This must be constructed before any construction works being on site and remain in place during the entire construction phase.
When the construction phase is completed removal of the protective berm must be undertaken by hand (i.e., shovel and wheelbarrow) due to the proximity of the northern edge of the proposed site (where the berm will be located) to the Mulkear River. A clear pathway for removal of the inert soil, that is at least 5m from the top of the riverbank to an awaiting container or truck must be identified for workers to ensure that there is no risk of soil entering the river at any stage during berm removal.

Surface Water Run-off
The Contractor will ensure that water containing silt will be treated on site (via silt traps on existing site drainage system) to ensure effective silt removal. Excavations will remain open for as little time as possible before the placement of fill/cover. This will help to minimise potential for water ingress into excavations. Weather conditions shall be taken into account when planning construction activities to minimise risk of run-off from the site. Considering the small size of the proposed site, and the proximity to the riverbank, all topsoil piles should be stored in a location that is a maximum

distance from both the riverbank, and all surface water drains on site. These storage areas are to be clearly marked and maintained through the demolition and construction phases.

Accidental Releases
All personnel working on the site shall be suitably trained in the implementation of the procedures. In the event of a spillage drainage from bunded areas will be inspected and diverted for collection and safe disposal if required. The contractor company will ensure adequate spill clean-up materials will be available onsite at all times.

Fuel / oil spillages
To minimise any impact from material spillages appropriate bunding shall be provided for all tank and drum storage areas. These storage areas shall be rendered impervious.
The Contractor shall ensure appropriate signage is be in place at each dedicated storage unit. The amount of chemicals stored will be kept to a minimum. All chemical containers will be labelled and copies of SDS sheets shall be maintained in the storage unit.
In the event of a spillage, drainage from bunded areas shall be inspected and diverted for collection and safe disposal if required. The integrity and water tightness of all bunding structures shall be tested and demonstrated. All fuel oil areas will have an appropriate spill apron.
With respect to portable equipment containing fuel oil, drip trays or approved equipment shall be used. Adequate spill clean-up materials will be available on site at all times.
Refuelling of construction vehicles, and the addition of hydraulic oils or lubricants to vehicles, will take place in a designated area (or where possible off site) which will be away from surface water gulleys or drains. In the event of a machine requiring refuelling outside of this area, fuel will be transported in a mobile double-skinned tank. An adequate supply of spill kits and hydrocarbon adsorbent packs will be stored in this area and made available. All relevant personnel will be fully trained in the use of this equipment. Guidelines such as 'Control of Water Pollution from Construction Sites, Guidance for Consultants and Contractors' (CIRIA 532, 2001) and other CIRIA guidelines regarding good practice (CIRIA 692, 2011; CIRIA 715, 2012) will be complied with.
A suitable risk assessment for wet concreting will be completed prior to works being carried out which will include measures to contain discharge of alkaline waste waters to a holding tank for discharge off site.
In the case of drummed fuel or other chemicals which may be used during construction containers should be stored in a dedicated internally bunded chemical storage cabinet and labelled clearly to allow appropriate remedial action in the event of a spillage.

9.5. Invasive species

Refer to Outline Invasive Species Management Plan in Appendix V of this report.

10. Residual effects

Upon the implementation of the above mitigation measures for the demolition and construction phases regarding earthworks, dust and water quality/surface run-off, the proposed development poses no risk of adverse effects on the conservation objectives, or the favourable conservation condition, of the qualifying interest habitats of the Lower River Shannon SAC either alone or in-combination with other plans or project.

11. In-combination effects

Article 6(3) of the Habitats Directive also requires an assessment of a plan or project to consider other plans or projects that might, in combination with the plan or project, have potential for significant effects European sites.

For considerations of in combination with respect to emerging or recent developments a search of the Dept of Housing, Local Government and Heritage planning database was undertaken to identify relevant plans and programmes which relate to the Proposed development. All developments from the receiving area were considered; the area considered is defined by the authoring ecologist using criteria which depend on the characteristics of the Proposed development and the associated sources (identified above); these criteria include:

- Having direct or indirect connectivity to a European site;
- Being in close proximity to a European site;
- Being of a substantial scale relative to the conditions and/or current works taking place in the surrounding landscape;
- Having disperse emissions or far-reaching sources for effects;
- Having sources for effects to ecological connectivity.

These factors are considered in the context of characteristics of the proposed development and on this basis a search radius of 200 m, within the last 5 years[26], was selected to be used to search for projects with applications to the local planning authority (i.e., Tipperary County Council) within the receiving environment. Regarding applications made to the national planning body, An Coimisiún Pleanála (ACP), a similar search radius of 200 m was used. The sources for potential significant effects are considered in combination with the potential sources for effects from the receiving environment for potential additive or interactive effects on the receiving environment.

Plans considered for possible in-combination effects from the proposed development

- Tipperary County Development Plan 2022-2028

Specific objectives contained within the Tipperary County Development Plan 2022-2028 such as Objective 5-4, which seeks to "*Support and encourage proposals for public and private sector housing involving the reuse and refurbishment of disused and derelict buildings in towns and villages*", and the proposed development is contributing to this objective for Newport Town. Considering the small-scale and temporary nature of the construction phase, and that the operational phase is consistent with the current site use and the land use zoning of the above plan, and that the above plan has also undergone Appropriate Assessment, it is not foreseen that proposed development will have any significant in-combination effects with the above plan.

Projects considered for possible in-combination effects from the proposed development

The results of the database search for applications to the local authority and ABP are both presented in Appendix I. There are a number of other projects in the vicinity of the proposed development including works which are at planning stage or underway on various sites. The database search found that the vast majority of projects within the area for which the search for local planning applications was conducted relate to the construction and alteration of residential structures, or changs in signage etc., all of which undergo Appropriate Assessment where required.

Two recently permitted cases resulting from the ABP search occur within the same area of the proposed development and also lie directly adjacent to the Mulkear River. These are ABP case reference JP92.302644, which is currently under construction and involves the construction of 11 residential housing units, and ABP case reference JP92.302960 which is also currently under construction and involves the construction of a town park with various amenity and leisure services

[26] Planning applications have a standard lifespan of 5 years as per Section 40 (3)(b) of the Planning & Development Act 2000, as amended; therefore, these are viewed to be the 'live' applications, all other projects are considered as part of the site other than refused and withdrawn applications, as these would not have any in-combination effects

and installations on site. Both cases have undergone appropriate assessment as required and are being implemented in accordance with detailed sets of mitigation measures designed for the sensitive nature of the surrounding SAC.

The proposed development is a small-scale project, with a temporary construction phase, and an operational phase that is consistent with current site use and environment. However, the proposed development does occur at a site that is highly hydrological sensitive and has identified sources and pathways for potential significant effects to a European site. Therefore, in the absence of mitigation measures, there is potential for in combination effects to the Mulkear River /Lower Shannon SAC with the following permitted projects:

- ABP JP92.302644; and,
- ABP JP92.302960.

A full list of the projects examined as part of the in-combination effects assessment is provided in Appendix I.

12. Conclusion

A Natura Impact Statement to inform the competent authority on Stage 2 AA has been carried out and found that the implementation of the proposed development at Mulkear view would have the potential to result in effects on the integrity of 2 (no.) European sites, if unmitigated, namely:

The risks to the safeguarding and integrity of the Qualifying Interests, Special Conservation Interests and Conservation Objectives of the European sites have been addressed by the inclusion of mitigation measures that will avoid adverse effects to any of the European sites considered.

In-combination effects from interactions with other plans and projects have been considered in the assessment. The mitigation measures incorporated into the design of the proposed development allow a conclusion to be arrived at that there will be no adverse effects as a result of the proposed development either alone or in-combination with other plans/projects.

Having incorporated mitigation measures, it is concluded that the proposed development will not give rise to any effect on the ecological integrity of any European sites, alone or in combination with other plans or projects[27]. This evaluation is made in view of the conservation objectives of the habitats or species for which these sites have been designated.

Following an examination, analysis and evaluation in view of best scientific knowledge, in view of objective information of the proposed development, in respect of the Qualifying Interests and Special Conservation Interests of the relevant European Sites, and in view of each sites' Conservation Objectives; it is concluded, that upon the application of the appropriate mitigation measures stated herein, which address the potential adverse effects identified, the proposed development at Mulkear view does not pose a risk of any adverse effects (either direct or indirect), alone or in-combination with other plans or projects, to the integrity of the European sites assessed.

[27] Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be: a) no alternative solution available, b) imperative reasons of overriding public interest for the plan to proceed; and c) Adequate compensatory measures in place.

Appendix I Review of planning history[28] in the vicinity of the proposed development[29]

The below tables contain the findings of a planning search of An Coimisiún Pleanála cases and Local Authority applications for projects/developments within a radius of 200 m of the site of the proposed development in the last 5 years.
Note: very minor projects considered as having no potential of contributing to significant cumulative effects, when considered in combination with effects arising from the subject proposal, such as signage, and minor alterations of planning etc. have been excluded.

An Coimisiún Pleanála cases

ACP case ID	Date	Decision	Description	Distance from proposed dev. (m)	Characteristics of the potential interactions between the projects; sources and pathways	Likelihood of significant in-combination effects
302644	2019-03-19	Approve with Conditions	Demolition and removal of 6 partially constructed houses and the construction of 11 dwellings consisting of 6 three-bed two-storey units, 4 two-bed two-storey units and 1 two-bed single storey unit and all associated works.	50	This is a project with a temporary construction phase and the operational phase will have localised effects. The consent process for this project was subject to applicable EIA and AA requirements. Considering the above, in combination with the application of suitable mitigation measures to ensure no adverse effects to European sites as a result of the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites.	No
302960	2019-04-10	Approve with Conditions	Proposed town park incorporating children's play area, play equipment, zip wire, outdoor gym equipment, pump track, multi-use games area, recreational walkways, seating, signage, interpretive panels, landscaping and car parking.	51	This is a project with a temporary construction phase and the operational phase will have localised effects. The consent process for this project was subject to applicable EIA and AA requirements. Considering the above, in combination with the application of suitable mitigation measures to ensure no adverse effects to European sites as a result of the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites.	No
323836		Case is due to be decided by 27/04/2026	The proposed development consists of the construction of a new Footbridge and resurfacing of existing lane with walkway link to the existing park in the form of new footpaths and all ancillary site works as required to complete the works.	152	This is a project with a temporary construction phase and the operational phase will have localised effects. The consent process for this project was subject to applicable EIA and AA requirements. Considering the above, in combination with the application of suitable mitigation measures to ensure no adverse effects to European sites as a result of the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites.	No

Local Authority applications

[28] The majority of surrounding planning permissions are for developments which are minor projects with no risk of in-combination effects. Therefore, a summary list is provided here of the largest / most relevant proposed project(s) within the below stated parameters (i.e., excluding minor additions or edits to residential homes / existing planning permissions)
[29] Parameters used: planning application from within the last 10 years, within a radius of 200m around the proposed project boundary

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Distance from Proposed Development (m)	Characteristics of the potential interactions between the projects; sources and pathways	Likelihood of potential significant in-combination effects
2561088	N/A	construction of a new extension to the southeast of the existing school building, to the rear of the existing sports hall which will be part single and part two storey and will be attached to the existing school building - the additional accommodation will include a 2 class base special education needs unit, graphics room, 2 no. science laboratories, home economics room, 3 no. general classrooms, staff office, sanitary accommodation, ancillary rooms, plant and stores. Minor works are proposed to the existing building to facilitate the new extension to include façade and layout changes in the vicinity of the connection to the new extension. The works will include the provision of landscaped courtyard and play spaces adjoining the new extension, amendments to the existing road and landscape layouts to support the new extension, 6 no. additional carparking spaces and all ancillary works. A Natura Impact Statement will be submitted to the planning authority with this application.		43,482.0	100.90	This is a project with a temporary construction phase and the operational phase will have localised effects. The consent process for this project was subject to applicable EIA and AA requirements. Considering the above, in combination with the application of suitable mitigation measures to ensure no adverse effects to European sites as a result of the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites.	No
2360631	Conditional	the demolition of an existing dilapidated two storey house (75.9m²) and all ancillary site works for the provision of a future site entrance	2024-01-17	27,721.2	76.10	This is a project with a temporary construction phase and the operational phase will have localised effects. The consent process for this project was subject to applicable EIA and AA requirements. Considering the above, in combination with the application of suitable mitigation measures to ensure no adverse effects to European sites as a result of the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites.	No
2517	Conditional	demolition and reconstruction of existing derelict and structurally unsafe building to provide for a 3 bedroom town house, construct 2 no. 2 bed apartments, connection to existing services, provision of rainwater retention system and associated site development works	2025-11-11	563.0	78.10	This is a project with a temporary construction phase and the operational phase will have localised effects. The consent process for this project was subject to applicable EIA and AA requirements. Considering the above, in combination with the application of suitable mitigation measures to ensure no adverse effects to European sites as a result of the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites.	No

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Distance from Proposed Development (m)	Characteristics of the potential interactions between the projects; sources and pathways	Likelihood of potential significant in-combination effects
2512	N/A	demolition and reconstruction of existing derelict and structurally unsafe building to provide for a 3 bedroom town house, construct 2 no. 2 bed apartments, connection to existing services, provision of rainwater retention system and associated site development works		100.0	83.93	This is a project with a temporary construction phase and the operational phase will have localised effects. The consent process for this project was subject to applicable EIA and AA requirements. Considering the above, in combination with the application of suitable mitigation measures to ensure no adverse effects to European sites as a result of the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites.	No

Appendix II Background information on European sites[30]

Site code	Site name	Qualifying feature	Pressure codes	Known threats and pressures
002165	Lower River Shannon SAC	Sea lamprey (Petromyzon marinus) [1095], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Bottlenose dolphin (Tursiops truncatus) [1349], Otter (Lutra lutra) [1355], Mudflats and sandflats not covered by seawater at low tide [1140], Brook lamprey (Lampetra planeri) [1096], River lamprey (Lampetra fluviatilis) [1099], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Freshwater pearl mussel (Margaritifera margaritifera) [1029], Estuaries [1130], Mediterranean salt meadows (Juncetalia maritimi) [1410], Atlantic salmon (Salmo salar) [1106], Sandbanks which are slightly covered by sea water all the time [1110], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Coastal lagoons [1150], Large shallow inlets and bays [1160], Perennial vegetation of stony banks [1220], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Salicornia and other annuals colonising mud and sand [1310], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Reefs [1170]	A04, D01.01, F03.01, B, A08, E03, J02.12.01, F01, C01.01.02, E01, C01.03.01, F02.03, G01.01, J02.01.01, J02.01.02, H04, J02.10, I01, K02.03	Grazing, paths, tracks, cycling tracks, hunting, sylviculture, forestry, fertilisation, discharges, sea defence or coast protection works, tidal barrages, marine and freshwater aquaculture, removal of beach materials, urbanised areas, human habitation, hand cutting of peat, leisure fishing, nautical sports, polderisation, reclamation of land from sea, estuary or marsh, air pollution, air-borne pollutants, management of aquatic and bank vegetation for drainage purposes, invasive non-native species, eutrophication (natural)
004077	River Shannon and River Fergus	Black-tailed Godwit (Limosa limosa) [A156], Pintail (Anas acuta) [A054], Teal (Anas crecca) [A052], Wigeon (Anas penelope) [A050], Dunlin (Calidris alpina) [A149], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Bar-tailed Godwit (Limosa lapponica) [A157], Curlew (Numenius arquata) [A160], Ringed Plover (Charadrius hiaticula) [A137], Golden Plover (Pluvialis apricaria) [A140], Black-headed Gull (Chroicocephalus ridibundus) [A179],	D03.02, E02, G01.01, E01, F01, E03, A08	Shipping lanes, industrial or commercial areas, nautical sports, urbanised areas, human habitation, marine and freshwater aquaculture, discharges, fertilisation

[30] That have functional connectivity (ecological pathways) to the proposed development area with potential for significant impact, including their Qualifying Interests, known threats and pressures

Site code	Site name	Qualifying feature	Pressure codes	Known threats and pressures
	Estuaries SPA	Wetland and Waterbirds [A999], Knot (Calidris canutus) [A143], Greenshank (Tringa nebularia) [A164], Shoveler (Anas clypeata) [A056], Scaup (Aythya marila) [A062], Redshank (Tringa totanus) [A162], Whooper Swan (Cygnus cygnus) [A038], Cormorant (Phalacrocorax carbo) [A017], Grey Plover (Pluvialis squatarola) [A141], Lapwing (Vanellus vanellus) [A142], Shelduck (Tadorna tadorna) [A048]		

Appendix III Qualifying Interests of SACs that have undergone assessment[31]

EU code	Qualifying interests	Article 17 report summary - threats and pressures	Threats and pressures codes	Known threats and pressures	Sensitivity of qualifying interests
[1029]	Freshwater Pearl Mussel *(Margaritifera margaritifera)*	The pressures facing this species come from a wide variety of sources (e.g. pollution from urban wastewater, development activities, farming and forestry), often quite removed from the species' habitat. Flow changes, caused by land drainage are also a significant pressure facing the species.	A26, A31, B23, B27, C05, D02, F12, F28, F31, F33	Agricultural activities generating diffuse pollution to surface or ground waters, drainage for use as agricultural land, forestry activities generating pollution to surface or ground waters, modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams), peat extraction, hydropower (dams, weirs, run-off-the-river), including infrastructure, discharge of urban waste water (excluding storm overflows and/or urban run-offs) generating pollution to surface or ground water, modification of flooding regimes, flood protection for residential or recreational development, other modification of hydrological conditions for residential or recreational development, abstraction of ground and surface waters (including marine) for public water supply and recreational use	Surface water dependent. Highly sensitive to hydrological change. Very highly sensitive to pollution.
[1095]	Sea Lamprey *(Petromyzon marinus)*	Most of the pressures on Sea Lampreys are associated with hydropower infrastructure, reduction of prey populations due to overharvesting, drainage and the use of both natural and synthetic fertilisers. Changes in rainfall due to climate change is also	A19, A20, A31, D02, G01, N01, N02, N03, Xo	Application of natural fertilisers on agricultural land, application of synthetic (mineral) fertilisers on agricultural land, drainage for use as agricultural land, hydropower (dams, weirs, run-off-the-river), including infrastructure, marine fishing and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species, temperature changes (e.g., rise of temperature & extremes) due to climate change, increases or	Marine water dependent. Low sensitivity to hydrological changes. Coastal development, trampling from recreational activity.

[31] Including known treats and pressures and sensitivities of qualifying interests

EU code	Qualifying interests	Article 17 report summary - threats and pressures	Threats and pressures codes	Known threats and pressures	Sensitivity of qualifying interests
		considered a significant pressure on the species.		changes in precipitation due to climate change, threats and pressures from outside the member state	
[1096]	Brook Lamprey *(Lampetra planeri)*	Most of the pressures on Brook Lampreys are associated with drainage for agriculture, the use of both natural and synthetic fertilisers, tree removal. Infrastructure related to hydropower along with pollution to ground and surface water and the discharge of waste water are also considered pressures.	A19, A20, A31, B09, D02, F11, F12, N01, N02	Application of natural fertilisers on agricultural land, application of synthetic (mineral) fertilisers on agricultural land, drainage for use as agricultural land, clear-cutting, removal of all trees, hydropower (dams, weirs, run-off-the-river), including infrastructure, pollution to surface or ground water due to urban runoffs, discharge of urban waste water (excluding storm overflows and/or urban run-offs) generating pollution to surface or ground water, temperature changes (e.g., rise of temperature & extremes) due to climate change	Surface water dependent. Highly sensitive to hydrological change. Availability of suitable spawning ground is a considerable issue for the species.
[1099]	River Lamprey *(Lampetra fluviatilis)*	The main pressures on River Lampreys are associated with hydropower infrastructure and changes in rainfall due to climate change. The use of synthetic and natural fertilisers, drainage and also infrastructure related to shipping are also considered to be pressures on the species.	A19, A20, A31, D02, E03, N01, N02, N03	Application of natural fertilisers on agricultural land, application of synthetic (mineral) fertilisers on agricultural land, drainage for use as agricultural land, hydropower (dams, weirs, run-off-the-river), including infrastructure, shipping lanes, ferry lanes and anchorage infrastructure (e.g., canalisation, dredging), temperature changes (e.g., rise of temperature & extremes) due to climate change, increases or changes in precipitation due to climate change	Surface water dependent. Highly sensitive to hydrological change. Availability of suitable spawning ground is a considerable issue for the species.
[1106]	Salmon *(Salmo salar)*	Known pressures include exploitation at sea in commercial fisheries, interceptor fisheries in coastal waters, aquaculture and predation. In addition, the negative influence of climate change on prey structure as well as alterations in habitat and water quality are also pressures on the species.	A25, A26, B23, D02, F12, F28, G11, G19, G20, I02, J01, K05, L06, N01	Agricultural activities generating point source pollution to surface or ground waters, agricultural activities generating diffuse pollution to surface or ground waters, forestry activities generating pollution to surface or ground waters, hydropower (dams, weirs, run-off-the-river), including infrastructure, discharge of urban waste water (excluding storm overflows and/or urban run-offs) generating pollution to surface or ground water, modification of flooding regimes, flood protection for residential or recreational development, illegal harvesting, collecting and taking, other impacts from marine aquaculture, including infrastructure, abstraction of water, flow diversion, dams and other modifications of hydrological conditions for freshwater aquaculture, other invasive alien species (other than species of union concern), mixed source pollution to surface and ground waters (limnic and terrestrial), physical alteration of water bodies, interspecific relations (competition, predation, parasitism,	Disease, parasites and barriers to movement.

EU code	Qualifying interests	Article 17 report summary - threats and pressures	Threats and pressures codes	Known threats and pressures	Sensitivity of qualifying interests
				pathogens), temperature changes (e.g., rise of temperature & extremes) due to climate change	
[1110]	Sandbanks which are slightly covered by sea water all the time	No significant pressures were identified acting on this habitat.	Xxp, Xxt	No pressures, no threats	None identified.
[1130]	Estuaries	Most of the pressures on estuaries come from various sources of pollution, including domestic wastewater, agriculture and marine aquaculture. Alien invasive species such as the naturalised Pacific oyster *(Magalana gigas)* are also recognised as a significant pressure	A28, F20, G16, I02, XU	Agricultural activities generating marine pollution, residential or recreational activities and structures generating marine pollution (excl. marine macro- and micro- particular pollution, marine aquaculture generating marine pollution, other invasive alien species (other than species of union concern), unknown pressure	Inappropriate development, changes in turbidity
[1140]	Mudflats and sandflats not covered by seawater at low tide	Pressures on mudflats and sandflats are partly caused by pollution from agricultural, forestry and wastewater sources, as well as impacts associated with marine aquaculture, particularly the Pacific oyster *(Magallana gigas)*.	A28, F20, G16	Agricultural activities generating marine pollution, residential or recreational activities and structures generating marine pollution (excl. marine macro- and micro- particular pollution, marine aquaculture generating marine pollution	Surface and marine water dependent. Moderately sensitive to hydrological change. Moderate sensitivity to pollution. Changes to salinity and tidal regime. Coastal development.
[1150]	Coastal lagoons	Several high-ranking pressures were identified acting on this habitat: eutrophication, modification of hydrological flow, and drainage. Other pressures noted include erosion and silting up, accumulation of seaweed, and sedimentation from peat related to turf cutting and/or forestry.	C12, J02, K02, K04, L01, L03, N04	Extraction activities generating marine pollution, mixed source marine water pollution (marine and coastal), drainage, modification of hydrological flow, abiotic natural processes (e.g., erosion, silting up, drying out, submersion, salinization), accumulation of organic material, sea-level and wave exposure changes due to climate change	Erosion and silting up. Accumulation of seaweed. Land use management resulting in hydrological interactions.

EU code	Qualifying interests	Article 17 report summary - threats and pressures	Threats and pressures codes	Known threats and pressures	Sensitivity of qualifying interests
[1160]	Large shallow inlets and bays	Pressures on the habitat include nutrient enrichment, dredging and invasive alien species.	A28, B23, F20, G01, G16, I02	Agricultural activities generating marine pollution, forestry activities generating pollution to surface or ground waters, residential or recreational activities and structures generating marine pollution (excl. marine macro- and micro- particular pollution, marine fishing and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species, marine aquaculture generating marine pollution, other invasive alien species (other than species of union concern)	Inappropriate development, changes in turbidity, surface water runoff, discharge etc. On site management activities.
[1170]	Reefs	The main pressures on reefs come from fishing methods that damage the seafloor.	G01, G03	Marine fishing and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species, marine fish and shellfish harvesting (professional, recreational) activities causing physical loss and disturbance of seafloor habitats	Sensitive to disturbance and pollution.
[1220]	Perennial vegetation of stony banks	The main pressures on this habitat are associated with coastal defences (which can interfere with sediment dynamics), recreation and shingle removal.	C01, E01, F07, F08, F09, I02	Extraction of minerals (e.g., rock, metal ores, gravel, sand, shell), roads, paths, railroads and related infrastructure (e.g., bridges, viaducts, tunnels), sports, tourism and leisure activities, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures), deposition and treatment of waste/garbage from household/recreational facilities, other invasive alien species (other than species of union concern)	Marine water dependent. Low sensitivity to hydrological changes. Coastal development, trampling from recreational activity and gravel removal.
[1230]	Vegetated sea cliffs of the Atlantic and Baltic coasts	A number of significant pressures were identified, including trampling by walkers, invasive non-native species, gravel extraction, and sea-level and wave exposure changes due to climate change.	C01, E01, F07, F08, I02, N03, N04	Extraction of minerals (e.g., rock, metal ores, gravel, sand, shell), roads, paths, railroads and related infrastructure (e.g., bridges, viaducts, tunnels), sports, tourism and leisure activities, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures), other invasive alien species (other than species of union concern), increases or changes in precipitation due to climate change, sea-level and wave exposure changes due to climate change	Land use activities such as tourism and/or agricultural practices. Direct alteration to the habitat or effects such as burning or drainage.

EU code	Qualifying interests	Article 17 report summary - threats and pressures	Threats and pressures codes	Known threats and pressures	Sensitivity of qualifying interests
[1310]	Salicornia and other annuals colonising mud and sand	Pressures on Salicornia mud are caused by alien species and overgrazing by livestock	A09, I02	Intensive grazing or overgrazing by livestock, other invasive alien species (other than species of union concern)	Marine water dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Infilling, reclamation, invasive species.
[1330]	Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)*	The main pressures on Atlantic salt meadows are from agriculture, including ecologically unstable grazing regimes and land reclamation, and the invasive non-native species common cord-grass (*Spartina anglica*).	A09, A33, A36, F07, F08, I02	Intensive grazing or overgrazing by livestock, modification of hydrological flow or physical alternation of water bodies for agriculture (excluding development and operation of dams), agriculture activities not referred to above, sports, tourism and leisure activities, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures), other invasive alien species (other than species of union concern)	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Overgrazing, erosion and accretion.
[1349]	Bottlenose Dolphin *(Tursiops truncatus)*	Pressures on this species in Irish waters mainly involve commercial vessel-based activities such as impacts arising from geophysical seismic exploration or from local/regional prey removal by fisheries.	C09, G01	Geotechnical surveying, marine fishing and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species	Large vessel movement effecting distributions. Prey availability, reduction in available habitat and water quality.
[1355]	Otter *(Lutra lutra)*	There are no pressures facing this species	Xxp, Xxt	No pressures, no threats	Surface and marine water dependent. Moderately sensitive to hydrological change. Sensitivity to pollution.
[1410]	Mediterranean salt meadows *(Juncetalia maritimi)*	Most of the pressures on Mediterranean salt meadows are associated with agriculture, including overgrazing, under-grazing and land reclamation.	A09, A10, A33, A36	Intensive grazing or overgrazing by livestock, extensive grazing or under grazing by livestock, modification of hydrological flow or physical alternation of water bodies for agriculture (excluding development and operation of dams), agriculture activities not referred to above	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime.

EU code	Qualifying interests	Article 17 report summary - threats and pressures	Threats and pressures codes	Known threats and pressures	Sensitivity of qualifying interests
					Coastal development and reclamation.
[3260]	Water courses of plain to montane levels with vegetation *(Ranunculion fluitantis and Callitricho-Batrachion)*	The majority of pressures on this habitat are caused by damage through hydrological and morphological change, eutrophication and other water pollution.	A25, A26, B23, C05, F11, F12, F13, K01, K04, K05	Agricultural activities generating point source pollution to surface or ground waters, agricultural activities generating diffuse pollution to surface or ground waters, forestry activities generating pollution to surface or ground waters, peat extraction, pollution to surface or ground water due to urban runoffs, discharge of urban waste water (excluding storm overflows and/or urban run-offs) generating pollution to surface or ground water, plants, contaminated or abandoned industrial sites generating pollution to surface or ground water, abstraction from groundwater, surface water or mixed water, modification of hydrological flow, physical alteration of water bodies	Surface water dependent Highly sensitive to hydrological change and direct physical interactions.
[6410]	Molinia meadows on calcareous, peaty or clayey-silt-laden soils *(Molinion caeruleae)*	The main pressures on the habitat are associated with agricultural intensification (e.g. land drainage, fertiliser application), under-grazing and forestry.	A02, A06, A10, A14, A31, B01	Conversion from one type of agricultural land use to another (excluding drainage and burning), abandonment of grassland management (e.g., cessation of grazing or of mowing), extensive grazing or under grazing by livestock, livestock farming (without grazing), drainage for use as agricultural land, conversion to forest from other land uses, or afforestation (excluding drainage)	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
[91E0]	Alluvial forests with Alder and Ash *(Alnus glutinosa, Fraxinus excelsior, Alno-Padion, Alnion incanae, Salicion albae)*	Many of the pressures facing this habitat include invasive species, particularly sycamore *(Acer pseudoplatanus)*, beech *(Fagus sylvatica)*, Indian balsam *(Impatiens glandulifera)* and currant species *(Ribes nigrum and R. rubrum)* as well as some native species such as brambles *(Rubus fruticoses agg.)* and common nettle, along with over felling.	B09, I02, I04, I05	Clear-cutting, removal of all trees, other invasive alien species (other than species of union concern), problematic native species, plant and animal diseases, pathogens and pests	Surface and groundwater dependent. Highly sensitive to hydrological changes. Changes in management.

Appendix IV Special Conservation Interests of SPAs that have undergone assessment[32]

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A017	Cormorant	*Phalacrocorax carbo carbo*	G12, D01, F07, G10, J02, N06, N07, N01	Bycatch and incidental killing (due to fishing and hunting activities), wind, wave and tidal power, including infrastructure, sports, tourism and leisure activities, illegal shooting/killing, mixed source marine water pollution (marine and coastal), desynchronisation of biological / ecological processes due to climate change, decline or extinction of related species (e.g. food source / prey, predator / parasite, symbiote, etc.) due to climate change, temperature changes (e.g. rise of temperature & extremes) due to climate change
A038	Whooper Swan	*Cygnus cygnus*	D01, D06, F07, F28	Wind, wave and tidal power, including infrastructure, transmission of electricity and communications (cables), sports, tourism and leisure activities, modification of flooding regimes, flood protection for residential or recreational development
A046	Light-bellied Brent Goose	*Branta bernicla hrota*	F07, D06, F01, F08, G01	Sports, tourism and leisure activities, transmission of electricity and communications (cables), conversion from other land uses to housing, settlement or recreational areas (excluding drainage and modification of coastline, estuary and coastal conditions), modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures), marine fish and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species
A048	Shelduck	*Tadorna tadorna*	F07, G19, N01, D01, N04	Sports, tourism and leisure activities, other impacts from marine aquaculture, including infrastructure, temperature changes (e.g. rise of temperature & extremes) due to climate change, wind, wave and tidal power, including infrastructure, sea-level and wave exposure changes due to climate change
A050	Wigeon	*Mareca penelope*	F07, G07, N01, D01, F08, F28	Sports, tourism and leisure activities, hunting, temperature changes (e.g. rise of temperature & extremes) due to climate change, wind, wave and tidal power, including infrastructure, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures), modification of flooding regimes, flood protection for residential or recreational development
A052	Teal	*Anas crecca*	G07, F07, D01, F28	Hunting, sports, tourism and leisure activities, wind, wave and tidal power, including infrastructure, modification of flooding regimes, flood protection for residential or recreational development
A054	Pintail	*Anas acuta*	F07, G07, N01, D01, F28	Sports, tourism and leisure activities, hunting, temperature changes (e.g. rise of temperature & extremes) due to climate change, wind, wave and tidal power, including infrastructure, modification of flooding regimes, flood protection for residential or recreational development
A056	Shoveler	*Spatula clypeata*	I02, I05, F07, G07, N01, D01, F28	Other invasive alien species (other than species of union concern), plant and animal diseases, pathogens and pests, sports, tourism and leisure activities, hunting, temperature changes (e.g. rise of temperature & extremes) due to climate change, wind, wave and tidal power, including infrastructure, modification of flooding regimes, flood protection for residential or recreational development
A062	Scaup	*Aythya marila*	F07, G07, G19, J01, D01	Sports, tourism and leisure activities, hunting, other impacts from marine aquaculture, including infrastructure, mixed source pollution to surface and ground waters (limnic and terrestrial), wind, wave and tidal power, including infrastructure

[32] Including known treats and pressures of SCIs

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A082	Hen Harrier	*Circus cyaneus*	B01, B03, A05, D01, A13, A02, B16, A11, A07, I04, A03, A31, A21, A15	Conversion to forest from other land uses, or afforestation (excluding drainage), replanting with or introducing non-native or non-typical species (including new species and gmos), removal of small landscape features for agricultural land parcel consolidation (hedges, stone walls, rushes, open ditches, springs, solitary trees, etc.), wind, wave and tidal power, including infrastructure, reseeding of grasslands and other semi-natural habitats, conversion from one type of agricultural land use to another (excluding drainage and burning), wood transport, burning for agriculture, abandonment of management/use of other agricultural and agroforestry systems (all except grassland), problematic native species, conversion from mixed farming and agroforestry systems to specialised (e.g. single crop) production, drainage for use as agricultural land, use of plant protection chemicals in agriculture, tillage practices (e.g. ploughing) in agriculture
A137	Ringed Plover	*Charadrius hiaticula*	F07, G19, D01, F08, N04	Sports, tourism and leisure activities, other impacts from marine aquaculture, including infrastructure, wind, wave and tidal power, including infrastructure, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures), sea-level and wave exposure changes due to climate change
A140	Golden Plover	*Pluvialis apricaria*	B01, I04, I02, A02, A11, A09, D01, H04, A31, G07, N01, F07, F28	Conversion to forest from other land uses, or afforestation (excluding drainage), problematic native species, other invasive alien species (other than species of union concern), conversion from one type of agricultural land use to another (excluding drainage and burning), burning for agriculture, intensive grazing or overgrazing by livestock, wind, wave and tidal power, including infrastructure, vandalism or arson, drainage for use as agricultural land, hunting, temperature changes (e.g. rise of temperature & extremes) due to climate change, sports, tourism and leisure activities, modification of flooding regimes, flood protection for residential or recreational development
A141	Grey Plover	*Pluvialis squatarola*	F07, G01, G19, D01, N04	Sports, tourism and leisure activities, marine fish and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species, other impacts from marine aquaculture, including infrastructure, wind, wave and tidal power, including infrastructure, sea-level and wave exposure changes due to climate change
A142	Lapwing	*Vanellus vanellus*	A08, A21, B01, I04, I02, A02, C05, D01, A06, A31, N01, F07, F28	Mowing or cutting of grasslands, use of plant protection chemicals in agriculture, conversion to forest from other land uses, or afforestation (excluding drainage), problematic native species, other invasive alien species (other than species of union concern), conversion from one type of agricultural land use to another (excluding drainage and burning), peat extraction, wind, wave and tidal power, including infrastructure, abandonment of grassland management (e.g. cessation of grazing or mowing), drainage for use as agricultural land, temperature changes (e.g. rise of temperature & extremes) due to climate change, sports, tourism and leisure activities, modification of flooding regimes, flood protection for residential or recreational development
A143	Knot	*Calidris canutus*	F07, G01, G19, D01, F08, N04	Sports, tourism and leisure activities, marine fish and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species, other impacts from marine aquaculture, including infrastructure, wind, wave and tidal power, including infrastructure, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures), sea-level and wave exposure changes due to climate change
A149	Dunlin	*Calidris alpina*	G01, G19, D01, F08, N04, F07	Marine fish and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species, other impacts from marine aquaculture, including infrastructure, wind, wave and tidal power, including infrastructure, modification of coastline, estuary and coastal conditions for development, use and protection of residential,

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
				commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures), sea-level and wave exposure changes due to climate change, sports, tourism and leisure activities
A156	Black-tailed Godwit	*Limosa limosa*	F07, G19, D01, F08, N04	Sports, tourism and leisure activities, other impacts from marine aquaculture, including infrastructure, wind, wave and tidal power, including infrastructure, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures), sea-level and wave exposure changes due to climate change
A157	Bar-tailed Godwit	*Limosa lapponica*	F07, G19, G01, F08, D01, N04	Sports, tourism and leisure activities, other impacts from marine aquaculture, including infrastructure, marine fish and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures), wind, wave and tidal power, including infrastructure, sea-level and wave exposure changes due to climate change
A160	Curlew	*Numenius arquata*	A08, B01, I04, I02, A31, A02, C05, D01, A06, A11, F07, G01, G19, F08	Mowing or cutting of grasslands, conversion to forest from other land uses, or afforestation (excluding drainage), problematic native species, other invasive alien species (other than species of union concern), drainage for use as agricultural land, conversion from one type of agricultural land use to another (excluding drainage and burning), peat extraction, wind, wave and tidal power, including infrastructure, abandonment of grassland management (e.g. cessation of grazing or mowing), burning for agriculture, sports, tourism and leisure activities, marine fish and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species, other impacts from marine aquaculture, including infrastructure, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures)
A162	Redshank	*Tringa totanus*	A08, A09, B01, I04, I02, A02, C05, D01, A06, A31, F07, F08, N04	Mowing or cutting of grasslands, intensive grazing or overgrazing by livestock, conversion to forest from other land uses, or afforestation (excluding drainage), problematic native species, other invasive alien species (other than species of union concern), conversion from one type of agricultural land use to another (excluding drainage and burning), peat extraction, wind, wave and tidal power, including infrastructure, abandonment of grassland management (e.g. cessation of grazing or mowing), drainage for use as agricultural land, sports, tourism and leisure activities, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures), sea-level and wave exposure changes due to climate change
A164	Greenshank	*Tringa nebularia*	F07, D01, F08, N04	Sports, tourism and leisure activities, wind, wave and tidal power, including infrastructure, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures), sea-level and wave exposure changes due to climate change
A179	Black-headed Gull	*Larus ridibundus*	F22, F23, I02, I04, D01, M08	Residential or recreational activities and structures generating marine macro- and micro- particulate pollution (e.g. plastic bags, styrofoam), industrial or commercial activities and structures generating marine macro- and micro- particulate pollution (e.g. plastic bags, styrofoam), other invasive alien species (other than species of union concern), problematic native species, wind, wave and tidal power, including infrastructure, flooding (natural processes)

Appendix V Conservation Objectives[33] that have been consulted in this report

NPWS (2012) Conservation Objectives for River Shannon and River Fergus Estuaries SPA [IE0004077] Version 1.
NPWS (2012) Conservation Objectives for Lower River Shannon SAC [IE0002165] Version 1.

[33] NPWS/Department of Culture, Heritage and the Gaeltacht

Appendix VI Legislative context and Appropriate Assessment overview

Overview of the legislative context

Appropriate Assessment (AA) is a procedure carried out in accordance with the requirements of Article 6(3) of Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter referred to as the "Habitats Directive"). The Habitats Directive provides legal protection for habitats and species of European importance. The aim of the Habitats Directive is to maintain or restore the "favourable conservation status" of habitats and species of European Community Interest. These habitats and species are listed in the Habitats Directive and the Birds Directive (2009/147/EC). Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are sites of ecological important for which habitats and species listed in the Habitats and Birds directives are designated. Qualifying Interests (QIs) are those habitats and species for which SACs are designated; and Special Conservation Interests (SCIs) are those species for which SPAs are designated. SACs and SPAs are collectively referred to as European sites (or Natura 2000 sites).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect SACs and SPAs. Article 6(3) establishes the requirement for AA. These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning and Development Act 2000 (as amended).

Article 6(3) of the Habitats Directive States:

> *'Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public'.*

In the context of this report, the above definition relates to a project. The AA process relates to the protection of species listed in Annex I and Annex II of the Habitats Directive which form the Natura 2000 network (Article 3(1)). Species breeding and resting places of species listed in Annex IV of the Habitats Directive are nationally protected in Ireland as per Articles 15 and 16 of the Habitats Directive. The actual species listed in Annex IV do not form part of the Natura 2000 network as they are not mentioned in Article 3(1) of the Directive which defines the Natura 2000 network.

Article 3(1) of the Habitats Directive States:

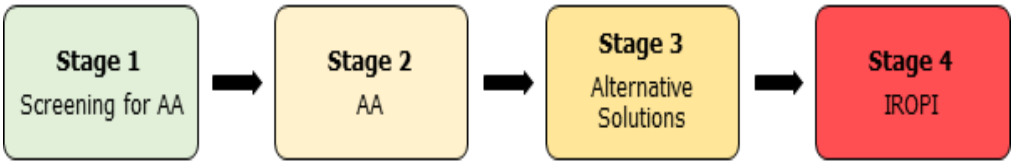
> *'A coherent European ecological network of special areas of conservation shall be set up under the title Natura 2000. This network, composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, shall enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range'.*

AA is an assessment of the likelihood of significant effects arising from a project, either individually or in combination with other plans or projects, to assess if the project will have potential for significant effect on any European site concerned, and implications in view of the Conservation Objectives (COs) for the species and/or habitats designated for that site. Where a formal consent process applies, the AA process is conducted by the relevant competent authority which makes a determination in accordance with article 6(3) of the Habitats Directive as to whether a proposed project will have likely significant effects on a given European site as a result of its implementation.

Overview of Appropriate Assessment

The Habitats Directive and associated AA process promote a hierarchy of avoidance, mitigation and compensatory measures. This approach aims to avoid any effects on European sites by identifying possible effects early in the project making process and avoiding such effects. Second, the approach involves the application of mitigation measures, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If potential significant effects on European sites remain, and no further practicable mitigation is possible, the approach requires the consideration of alternative solutions. If no alternative solutions are identified and the project is required for imperative reasons of overriding public interest, then compensation measures are required for any remaining adverse effects.

There are four main stages in the AA process:



Stage one: Appropriate Assessment Screening
The process that identifies the likely impacts upon a European site of a project or plan, either alone or in combination with other projects or plans and considers whether these impacts are likely to be significant. An Appropriate Assessment Screening Report (AASR) can be compiled to inform the competent authority on conducting a Screening for AA.

Stage two: Appropriate Assessment (AA)
The consideration of the impact on the integrity of the European site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse effects mitigation measures are required to avoid or minimise potential effects. The details of these mitigation measures are then assessed in the context of the ecological integrity of the plan/project characteristics to ensure no significant adverse effects on European sites. If this assessment process shows there are no residual significant effects, then the process may end at this stage, stage two, of the AA process which are formalised in Natura Impact Statements (NIS) reports which support the overall AA process. However, if the likelihood of significant impacts remains, then the process must proceed to Stage Three.

Stage three: Assessment of Alternative Solutions
The process that examines alternative ways of achieving the objectives of the project or plan that avoids adverse impacts on the integrity of the European site.

Stage four: Imperative Reasons of Overriding Public Interest (IROPI)
An assessment of compensatory measures, where no alternative solutions exist and where adverse impacts remain, but in the light of an assessment of IROPI, it is deemed that the project or plan should proceed.

Appendix VII Contributor competencies

Lead author - Karen Dylan Shevlin is a senior ecologist with over 12 years' experience working in multiple capacities in ecology in Irish and international research institutions and organisations and holds a MSc in Biodiversity and Conservation from Trinity College Dublin (Dist. 2013). Karen has significant skills and experience in leading research and ecological surveys of bats, birds, insects, habitats and mammals, data analysis and managing resulting reports. Karen is also a specialist in ecological theory and the impacts/effects that altering natural dynamics may have on the surrounding environment.

Karen has been the lead author and reviewed on many Appropriate Assessment Screenings, NISs, and EIARs for a range of public and private projects and plans ranging from residential and industrial projects to County Development Plans, to major wind turbine sites.

Reviewer - Paul Fingleton has an MSc in Rural and Regional Resources Planning (with specialisation in EIA) from the University of Aberdeen. Paul is a member of the International Association for Impact Assessment as well as the Institute of Environmental Management and Assessment. He has over twenty-five years' experience working in the area of Environmental Assessment. Over this period, he has been involved in a diverse range of projects including contributions to, and co-ordination of, numerous complex EIARs and EIA screening reports. He has also contributed to and supervised the preparation of numerous AAs and AA screenings.

Paul is the lead author of the current EPA Guidelines and accompanying Advice Notes on EIARs. He has been involved in all previous editions of these statutory guidelines. He also provides a range of other EIA related consultancy services to the EPA. Paul is regularly engaged by various planning authorities and other consent authorities to provide specialised EIA advice.

Appendix VIII Outline Invasive Species Management Plan

Outline Invasive Species Management Plan

for proposed

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residential development
at
Mulkear view, Newport, County Tipperary

by

CAAS Ltd

for

Tipperary County Council

Comhairle Contae Thiobraid Árann
Tipperary County Council

December 2025

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Document Control

	Author/Reviewer	Date
prepared by	Karen Dylan Shevlin	Various dates to 18 December 2025
reviewed by	Paul Fingleton	19 December 2025
status of this version	Final	

13.Introduction

A non-native invasive species, namely Japanese knotweed (*Reynoutria japonica)* (or possible hybrid with giant knotweed (*Reynoutria sachalinensis*), was recorded within the boundary of the proposed residential development at Mulkear view, Newport, County Tipperary in 20th of October 2025.

This Outline Invasive Species Management Plan (OISMP) (which accompanies the NIS prepared for the proposed development) provides a high-level description of the requirements for the appropriate management and treatment of the site to prevent adverse effects to the Lower River Shannon SAC, including management options (see also s13.1 below for the legislative context). Where invasive species were recorded outside of the proposed development site, this has been provided for additional context.

The OISMP is a working document and will be updated by the appointed invasive species management specialist engaged for the proposed development who will then form a detailed and final ISMP prior to any site preparation, demolition or construction works associated with the proposed development on site.

13.1. Legislative context

The European Communities (Birds and Natural Habitats) Regulations 2011 SI 477 of 2011 (as amended) ("the Regulations") contain specific provisions that govern the control of listed invasive species. It is an offence to release or allow to disperse or escape, to breed, propagate, import, transport, sell or advertise species listed on the Third Schedule of the Regulations without a licence. The invasive species recorded within the proposed development site, Japanese knotweed (*Reynoutria japonica)* (or possible hybrid with giant knotweed (*Reynoutria sachalinensis*); is listed on the Third Schedule. Of the Regulations, the two regulations that deal specifically with the Third Schedule are:

- Regulation 49: Prohibition of introduction and dispersal of certain species; and,
- Regulation 50: Prohibition on dealing in and keeping certain species.

As a result of a species listed on the Third Schedule of the Regulations occurring on site, the following is prohibited:

- Dumping invasive species cuttings in the countryside;
- Planting or otherwise causing to grow in the wild (hence the landowner should be careful not to cause further spread);
- Disposing of invasive species at a landfill site without first informing the landfill site that the waste contains invasive species material (this action requires an appropriate licence); and,
- Moving soil in the Republic of Ireland which contains specific invasive species unless under a licence from National Parks and Wildlife Service (NPWS).

13.2. Proposed site context

The proposed development is located within Mulkear View housing estate on the southside of Newport town, County Tipperary. This site is 0.055 ha in area and consists of 2 (no.) two story, unoccupied residential dwellings, with a small driveway and back garden for each., and the Newport (Tipperary) River [040] borders the proposed site boundary along its northern boundary, which is also part of the Lower River Shannon SAC [002165] (Figure 3.1). See accompanying NIS for a wider description of the proposed development site.

14. Methodology

This OISMP, the survey methodology undertaken, and the mitigation strategies herein, have been undertaken and prepared with regard to the following guidance, where relevant:

- National Roads Authority (2010). Guidelines on the Management of Noxious Weeds and Non-native Invasive Plant Species on National Roads
- Environment Agency 2010. Managing Invasive Non-native Plants in or near Freshwater
- National Roads Authority (2010). The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads.
- Best Practice Management Guidelines Japanese knotweed Fallopia japonica, Invasive Species Ireland (2015).

This report has been informed by an invasive species survey, as part of an ecological walkover, that was carried out by CAAS Ltd. on the 20th of October 2025. The location of the invasive species recorded within and in the vicinity of the proposed development were the recorded and mapped using ArcGIS Survey 123 and QGIS 3.40 Bratislava.

14.1. Survey limitations

The ecological walkover was not carried out within the optimum summer period for vegetative surveys. However, considering the nature of the proposed project combined with small size and nature of the existing site (i.e. mostly composed of hard surface existing buildings – half of which will be retained), and the need to focus on the presence of invasive species due to the proximity to a sensitive SAC watercourse; a survey in October is still a sufficient time of year to gather evidence of presence of most problematic invasive species that could potentially affect the conservation objectives of the Lower River Shannon SAC. Therefore, it is considered that the survey effort is sufficient to support this AA report for the proposed development.

15. Survey results

A a significant stand of Japanese knotweed (*Reynoutria japonica)* (or possible hybrid with giant knotweed (*Reynoutria sachalinensis*); *Fallopia x bohemica)* was recorded in the rear garden of 86 Mulkear View (Figure 3.1). Smaller stands of Japanese knotweed were also recorded in the locality surrounding the proposed development site, along with two stands of Giant hogweed (*Heracleum mantegazzianum)* on the opposing banks of the Newport River.

Figure 15.1. Invasive species recorded within, and in the vicinity of, the proposed site

16. Pre-commencement survey and ISMP preparation

A pre-commencement invasive species survey will be carried out prior to any site preparation, demolition, or construction works by a licenced invasive species management specialist, with experience in treating Japanese knotweed in highly sensitive, protected riverine systems. This survey will confirm the presence and extent of any invasive species within the proposed development site immediately prior to commencement of any works (as the distributions or species within the proposed site may have changed between the time of the survey to inform this report in October 2025, and the eventual commencement of works on site).

Subsequently the invasive species specialist will utilise this information, in combination with site design, methods and scheduling, to develop a final, detailed ISMP. The ISMP will:

- Identify the extent of the infestation with the project boundary, and any additional areas affected by the demolition / construction phase works (e.g. set down areas) in the vicinity of the site
- Design and implement measures to prevent any further growth and spread of the plant on the site as a result of the site preparatory works, or demolition or construction phase
- Design and implement measures to prevent spread to other areas that are either adjacent to the affected site, or via transportation of contaminated soil to another site
- If soil is imported to the site for landscaping, infilling or embankments, ensure the contractor gains documentation from suppliers that the material to be imported is free from invasive species, before it is imported.
- Communicate the ISMP clearly to the demolition and construction teams, and relevant managers and identify communication pathway for any questions or concerns regarding the

ISMP during works
- Document and record the treatment and management methods carried out on
- site for future reference (for use during main construction contract, future site owners, site users etc.)

The invasive species specialist engaged shall also discuss the full details of the ISMP with the construction manager appointed for the proposed development prior to any preparatory, demolition or construction works taking place on site. Demolition and construction methodologies shall be designed around the requirements and schedule for the removal of Japanese knotweed on site and management of the excavated soil and site of origin thereafter and done so in full continual communication with the invasive species management specialists in line with guidelines and to licenced waste facilities for handling such waste.

The invasive species specialist will consider the site and the results of the pre-commencement survey to apply targeted, site-specific management options, consisting of one or a combination of the below.

17. Management options to control/prevent the spread of non-native invasive plant species

17.1. Chemical Control (Herbicide Treatment)

Chemical control involves the application of a systemic herbicide that is absorbed by the foliage or stem and translocated to the plant's extensive underground rhizome system. This approach is often the standard method for managing established Japanese knotweed infestations, particularly where minimising disturbance regarding sensitive areas is a priority.

Herbicide treatment is carried out using glyphosate-based herbicides that are specific for treating Japanese knotweed. Application methods may include foliar spraying, targeted weed-wiping, or direct stem injection, depending on site conditions and environmental sensitivities. The timing of application is essential as will be advised by the invasive species specialist. Herbicide treatments for Japanese knotweed are most effective when undertaken in late summer to early autumn, when the plant is actively transporting nutrients to its rhizomes, thereby maximising herbicide uptake.

However, chemical control is not a single event treatment. Japanese knotweed infestations usually require repeated treatment over several growing seasons, with annual monitoring often required in order to identify regrowth and assess treatment progress in the affected area. During this period, sites that have been chemically treated are typically left undisturbed, to provide the herbicide with maximum opportunity to weaken the rhizome system progressively.

All herbicide use must comply with Irish pesticide legislation and guidelines, including the use of trained and competent herbicide application operatives, adherence to label instructions, particularly where treatment occurs near watercourses and their related sensitive habitats, such as:

- Chapter 7 and Appendix 3 of the NRA Publication: The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads (NRA, 2010)
- Managing invasive non-native plants in or near fresh water (Environment Agency, 2010)
- Invasive Species Ireland Best Practice Management Guidelines for Japanese Knotweed (2015)

When correctly applied following best practice by a licence professional, the chemical control method can allow Japanese knotweed to be managed in situ, reducing the risk of spreading

contaminated material and avoiding unnecessary soil disturbance. The invasive species specialist engaged for the project will advise on whether this approach would be appropriate in the context of the results of the pre-commencement survey, nature of the works proposed and sensitivity of the proposed site.

17.2. Mechanical Control: Excavation and Soil Management

Mechanical control requires the physical removal or containment of Japanese knotweed plant material, and all of the associated contaminated soil. This approach is used in circumstances where chemical treatment is not advised or appropriate. Excavation of Japanese knotweed materials involves removing all above-ground growth and rhizome-contaminated soil, beyond the visible extent of the infestation. Excavated material may be transported to a licensed waste facility for disposal or, in some cases, managed on site through engineered containment or deep burial using root barriers and geotextile membranes.

Due to the ability of Japanese knotweed to regenerate from very small fragments, excavation works require rigorous biosecurity controls. All vehicles, machinery and tools must be regularly cleaned, and strict procedures must be followed to prevent the accidental spread of material beyond the site. The movement of plant material of any plants listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 (as amended) requires a licence from the NPWS. Invasive species must be disposed of at licensed waste facilities or composting sites, appropriately buried, or incinerated having regard to relevant legislation. All disposals must be carried out in accordance with the relevant Waste Management legislation (as per guidance from NRA, 2008)

Mechanical control can achieve clearance of an affected site without the application of chemicals; however, it can be resource-intensive and result in significant disturbance to soils, habitats and existing vegetation. The invasive species specialist engaged for the project will advise on whether this approach would be appropriate in the context of the results of the pre-commencement survey, nature of the works proposed and sensitivity of the proposed site.

17.3. Integrated Management Approaches

Integrated management combines chemical and mechanical techniques in a planned and coordinated approach tailored for the particular site affected. This approach can be applied where, for example, one of the above alone is unlikely to achieve the desired outcome within an given required timeframe, or where site conditions are complex.

Upon advice of the invasive species specialist, limited excavation may be undertaken to remove dense stands or facilitate access, followed by targeted herbicide treatment of regrowth over subsequent seasons. Integrated approaches can also involve the initial application of herbicide treatment to weaken an infestation, and then follow with mechanical means.

An integrated approach requires detailed planning and outlines of the methodology within the final ISMP. When appropriately designed and supervised, integrated management can shorten control timescales while maintaining environmental safeguards.

For all of the above approaches, the invasive species specialist, with full cooperation of demolition and construction management, must ensure that disturbance of any method does not inadvertently increase the risk of spread and that all actions remain compliant with regulatory requirements.

18. Biosecurity, Containment and Prevention Measures

Biosecurity aims to prevent the creation of new infestations through accidental movement of plant material or contaminated soil both during treatment and in the operational phase post treatment and construction of a given project. Best practice biosecurity measures include avoidance of activities such as cutting, strimming or flailing knotweed, as these actions can generate viable fragments. Infested areas should be clearly identified and mapped, and all personnel in demolition, construction and management working on site should be made aware of the risks associated with the species and how it can be spread. Cleaning protocols for footwear, equipment and machinery are standard and essential biosecurity, containment and prevention measures, particularly where works take place at sensitive riverine habitats. The invasive species specialist engaged for the project will advise on the appropriate biosecurity, containment and prevention measures in the context of the results of the pre-commencement survey, nature of the works proposed and sensitivity of the proposed site.

19. Monitoring

Monitoring is important for ensuring that the infection is continually management post project implementation. A survey once a year for three years post implementation of the project for Japanese knotweed at the affected site will identify any repeat stands and allow continued treatment, with the aim of eventual eradication locally at the site. The invasive species specialist engaged for the project can also advise on post project implementation monitoring, nature of the works proposed and sensitivity of the proposed site.

20. Conclusion

This Outline Invasive Species Management Plan provides measures to prevent the spread of invasive species and measures to control and eradicate invasive species recorded within the proposed development site. Prior to the implementation of this plan and commencement of any works within the proposed site, a pre-commencement survey will be carried out by an invasive species specialist with experience in treating Japanese knotweed in highly sensitive, protected riverine systems to confirm the extent of the invasive species at the time of treatment and to ensure there are no new invasive species present.

Following a pre-commencement survey of the proposed site for Japanese knotweed, the management and biosecurity measures recommended within this OISMP will be fine-tuned and implemented in full, with regard to the relevant legislation and best practice standards outlined / references above, by a qualified and licenced invasive species treatment specialist. The proposed development site will be monitored after control measures have been implemented and monitoring will take place for three years following construction. Any regrowth of invasive species within those three years will be subsequently treated as detailed in the final ISMP.