Inspector's Report
ABP-322250-25

Development

Alterations to the Kilfenora Wastewater Treatment Plant and Percolation Area development, approved by An Bord Pleanála under reference ABP-305756-19, and consists of:

1 - Modifications to site access and internal roads at the wastewater treatment plant to include (a) raising of access road level from the public road (L1034) to the site entrance gates, to include provision of permeable paving finish, and (b) widening/reconfiguration of internal road in focused areas, permeable paving finish, hard surface area and gully, and provision of petrol interceptor.

2 - Modifications to site access and internal road at the percolation area to include new roadside channel drain and provision of permeable paving finish.

3 - All ancillary site development and excavation works above and below

	ground necessary to facilitate the development. A Natura Impact Statement (NIS) will be submitted to the Planning Authority with the application.
Location	Killcarragh and Ballybreen Townlands, Kilfenora, Co. Clare
Planning Authority	Clare County Council
Planning Authority Reg. Ref.	25/60013
Applicant	Uisce Éireann
Type of Application	Permission
Planning Authority Decision	Grant Permission
Type of Appeal	Third Party
Appellant	Michael Duffy
Observers	None
Date of Site Inspection	19th June 2025
Inspector	Ian Campbell

1.0 Site Location and Description

1.1. This appeal relates to two separate sites,

- the site of the Kilfenora Waste Water Treatment Plant (WWTP) in the townland of Killcarragh, and,
- the site of a Percolation Area in the townland of Ballybreen.

The particulars submitted with the planning application refer to a site area of 0.721 Ha.

1.2. The red line boundary associated with the Kilfenora Waste Water Treatment Plant site is irregular in shape, reflecting the extent of works proposed, with a dog-leg section (comprising an access road) connecting the main body of the site to the L1034. The site, which is c. 200 north-west of the centre of the village, is surrounded by lands which appear to be in agricultural use. Dwellings are located to the east of the WWTP site and Kilfenora National School is located to the south. The wider site accommodates a 330 PE wastewater treatment plant, along with areas of hardstanding, settlement tanks, and storm water storage tank permitted under PA. Ref. 19/31 & ABP. Ref. 305756-19. The site is bound by security fencing. The Kilfenora Waste Water Treatment Plant provides tertiary filtration and UV disinfection and sludge treatment. The lands to the west and south, which comprise WWTP and attendant lands, are indicated as being within the control/ownership of the applicant, as denoted by the blue line boundary. A turlough/swallow hole is located to the west of the WWTP site. A bund provides flood protection for the WWTP from the turlough.

1.3. The Percolation Area site is broadly rectangular in shape and is accessed/bound by the R481 to the south. The Percolation Area site is c. 700 metres south-west of the Kilfenora WWTP site, and c. 840 metres south-west of the centre of the village. The Percolation Area site is surrounded by lands which are in agricultural use. The closest dwelling is c. 70 metres east. A wayleave is indicated to the north-east of the Percolation Area site and accommodates an existing 150 mm (dia.) gravity effluent pipe, connecting to the Kilfenora WWTP. An area of land to the north is indicated as being within the control/ownership of the applicant, as denoted by the blue line boundary. The Percolation Area site accommodates a 4 no. stratified sand filters, a pumping station and control kiosk permitted under PA. Ref. 19/31 & ABP. Ref. 305756-19. The Percolation Area site is bound by security fencing. There is a swallow hole

(Ballybreen Swallow hole) located within the Percolation Area site. A small fluvial watercourse enters the Percolation Area site from the south-east under the R481 road in a culvert. This stream flows north and disappear down a swallow-hole located within the Percolation Area site. The purpose of the of the sand filters within the Percolation Area Site is to dissipate hydraulic loading of highly treated effluent over a wide area, and not to act as a polishing filter.

2.0 Proposed Development

The development description contained in the public notices describes the proposed development as comprising, alterations to the Kilfenora Wastewater Treatment Plant and Percolation Area development approved by An Bord Pleanála under reference ABP-305756-19, more specifically:

At the WWTP site:

- Modifications to site access and internal roads at the wastewater treatment plant to include (a) raising of access road level from the public road (L1034) to the site entrance gates, to include provision of permeable paving finish, and (b) widening/reconfiguration of internal road in focused areas, permeable paving finish, hard surface area and gully, and provision of petrol interceptor.

At the Percolation Area site:

- Modifications to site access and internal road at the percolation area to include new roadside channel drain and provision of permeable paving finish.

In addition, the development description in the public notices refers to, all ancillary site development and excavation works above and below ground necessary to facilitate the development.

2.1. The particulars submitted with the planning application/appeal provides the background to the proposal and a detailed description of the proposed development. The following is pertinent.

- On the 6th of March 2020, Uisce Eireann (formerly Irish Water) obtained planning permission for upgrade works to the Kilfenora Wastewater Treatment Plant (WWTP), PA. Ref. 19/31 / An Bord Pleanála Reference ABP-305756-19 refers. The project ensures compliance with the Urban Wastewater Treatment Directive and ensures that the WWTP delivers tertiary treatment for all of its

catchment. The development of the new WWTP ends the practice of direct discharge to groundwater.

- The Kilfenora WWTP was substantially completed in November 2023.
- The proposed development comprises minor design changes to the operational project and relates only to access, to facilitate sludge tanker access, and surface water management.
- The requirement to raise the access road level from the public road (L1034) to the site entrance gates of the WWTP is a response to a Flood Risk Assessment (completed at request for Further Information stage under reference P22/1122, subsequently withdrawn). The WWTP has never been inaccessible, but the proposed works will ensure the access road will not be susceptible to flood risk even in an extreme flood event.

The applicant notes that the above works are required before the WWTP can be fully commissioned.

2.2. The planning application/appeal was accompanied by the following reports;

- Cover Letter
- Kilfenora WWTP Upgrade & Percolation, Access Road Modifications and Surface Water Management Technical Note - WWTP & Percolation Site
- Appropriate Assessment Screening
- Natura Impact Statement (NIS)
- Ecological Impact Assessment (EcIA)
- Environmental Impact Assessment Screening
- Hydrogeological Assessment
- Construction Environmental Management Plan (CEMP)
- Site Specific Flood Risk Assessment (SSFRA)

3.0 Planning Authority Decision

3.1. Decision

The Planning Authority issued a Notification of Decision to GRANT Permission on the 12th of March 2025 subject to 2 no. conditions, as follows;

C1 – development to be carried out as per drawings and particulars submitted.

C2 – all mitigation measures in EcIA, NIS and CEMP to be implemented.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The report of the Planning Officer notes –

- the principle of the proposed development is acceptable.
- proposal to address flooding are not dependent on works proposed under PA. Ref. 25/60011 (effluent pipe). The proposed works are reasonable to ensure that modifications to the access roads will not impact significantly on the pattern of flooding and flood risk in the vicinity.
- the applicant's proposal for compliance with the archaeological condition attached to the permission granted under PA. Ref. 19/31 & ABP. Ref. 305756-19 was deemed satisfactory.

3.2.2. Other Technical Reports

Road Design Office – report recommends that applicant clarify if access road floods, and if so will the raising of the road have flood implications for adjacent lands.

Environmental Assessment Officer – report relates to PA. Ref. 25/60013 and 25/60011[1]. In respect of PA. Ref. 25/60013 (i.e. the subject of this appeal) the report notes,

[1] Concurrent planning application for gravity pipe at Percolation Area site.

- NIS does not include development permitted under PA. Ref. 19/31 under consideration of cumulative effects, and is not in keeping with the requirements of Appropriate Assessment legislation.
- the area experiences fast groundwater movement, based on tracer studies.
- current inputs at Ballybreen swallow hole do not appear to be affecting water quality in the River Fergus, therefore it can be concluded that the ongoing operation of the Kilfenora WWTP is not affecting water quality in the River Fergus.
- as the percolation beds are not required to provide additional treatment any inundation would not be expected to result in a deterioration of water quality.
- nutrient ELV's[2] will be lower than the existing effluent quality being discharged to the Ballybreen swallow hole, which can only improve water quality in the River Fergus.
- while potentially being exposed to inundation at times (partial saturation of the two northern percolation beds), given the percolation beds are not necessary to provide additional treatment there should be no impact on water quality, and given that the water quality results downstream are not evidencing any deterioration in water quality at present there is no risk of adverse effects on the conservation objectives of associated European Sites.
- proposal is considered sub-threshold development for purpose of EIA. Based on information submitted there is no requirement for an EIAR.

West Clare Municipal District Office - report recommends standard condition regarding surface water.

Roads, Water Services and Environment Section – report notes no objection, and that the percolation area complies with Condition no. 4[3] of ABP. Ref. 305756-19.

[2] Emission Limit Values.
[3] That the percolation areas comply with Table B.3 of the EPA Code of Practice for Single Houses, 2009.

3.3. Prescribed Bodies/Government Departments

DoHLGH – submission recommends that mitigation measures outlined in the Ecological Impact Assessment, Natura Impact Statement and Construction Environmental Management Plan are a condition of any subsequent grant of planning. Submission also notes that Kilfenora sits inside a geographical belt which forms the range of the Lesser Horseshoe Bat, that Lesser Horseshoe Bat roosts, and bat roosts of other species, remain undiscovered within this geographical belt and could occur nearby, and that best practice guidelines for minimising light impacts on bat commuting and foraging areas should be followed.

EPA – submission notes that the Kilfenora WWTP is authorised under the Waste Water Discharge of Authorisation (Register No: A0079-01) held by Uisce Éireann, and that the certificate of authorisation is currently being reviewed by the Agency (Register No: A0079-02).

3.4. Third Party Observations

The report of the Planning Officer summarises issues raised in the observations (2 no.) submitted in respect of the planning application as follows;

- Procedural and ownership issues.
- Application is invalid due to red line boundary.
- The area is a flood plain. Raising the road will result in flooding elsewhere.
- The is no percolation area on the site, soft surfaces are causing flooding of adjacent lands.
- Run-off estimates do not explain the soil values used in calculations.
- A temporary wwtp was used for the duration of the works carried out under PA. Ref. 19/31, which was unauthorised. No environmental assessment of same was carried out.
- The stormwater overflow from the wwtp was altered, permission for same was not sought. Overflow discharges to ground, which is unauthorised, and contrary to regulations and directives.
- The NIS is incorrect as works carried out were not in accordance with PA. Ref. 19/31. The NIS refers to the gravity effluent pipe and not the rest of the development.

- Flooding at the site only began after the development permitted under PA. Ref. 19/31 was carried out. Flooding arises on the site due to the unauthorised removal of soil and rock breaking which impacted the course of the swallow hole. Flooding will be intensified by the distribution of effluent on the polishing filters. The flooding is a direct discharge to groundwater via the turlough to the north-west.
- The assertion that flooding of 2 no. percolation beds will not affect surface water distribution is incorrect. Without any loading these beds are flooding.
- The application made under PA. Ref. 19/31 did not refer to flooding on the site, whereas the current application does.
- Bedrock is impermeable.
- The NIS does not include downstream sampling.
- The in-combination effect section in the NIS does not take into account unauthorised development. Substitute consent is required.
- During flooding, the swallow hole overflows untreated sewerage which is not addressed in the NIS or FRA.

4.0 Planning History

Kilfenora WWTP Site & Percolation Area site i.e. applications common to both sites (valid/recent)

PA. Ref. 19/31 – Permission GRANTED for (1) construction of a new 330 PE wastewater treatment plant and demolition of the existing treatment works in the townland of Killcarragh. The development will consist of inlet works; a storm water storage tank; treatment works including tertiary filtration and UV disinfection; sludge treatment; a control kiosk; flood protection bund; site lighting; a 2.4m high security fence; and a scheme identification sign. All associated site development and site excavation works above and below ground for the wastewater treatment plant. (2) Provision of the following in the townland of Ballybreen: The construction of a percolation area, including a treated effluent pumping station; a control kiosk; an internal road; site lighting; a 1.2m high fence; and a scheme identification sign. All associated site development and site excavation works above and below ground for the percolation area. A Natura Impact Statement was submitted with this planning application.

Percolation Area Site (valid/recent)

PA. Ref. 25/60011 – Permission GRANTED for alterations to the Kilfenora wastewater treatment plant and percolation area development approved by An Bord Pleanála under reference ABP-305756-19, and consists of: 1. Disconnection and capping of existing gravity effluent pipe (pipework to be retained in situ); 2. The installation of a new gravity effluent pipe and connection to pumping station; and, 3. All ancillary site development and excavation works above and below ground necessary to facilitate the development. A Natura Impact Statement (NIS) will be submitted to the Planning Authority with the application. This application is currently on appeal to An Bord Pleanála, ABP. Ref. 322234-25 refers.

PA. Ref. R22/43 – Section 5 referral, the question in which was 'whether the removal of all soils and subsoils within the plot area (outlined in the submitted maps) at Ballybreen, Kilfenora Co. Clare is or is not development, and is or is not exempted development. The Planning Authority concluded that (a) the removal of all soils and subsoils within the plot area constitutes "works" which come within the scope of section 2 (1) of the Planning and Development Act 2000, as amended; (b) the said works constitute "development" which comes within the scope of section 3 (1) of the Planning and Development Act 2000, as amended; (c) the said development falls within the terms and conditions of PA. Ref. 19/31 as amended by An Bord Pleanála Ref. 30575-19. Clare County Council decided the removal of all soils and subsoils within the plot area in question is development which has the benefit of planning permission.

PA. Ref. 20/679 & PL03.308904 - Permission REFUSED for a dwelling , garage, on-site wastewater treatment system, a new entrance and ancillary ground works.

PA. Ref. 20/670 – Permission REFUSED for a dwelling , garage, on-site wastewater treatment system, a new entrance and ancillary ground works.

5.0 Policy Context

5.1 Ministerial Guidelines

5.1.1 Having regard to the nature of the proposed development and to the location of the appeal site, I consider the following Guidelines to be pertinent to the assessment of the proposal.

- Appropriate Assessment of Plans and Projects in Ireland, Guidelines for Planning Authorities (2010).
- The Planning System and Flood Risk Management (including the associated Technical Appendices) (2009).

5.2. **Development Plan**

5.2.1. The relevant Development Plan is the Clare County Development Plan 2023-2029.

5.2.2 The lands accommodating the Kilfenora WWTP are zoned 'UT1 - Utilities[4]' under the Clare County Development Plan 2023 – 2029. The lands accommodating the Percolation Area associated with the Kilfenora WWTP are not zoned under the Clare County Development Plan 2023 – 2029, being located outside the settlement boundary of the village. There are a number of Recorded Monuments located to the west of the Kilfenora WWTP, Ref.'s CL 016 – 011001 – Castle – Tower House; CL 16 – 011002 – Bawn; CL 016 011003 – Kiln – Lime; and CL 16 – 011004 – Building) refer.

5.2.3. The provisions of the Clare County Development Plan 2023-2029 relevant to this assessment are as follows:

- CDP 11.26 (Water Framework Directive & River Basin Management)
- CDP 11.27 (Water Resources)
- CDP 11.32 (Wastewater Treatment & Disposal)
- CDP 15.3 (European Sites)
- CDP 15.29 (Allien & Invasive Species)

5.3 **Natural Heritage Designations**

(relative to WWTP Site and Percolation Area Site)

- East Burren Complex SAC (Site Code: 001926) – c. 6 km and c. 6.7 km east.
- Corofin Wetland SPA (Site Code: 004220) – c. 8.9 km and c. 9.2km south-east.
- Inagh River Estuary SAC (Site Code: 000036) – c. 8 km south-west.
- Ballyteige Clare SAC (Site Code: 000994) – c. 5 km north-west.

[4] See Volume 3(d) of Clare County Development Plan 2023 – 2029.

- Moneen Mountain SAC (Site Code: 000054) - c. 3 km and c. 3.7 km north-east.
- Moneen Mountain pNHA (Site Code: 000054) - c. 3 km and c. 3.7 km north-east.

5.4. EIA Screening

The proposed development is not a class for the purpose of EIA as per the classes of development set out in Schedule 5 of the Planning and Development Regulations, 2001, as amended (or Part V of the 1994 Road Regulations). No mandatory requirement for EIA therefore arises and there is also no requirement for a screening determination for EIA. Refer to Form 1/Appendix 1 of report.

I consider that any issues arising from the proximity/connectivity to European Sites can be adequately dealt with under the Habitats Directive (Appropriate Assessment).

6.0 The Appeal

6.1. Grounds of Appeal

This is a third-party appeal by Michael Duffy against the decision to grant permission. The grounds of appeal may be summarised under the following headings;

Procedural Issues -

- The application is invalid as 2 no. planning applications were lodged in respect in the site(s). One of the site notices should have been yellow, as required under Article 19 (4) of the Planning and Development Regulations, 2001, as amended.
- Development description which refers to ‘all ancillary site development and excavation works above and below ground necessary to facilitate the development’ is ambiguous and conflicts with Sweetman v An Bord Pleanála [2021] IEHC 662.
- No landowner consent submitted. The lands within the red line boundary of the site are not shown to be within the control of the applicant on the site layout.
- No details of pre-application meeting provided.

- The red line boundary of the site does not reflect the fact that stormwater arising from hard surfaces previously constructed are to be processed in this proposal, thereby rendering the application invalid.
- The red line boundary of the site does not include certain works. The applicant is proposing to replace some of the pipe located outside the red line boundary of the site, rendering it invalid.

Alleged Unauthorised Development -

- Development carried out under PA. Ref. 19/31 & ABP. Ref. 305756-19 was not constructed in accordance with the permission. A temporary wwtp discharging directly to groundwater via the Ballybreen swallow hole was used on the site as part of the works, permission did not exist for this and it was not considered in the Appropriate Assessment carried out by the Board. Rock crushing was also carried out on the site, which similarly was not included in the planning application or in the Appropriate Assessment.
- The stormwater overflow from the wwtp was modified during the works which was not included in the application and therefore not considered in the Appropriate Assessment carried out by the Board. This stormwater overflow is an unlawful unmonitored direct discharge to groundwater via the swallow hole proximate to the wwtp. It is not addressed in the NIS submitted with this application and was not addressed in the environmental assessment carried out by the Planning Authority or in the Appropriate Assessment carried out by the decision maker.
- A surface water mitigation settlement pond, required by condition under PA. Ref. 19/31 & ABP. Ref. 305756-19 was not installed for the duration of the works.
- The polishing filter site was excavated to bedrock/in-situ sub-soil removed, which not was not included in the planning application, and not considered in the Appropriate Assessment carried out by the Board. This has caused flooding of neighbouring lands. The sub-soil was removed because it was unsuitable.
- The planning status of the site requires regularisation, i.e. substitute consent, before any further development can be considered.

Flooding -

- The area is a flood plain and the proposed raising of the road will increase flooding locally.
- Flooding occurs on the site without any loading on the polishing filters.
- Flooding commenced after the development permitted under PA. Ref. 19/31 & ABP. Ref. 305756-19 was carried out. Rainfall now passes through impermeable bedrock due to the unauthorised removal of soil, causing flooding of adjacent lands. Rock breaking on the site has also changed the course of the swallow hole causing flooding of the swallow hole. The flooding is in effect a direct discharge to groundwater.

Other Issues –

- T-test results submitted under PA. Ref. 19/31 & ABP. Ref. 305756-19 suggests poor drainage/percolation on the site. This is evidenced by flooding of adjoining lands. The polishing filters (at the time) were not designed in accordance with the 2009 EPA Code of Practice.
- The development has not resulted in the removal of direct discharge to groundwater to the Ballybreen swallow hole, or to the Kilfenora swallow hole at the WWTP site.
- Consideration of the unauthorised development should be given in the NIS.
- The PE design of the Kilfenora WWTP, at 330 PE, is inadequate for the nature of the settlement it serves.
- Condition no. 4 of ABP. Ref. 305756-19 is likely unenforceable.
- The discharge licence needs to be reviewed by the EPA.
- The applicant has failed to prove the integrity of the pipe, and connections to it.
- The Planning Authority is essentially regularising unauthorised development at the site.
- The Planning Authority should have information on the status of groundwater.
- Gravel will not attenuate discharge, and the comment of the Planning Authority that inundation will not lead to a deterioration in water quality in incredible.
- Effluent is only being tested for a limited number of parameters.

- No Water Framework Directive Assessment was carried out.

NIS -

- Lickeen Lake has not been investigated. Wider connectivity to European sites cannot be ruled out.
- Sampling of 13 no. downstream private wells has not been undertaken in the NIS.
- This NIS is flawed, and does not address how unauthorised development may already have impacted protected sites; the removal of sub-soil and consequent discharge directly onto bedrock; the non-installation of a reserve discharge dewatering area, which was required by condition under ABP. Ref. 305756-19; and the crushing of rock on the site.
- The NIS fails to consider unauthorised development on the site in the context of cumulative effects.
- Substitute consent is required for unauthorised development undertaken at the site.
- It is unclear if the site was flooded during the ecological walkovers carried out on the site.
- The Planning Authority noted that the NIS is not in keeping with legislative requirements, with reference to non-consideration of the constructed or operation of the permitted development at the site.
- The Planning Authority have concluded on Appropriate Assessment based on incomplete information and have disregarded environmental information provided to it.

The appellant requests that regard is also given to his submissions to the Planning Authority.

6.2. Applicant Response

The applicant submitted a response in respect of the third party appeal submission, summarised as follows;

- Background to proposal outlined (i.e. to address flood risk at access road).
- The applicant refutes claims of unauthorised development and notes that allegations of same are not a relevant matter for this appeal. The appellant's claim in respect of this issue is subject to separate legal proceedings. The excavation of some in-situ soil was envisaged under PA/ Ref. 19/31 & ABP. Ref. 3105756-19.
- The site notice erected accords with Article 19(4) of the Planning and Development Regulations, 2001, as amended. 2 no. white site notices relating to 2 no. concurrent applications were erected on the same day, and as such there was no subsequent application lodged within 6 months necessitating a yellow site notice.
- The development description accords with Article 18 of the Planning and Development Regulations, 2001, as amended, and provided a brief description of the proposed development. The Development Management Guidelines for Planning Authorities, 2007 provides that development descriptions are not required to contain excessive detail.
- The submitted site plan accords with Article 22 (1) (a) of the Planning and Development Regulations, 2001, as amended, and includes a red line around the application site boundary and indicates lands which are within the applicant's control in blue. The applicant is the legal owner of the lands within the red line boundary. Other lands previously in third party ownership were subject of a Compulsory Purchase Order.
- Regarding the appellant's contention that the Technical Note submitted with the application fails to recognise that the area is already a flood plain, that the rising of the road will increase flooding locally, and the issue of flooding in general, the following is noted;
    - The appellant's statement is incorrect and ignores the information submitted.
    - The section of road to be raised is the access between the L1034 and the WWTP entrance gate, which is a 70m stretch of road. The SSFRA demonstrates what the effect will be of localised raising of

the section of access road between the L1034 and the site entrance gate. The SSFRA states that the proposed raising of levels to the access road represents a loss in potential flood storage volume from the surrounding flood area of 229m3, which is 0.12% flood storage reduction of the total available flood storage volume of 221,235m3 at the 100year flood. This impact on flooding will be very minor and will not represent a significant impact to flood risk (both flood level, duration and frequency of flooding) either at the WWTP, to the public road (L1034) or to any third-party lands.

- The peak flood level and duration of flooding is influenced by the spill level from the basin area westward across the L1034 and the groundwater table recession which are external factors and not influenced by activities at the WWTP site or the local filling of the access road between the L1034 and the site entrance.
- The engineering technical note describes that the proposed surface water drainage will be managed through use of permeable pavement, which meets the principles of SuDS in respect of on-site treatment of surface run-off through dispersed infiltration of surface water beneath the road pavement and avoiding direct surface water discharges. The permeable paving of the access road leading to the entrance gate and within the WWTP site itself will permit rainfall to infiltrate through the pavement to ground. The permeable pavement construction is accounted for in the Flood Risk Assessment as the on-site surface water management system.
- There is some flood history at both sites associated with groundwater flooding at the WWTP Site and combined fluvial and groundwater flooding at the Percolation Site. This results in water ponding to the lower-lying, northern section of both sites. There is no impact of this existing flood risk on the operation and treatment performance of the WWTP upgrades facilities or the proposed effluent disposal operation at the percolation site.

- The excavation of in-situ soil has not caused flooding, as alleged by the appellant. There is no connection between the construction make-up of the percolation beds and alleged flooding from the existing Ballybreen swallow hole.
- The SSFRA explains that occasionally (estimated to be at least 3 times per year) the lack of capacity (approximately 300l/s) of the Ballybreen swallow hole cannot always cater for the streamflow entering it from the surface water stream serving the catchment to the south of the percolation site (i.e. on the southern side of the regional road R481), discharging to the swallow hole. The flows in the stream are estimated to be 835l/s for a 1 in 100 year storm event and the mean annual flood event will give a peak stream flow of 426l/s. When flows in excess of the 300l/s arrive at the swallow hole the flows overtop the swallow hole and flow in a northerly and northeasterly direction towards the lower lying lands of the Ballybreen basin. It is also important to note that such overflow events are typically associated with short duration rainstorm events and not associated with a high typically winter groundwater table as described in the SSFRA.
- The proposed access road modifications provide for a permeable pavement beneath the roadway for the access road and within the WWTP, which is considered a suitable SuDS method for the site facilitating dispersed infiltration of storm water beneath the road pavement thereby avoiding a surface storm discharge and the requirement for storm water attenuation system.
- The only section of pavement that will be impervious and gullied will be 35m2 area, where occasional refuelling of the standby diesel generator will be located. This area will be collected in a surface water gully and piped through a petrol interceptor, after which it will be directed to infiltrate beneath the adjacent road pavement. The proposed internal road finish at the percolation site is to remain as a permeable surface and thereby eliminates the requirement for a surface water piped drainage system with the

surface water infiltrating to below ground. At the entrance to the Percolation Site a concrete dished channel is proposed to carry the existing public road drainage so as to maintain the existing drainage discharging with the road gradient and to prevent any public road drainage entering the percolation site and thereby maintaining the status quo.

- The proposed works do not give rise to any increase in flood risk in the local area and this has been robustly demonstrated as part of the submitted SSFRA.

- The red line boundary covers the entire area within which the proposed surface water drainage will be constructed. The currently unfinished road to be finished with a permeable surfacing is entirely within the red line.
- Regarding hydrogeology, many of the issues raised by the appellant pertains to the development permitted under PA. Ref. 19/31 & ABP. Ref. 3105756-19 and not the development before the Board. In relation to hydrogeology the following is noted;

    - The replacement of the subsoil under the percolation beds with a more consistent, highly permeable fill media has no negative impact on the dispersal of the final tertiary treated, disinfected effluent and its loading to groundwater.
    - Claims made in respect of differences between the 2009 and 2021 EPA Codes of Practice in terms of the percolation test methodology used for subsoils is inaccurate and points raised about the measurement subsoil percolation values and design based upon those values are not relevant.
    - The diversion of the direct hydraulic loading of effluent from the WWTP into the swallow hole to the more indirect discharge and dispersal over a wide area via the sand filters, underlying media and epikarst, which is being proposed under reference PA Ref. 25/60011, will dampen any peak hydraulic loading at the swallow hole and therefore actually ameliorate some risk of local flooding.

- The appellant claims that the development will not result in the removal of the direct discharge to the swallow hole, however, the very reason that the sand filters have been designed and constructed is to provide an indirect discharge to groundwater, whereby the final tertiary treated disinfected effluent is distributed onto the top of the filters to provide an even hydraulic loading which then percolates via the sand media and underlying Class 6C fill to the underlying karstified bedrock.
- Regarding the appellant's contention that groundwater quality data downstream of the swallow hole and the fact that some wells had been shown to be contaminated in the past, the rationale of the new WWTP at Kilfenora is to stop the direct discharge of poorly treated effluent into the swallow hole and thereby improve the downstream water quality.
- The proposed development will not result in any negative impacts on hydrogeology in the area.

- Regrading NIS, the following is noted;
  - Many of the issues raised by the appellant pertain to the development permitted under PA. Ref. 19/31 & ABP. Ref. 3105756-19 and not the development currently before the Board.
  - The constructed WWTP and Percolation Area was part of the baseline scenario.
  - The Planning Authority carried out its own in-combination assessment.
  - The Appropriate Assessment Screening Report submitted with the application concludes that "on the basis of the HIA, there is no potential for cumulative impacts with surface water drainage and the ongoing treated wastewater discharges". There is no potential for combined or cumulative effects on downstream European Sites from the Kilfenora WWTP in combination with the road surfacing and access works (the Proposed Development), due to a lack of

any operational stage interaction. In the context of effluent treatment and discharge, no operational impacts of the Proposed Development works alone were identified at Appropriate Assessment Screening stage as these works do not alter/amend the permitted treatment process or discharge location of the Kilfenora WWTP in any way.

- No reliance is placed on any beneficial effect of the percolation beds in terms of wastewater treatment, and while their functioning under normal and flooded scenarios has been described in the HIA, it is not therefore relevant to the Appropriate Assessment.
- A groundwater conduit link toward the River Fergus system, providing a hydrological link between the Kilfenora discharges and several European Sites, is acknowledged in all submitted information. The water quality monitoring location at Poplar bridge on the River Fergus lies downstream of where the main karst conduit emerges to form the river, and reflects the condition of waters hydrologically/hydro-geologically upstream of the closest connected European Sites. This monitoring data includes periods prior to the upgrade of the WWTP. It also encompasses all other catchment pressures. The potential for adverse effects to any European Sites were excluded by the Planning Authority on the basis of the nature and scale of the source impacts (the highly treated nature of the discharge), the dilution capacity afforded by the intervening groundwater and surface waters between Kilfenora and the European Sites, and water quality monitoring data from the River Fergus at Poplar bridge and from local group water schemes (which demonstrates sufficient dilution has been achieved). It is objectively concluded that the proposed development will not adversely affect the integrity of any Natura 2000 sites, and there is no reasonable scientific doubt in relation to this conclusion.

- Regarding the appellant's contention that the proposed development does not comply with the provisions of the Water Framework Directive, the primary purpose of the Kilfenora WWTP upgrades is to stop the direct

discharge of poorly treated effluent into the swallow hole and thereby improve the downstream water quality. The appeal response includes a Water Framework Directive Assessment statement confirming that protection of water bodies has been considered as a proactive part of project design and that the proposed development will not cause a deterioration in status in any water body in compliance with all requirements of the WFD.

The applicant's response to the third party appeal is also accompanied by 4 no. appendices. These appended reports are responses to issues raised by the appellant in respect of ecology, flooding, hydrogeology and have generally been incorporated into the applicant's response to the appeal (summarised above). Issues raised in the appended report not included in the above summary are as follows;

- Regarding hydrogeology, The appellant makes detailed submissions about the minimal difference between the 2009 and 2021 EPA Codes of Practice in terms of the percolation test methodology used for subsoils. However, the appellant has confused the design loading rate recommended for a polishing filter (i.e. one that is designed to achieve tertiary treatment) and the sand filters at Kilfenora which are designed for dispersal of clean (i.e. tertiary treated disinfected effluent). These filters have been correctly designed for an on-site wastewater treatment system discharging tertiary treated effluent to ground according to the saturated hydraulic conductivity of the sand media and underlying subsoil at the time (see below).
- The Class 6C fill which has much higher permeability makes any discussion on the subsoil T-value a moot point in terms of the current planning application, given that the fill has a higher permeability than the subsoil it replaced which therefore means that the dispersal system could have been designed to an even higher hydraulic loading rate.
- The appeal also claims that a T-value below T3 is considered a failure, which is true if you intend to use the subsoil as part of the treatment process, but not true if the subsoil is just being used to disperse highly treated effluent, as is the case at Kilfenora.

6.3. Planning Authority Response

The Planning Authority submitted a response in respect of the third party appeal submission, summarised as follows;

- The provision of suitable wastewater treatment facilities is critical to the achievement of County Development Plan objectives for the village and the project will ensure compliance with the Urban Wastewater Treatment Directive and ensure that the wastewater treatment plant delivers tertiary treatment for all of its catchment.
- The development approved under ABP-305756-19 is substantially completed. As part of this the need to decommission the existing gravity effluent pipe and replace it with a new pipe to connect to the percolation area pumping station was identified and the subject application was submitted on this basis[5].
- Under CDP 11.32 Waste Water treatment and Disposal, it is an objective to support the implementation of Uisce Éireann Investment Plans and to advocate for the provision, by Uisce Éireann, of adequate wastewater treatment facilities.
- The proposed development is ancillary to the development of the treatment plant previously permitted by the Board.
- A meeting was held with the applicant but it was not a formal Section 247 meeting.
- The application was deemed valid, and accorded with Article 19 (4) of the Planning and Development Regulations, 2001, as amended.
- The applicant has indicated that it is the owner of the site and the Planning Authority has no reason to doubt this. Section 34 (13) of the Planning and Development Act, 2000, as amended applies in any event.
- Intermittent flooding is indicated on satellite mapping (2005 – 2017), contrary to the appellant's assertion that flooding only occurred after the

[5] This point raised by the Planning Authority appears to relate to the separate/concurrent planning application PA. 25/60011.

construction of the PA. Ref. 19/31 & ABP. Ref. 305756-19. The area was also indicated on historic mapping as being ‘liable to flooding’.

- The final surface water receptor for the effluent arising from the Kilfenora WWTP is the River Fergus at Poplar Bridge. The most recent monitoring data demonstrates that the water quality within the River Fergus downstream of the Kilfenora swallow holes/Elmvale Springs is in compliance with Schedule 5 of the European Communities Environmental Objectives (Surface Water) Regulations 2009 (S.I. No. 272 of 2009) for all relevant 95%ile Environmental Quality Standards (EQSs with the exception of two low DO results, likely to reflect the high groundwater input. The surface waterbody has been assigned a "Good" Q value status also. The overall surface water status of the River Fergus at this location has been assigned Good Status (2016-2021) under the WFD. A summary of the water quality of the River Fergus at Poplar Bridge (between 2009 to 2013 and between 2016 to 2021) which is downstream of the main Elmvale Springs shows the high-water quality of the river at this location (see Groundwater Risk Assessment and Natura Impact Assessment), despite the ongoing discharge of Kilfenora WWTP directly into the karst network. The water quality measured at the Poplar Bridge location represents inputs not only from the current discharges to the Ballybreen swallow hole but also other more diffuse sources such as domestic wastewater treatment systems and agriculture, hence, it was concluded that the current inputs at Ballybreen swallow hole do not appear to be materially impacting surface water quality in the River Fergus and the associated SAC.
- Monitoring data available for Leamaneh and other private GWS (2009-2013) identified as being at risk of contamination by the Kilfenora WWTP discharge indicated ammonium (NH4) concentrations below 0.03-0.05 mg/l, 10 to 6 times below the limit of 0.3 mg/| in the Drinking Water Regulations. Therefore, it is reasonable to assume that with a proposed Emission Limit Value (ELVs) of 1.0 mg/l as outlined in the planning application for Kilfenora the concentrations at the downstream receptors will remain below the 0.3 mg/l limit. From an environmental (ecological)

risk perspective, the proposed nutrient ELVs are lower than the existing effluent quality being discharged directly into the Ballybreen swallow hole and will be met for more than 95% of the time, which can only improve the water quality in the River Fergus.

- Allegations of the temporary use of a waste water treatment plant are subject to Section 160 Circuit Court proceedings.
- Regarding the excavation of subsoil from the polishing filter, the issue was the subject of a Section 5 (R22/43 refers) where it was determined that the removal of all soils and subsoils within the plot area was development which has the benefit of planning permission, ABP 305756-19 refers.
- Condition No. 4 of the An Bord Pleanála Order ABP-305756-19 required that the percolation area shall comply with the requirements of Table B.3 of the Code of Practice: Wastewater Treatment Systems for Single Houses, published by the Environment Protection Agency in 2009 to ensure suitable separation between the percolation area and karst features. Table B.3 of the Code of Practice is entitled "Recommended minimum distance between a receptor and a percolation area or polishing filter". The Percolation area as constructed has complied with the requirements of this condition.
- The submission of the Planning Authority requests that the decision to grant permission is upheld by the Board.
- The submission of the Planning Authority includes 4 no. appendices, providing referral and enforcement history on the site; minutes of a meeting held with Uisce Éireann; extracts from the EPA Code of Practice 2009; and aerial images and maps of flooding at Ballybreen.

6.4. **Observations**

None received.

6.5. **Further Responses**

The Planning Authority submitted a subsequent response (dated 30th May 2025) in respect of the third party appeal submission. A number of issues addressed in the

submission are also contained in their initial submission to the Board (dated 6th May 2025). Additional issues raised can be summarised as follows;

- Flood risk on the site is very minor and will not represent any significant impact at the WWTP Site, the public road or third party lands. The Planning Authority has no reason to doubt the SSFRA.
- The Planning Authority concur with the applicant's reasoning for constructing the percolation beds, i.e. to facilitate indirect discharge to ground water and to provide for a cessation of surcharging to the swallow hole, ensuring compliance with the Urban Waste Water Treatment Directive and the WFD. The Planning Authority does not consider that the proposal would have an adverse effect on the hydrogeology of the area or cause a deterioration to the status of water quality downstream.
- The Planning Authority concurs with the observation that the WWTP and Percolation Site was considered as part of the baseline scenario, and that the potential for adverse effects on European Sites can be excluded on the basis of the highly treated nature of discharge, the dilution afforded by intervening ground and surface water and water quality monitoring data from the River Fergus, and local group water schemes.
- Submission includes appended report from Environmental Assessment Officer, the contents of which are reflected in the submission itself.

7.0 **Assessment**

7.1. Having examined the application details and all other documentation on file, including the appeal, the applicant's response to same, the submissions of the Planning Authority, and having inspected the site(s), and having regard to the relevant national and local policy and guidance, I consider the main issues in relation to this appeal are as follows:

- Scope of Appeal
- Impact on Water Quality
- Flood Risk

- Issues Arising
- Appropriate Assessment

7.2. **Scope of Appeal**

7.2.1. The appellant raises a number of procedural issues in relation to the planning application, specifically that one of the site notices should have been yellow in colour; that the wording of the development description in the public notices is ambiguous/inadequate; that the applicant has not demonstrated ownership of the site; and issues in relation to the extent of the red line boundary.

7.2.2. In terms of procedural matters and the alleged irregularities in terms of the erection of the site notice(s) and the development description, I note that both matters were considered acceptable by the Planning Authority, and I am satisfied that this did not prevent the concerned party from making representations. The assessment (below) represents my *de novo* consideration of all planning issues material to the proposed development. In terms of the applicant's legal interest in the site, the applicant states that it is the legal owner of the site and I note that the appellant has not provided any information to the contrary. Any further legal dispute is considered a civil matter, to be resolved between the parties, having regard to the provisions of Section 34(13) of the Planning and Development Act, 2000, as amended, and is outside the scope of the planning appeal. In relation to the red line boundary of the site/extent of same, I note that the proposed works within both the WWTP site and the Percolation Area site are within the red line boundary, as required under the Planning and Development and Development Regulations, 2001, as amended. Furthermore, I do not consider that the extent of the red line boundary should be expended to reflect where surface water run-off is originating, as suggested by the appellant.

7.2.3. The appellant alleges that unauthorised development was carried out at the site, specifically the use of a temporary waste treatment plant during the construction of the new wwtp; that subsoil was removed from the percolation area without the benefit of permission; that a settlement pond required by condition was not constructed; and that stormwater overflow from the wwtp was modified during the works. The applicant, in its response to the appeal, refutes claims of unauthorised development, notes that

allegations of same are not a relevant matter for this appeal, and notes that the issue is subject to separate legal proceedings. In their response, the Planning Authority similarly refers to separate legal proceedings in respect of this issue. Additionally, in relation to the issue of the removal of subsoil from the percolation area, the Planning Authority refer to a Section 5 referral on the site, i.e. PA. Ref. R22/43, the decision in respect of which was that the removal of all soils and subsoils fell within the conditions of PA. Ref. 19/31 & Ref. 305756-19 and therefore had the benefit of planning permission. I note that the Board has no role planning enforcement and I consider that the issues raised in this regard fall outside the scope of the appeal.

7.2.4. The appellant raises a number of concerns in relation to the development which was permitted under PA. Ref. 19/31 & Ref. 305756-19, specifically in relation to the nature of soil on the site/suitability of the site; the adequacy of the design of the wwtp with reference to PE capacity; the adequacy of the NIS submitted with PA. Ref. 19/31 & Ref. 305756-19; the enforceability of conditions attached to PA. Ref. 19/31 & Ref. 305756-19; and; that the polishing filters were not designed in accordance with the 2009 EPA Code of Practice. I submit to the Board that consideration of this appeal should be based on the development proposed under the current. In my opinion it is not in appropriate for the appellant to seek to challenge the merits of, aspects of the development which has been permitted under PA. Ref. 19/31 & Ref. 305756-19, and which is substantially complete.

7.3. **Impact on Water Quality**

7.3.1. The applicant has submitted a Water Framework Directive Assessment to the Board in its response to the appeal. The WFD Assessment submitted by the applicant addressed construction and operational phases of the proposed development and concludes that the proposed development will not cause a deterioration in the status of any water body in compliance with all requirements of the WFD. The WFD Assessment notes that there are no Bathing Waters, Shellfish Waters or Nutrient Sensitive Areas within 2km of the site, and the proposal does not include in-stream works. The WFD Assessment includes an in combination assessment, alongside the concurrent proposal for a gravity pipe.

7.3.2. The proposed development comprises, at the WWTP Site, modifications to site access and internal roads, specifically raising of an access road and provision of permeable paving finish; widening/reconfiguration of internal road in focused areas, permeable paving finish, hard surface area and gully, and provision of petrol interceptor; at the Percolation Site, modifications to site access and internal road, specifically a new roadside channel drain and provision of permeable paving finish, in additional to all ancillary site development and excavation works above and below ground necessary to facilitate the development. The appeal submission notes that no Water Framework Directive Assessment was carried out. General concerns with regard to the drainage design were also raised in the appeal although these issues were raised in the context of the permitted/substantially complete development.

7.3.3. I have assessed the proposed development and have considered the objectives as set out in Article 4 of the Water Framework Directive, which seek to protect and, where necessary, restore surface and ground water waterbodies in order to reach good status (meaning both good chemical and good ecological status), and to prevent deterioration. Having considered the nature, scale and location of the project, I am satisfied that it can be eliminated from further assessment because there is no conceivable risk to any surface and/or groundwater water bodies either qualitatively or quantitatively.

7.3.4. The reason for this conclusion is as follows:

- The nature and extent of the proposed development, entailing shallow excavations.

- The provision of SuDS measures, including permeable pavement for the access road in the WWTP Site and porous surface at the Percolation Site, which result in road surfaces filtering any sediment-laden surface waters prior to soakage to groundwater, and a petrol/oil interceptor at the WWTP Site for the refuelling area which mitigates the release of hydrocarbons to ground and surface waters.
- Mitigation measures to address the potential spread of invasive species (Japanese knotweed at the entrance to the WWTP Site and in the vicinity

of the Percolation Area site), notwithstanding the absence of known pathways.

- The findings of the Water Framework Directive Assessment submitted by the applicant in their response to the third party appeal.

- The findings of the Site Specific Flood Risk Assessment.

7.3.5. I conclude that on the basis of objective information, that the proposed development will not result in a risk of deterioration on any water body (rivers, lakes, groundwaters, transitional and coastal) either qualitatively or quantitatively or on a temporary or permanent basis or otherwise jeopardise any water body in reaching its WFD objectives and consequently can be excluded from further assessment. (See Appendix 4 for WFD Screening Matrix).

7.4. Flood Risk

7.4.1. The appellant raises concerns in relation to flood risk, and contends that the proposed raising of the road will increase flooding locally. The appellant also states that flooding occurs on the site without any loading on the polishing filters; that flooding only commenced after the development permitted under PA. Ref. 19/31 & ABP. Ref. 305756-19 was carried out; and that that the unauthorised removal of soil and rock breaking on the site causes flooding. As addressed above, a number of the issues raised by the appellant relate to the permitted and substantially complete development and are outside the scope of the current appeal, which relates to relatively minor alterations to roads and drainage within both the WWTP Site and the Percolation Area site.

7.4.2. The applicant has submitted a SSFRA[6] with the planning application. The SSFRA was informed by satellite imagery, lidar surveys, rainfall records and 2D rainfall-runoff modelling. The SSFRA notes a flood history at both sites, groundwater flooding at the WWTP Site, and combined fluvial and groundwater flooding at the Percolation Area

[6] The SSFRA also addresses a separate development for a new gravity effluent pipe proposed under a concurrent planning application PA. Ref. 25/60011, and subject to a current appeal to the Board (ABP. Ref. 322234-25 refers).

site, resulting in flooding to the lower-lying, northern section of both sites, however the SSFRA states that there is no impact from this existing flood risk on the operation and treatment performance of the wwtp upgrades facilities or the proposed effluent disposal operation at the Percolation Area.

7.4.3. In respect of the WWTP Site, the SSFRA notes the following;

- at the WWTP Site, significant flood events occurred in the winter months of 2009, 2015 and 2020.

- the area of flooding occurs in a depression extending from the west of the wwtp to north-east of the L1034.

- a conservative peak flood level of 54.5mOD is noted (i.e. predicted 1 in 100 year design flood), and at this level all treatment processes are protected from flooding and are generally protected from floodwater ingress to levels above 55mOD. The only elements that interact with this extreme groundwater flood level are the current access road to the WWTP site and the Emergency Storm Overflow which is flapped to prevent backflow.

- in order to achieve vehicular access to the WWTP Site during flood periods it is proposed to raise levels along the access road leading from the L1034 public road to the wwtp site entrance (i.e. from the L1034 Road Level (53.93m OD) to 54.5m OD at the WWTP entrance gate). SSFRA simulations indicate that this will result in a potential loss of flood storage of 229m3 at the design flood level of 54.5m OD. This volume is very minor relative to the surface storage within the flood basin of 221,235m3 at the 100year design Flood Level, representing a loss of 0.12% which gives rise to an insignificant impact on flood risk to the WWTP Site and access road itself, and to any third-party lands and the L1034 road (c. 1mm increase in flood level).

- a petrol/oil interceptor will be provided for the small section of impervious pavement where a refueling area for a standby diesel generator is to be located. The run-off from this small area will be allowed to infiltrate in the gravels under the road pavement after it passes the proposed petrol interceptor. The refueling location and the petrol interceptor are located on the higher southern section of the site and outside of the flood risk zones.

7.4.4. In respect of the Percolation Area Site, the SSFRA notes the following;

- at the Percolation Site, flooding (estimated at least 3 times/year) is caused by lack of flow capacity at the swallow hole, resulting in ponding of water in the north and north-east of the site.

- Flood level estimation simulations show that these flood waters build up to a level of 57.5 to 57.6m OD before spilling westward through the dry-stone field wall and over a natural bedrock crest area to the northwest of the Percolation Site, after which the land falls away to the west and northwest towards the extensive flood area in Ballybreen basin.

- even in the extreme 100 year flood, the percolation beds within the unsaturated layers will provide 468m3 of attenuation storage representing almost 47 hours storage at the treated effluent discharge rate of 2.78l/s. This is beneficial over the existing situation of a direct discharge to the swallow-hole that spills during flood conditions. Computed maximum extreme flood level will result in partially saturated conditions in the gravels of the two northerly percolation beds. Such flood conditions will not affect the surface distribution to ground of the pumped treated effluent at the site, which is the objective of the percolation beds, in order to avoid point source discharge to the swallow-hole.

- simulations show that the landscape treatment and finished road levels allow the flood flow from the swallow hole to spill along the lower-lying grassed area immediately to the east of the control kiosk and pump

station and thereby avoid the access road and set down area, the percolation beds and the control kiosk and pump station area.

- the proposed internal access road at the Percolation Site will have a permeable surface. Surface water runoff from the R481 will be prevented from entering the Percolation Site by provision of a dished concrete channel along the edge of the road at the site entrance.

7.4.5. The SSFRA concludes the following;

- the proposed development will not adversely impact flood risk to itself or to any third-party lands either at the Percolation Site or at the WWTP Site and the flood risk to the development will not impact its operation or performance in terms of treatment performance at the wwtp or the distribution and disposal of the treated effluent to groundwater at the percolation area.
- a residual flood risk exists at the Percolation Site due to the limited capacity of the Ballybreen Swallow-hole. The pumping station, access road and top of percolation beds are all above the predicted maximum flood level of 57.7m OD. This maximum flood level at the site and on surrounding lands will not be impacted by the proposed development.

Having regard to the findings and conclusions of the SSFRA, which is based on simulations/modelling; the extent of flood storage loss at the WWTP Site as a result of the proposal to raise the road level; the minor extent of proposed impermeable surface at the WWTP Site, and the proposal to use permeable surfacing at the Percolation Area Site; I am satisfied that the proposed development would not increase the risk or extent of flooding within the site(s), or on adjacent third party lands, including the public road(s), and is acceptable from a flood risk perspective.

7.5. **Issues Arising**

7.5.1. Development Contributions – neither the Notification of Decision to Grant Permission issued by Clare County Council in respect of the current proposal, nor the permission granted under PA. Ref. 19/31 & ABP. Ref. 305756-19, included a condition requiring

the payment of a development contribution. In the event that the Board are minded to grant permission for the proposed development I submit to the Board that a condition requiring the payment of a development contribution is not required.

7.5.2. Conditions of Planning Authority – the Notification of Decision to Grant Permission issued by Clare County Council includes 2 no. planning conditions. The first condition requires compliance with the drawings and particulars submitted, and the second condition requires the implementation of mitigation measures contained in the EcIA, the NIS and the CEMP. Should the Board grant permission for the proposed development I recommend that both conditions are included in any subsequent grant of permission issued by the Board.

7.5.3. Nature of Application – the development description contained in the public notices refers to the proposed development as alterations to the Kilfenora WWTP and Percolation Area development, approved under ABP Ref. 305756-19. The proposed development does not comprise an alteration to a specific planning permission i.e. ABP Ref. 305756-19, but rather alterations to the development permitted under that permission, which I note is substantially complete/complete and awaiting commission. A planning condition linking any subsequent permission granted under this application/appeal is therefore not required.

7.5.4. Archaeology – I note the presence of archaeology in the vicinity of the appeal site, and I note that under PA. Ref. 19.31 and ABP Ref. 305756-19 Condition no. 6 required the preservation, recording and protection of archaeological features which may exist on the site. Noting the nature and extent of the development proposed under the current application, and the shallow depth of excavations concerned, which largely relate to areas within site(s) which have previously been excavated, i.e. the access roads, I do not consider that a specific archaeology condition is necessary.

7.6. Stage 1 - Appropriate Assessment Screening

7.6.1. In accordance with Section 177U of the Planning and Development Act, 2000, as amended, and on the basis of objective information provided by the applicant, I conclude that the proposed development could result in significant effects East Burren Complex SAC (Site Code: 001926); Corofin Wetlands SPA (Site Code:004220); Inagh

River Estuary SAC (Site Code: 000036); and Moneen Mountain SAC (Site Code 000054) in view of the conservation objectives of a number of qualifying features of these sites. It is therefore determined that Appropriate Assessment (Stage 2) [under Section 177V of the Planning and Development Act, 2000] of the proposed development is required.

7.7. Stage 2 – Appropriate Assessment

7.7.1. Following screening for the need for Appropriate Assessment it was determined that the proposed development could result in significant effects on East Burren Complex SAC (Site Code: 001926); Corofin Wetlands SPA (Site Code:004220); Inagh River Estuary SAC (Site Code: 000036); and Moneen Mountain SAC (Site Code 000054) in view of the conservation objectives of those sites, and Appropriate Assessment was deemed to be required. All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects on site integrity are examined and evaluated for effectiveness. Possible in-combination effects are also considered. A full description of the proposed development, including construction methodology, is set out on pages 11 - 13 of the NIS submitted by the applicant and the potential impacts from the construction and operational phases are set out on pages 47 - 49 of the NIS.

7.7.2. Following an examination, analysis and evaluation of the NIS, as set out within Appendix 3 of this report, and all associated material submitted, I consider that in light of the mitigation measures proposed, that adverse effects on the integrity of East Burren Complex SAC (Site Code: 001926); Corofin Wetlands SPA (Site Code:004220); Inagh River Estuary SAC (Site Code: 000036); and Moneen Mountain SAC (Site Code 000054) can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects. My conclusion is based on the following:

- Detailed assessment of construction and operational impacts.

- Effectiveness of mitigation measures proposed.

- Application of planning conditions to ensure application of these measures.

8.0 Recommendation

8.1. Having regard to the above it is recommended that permission is granted based on the following reasons and considerations and subject to the attached conditions.

9.0 Reasons and Considerations

Having regard to:

(a) The nature, scale and extent of the proposed development,

(b) The conclusion of the Site Specific Flood Risk Assessment,

(c) The conclusion of the Ecological Impact Assessment,

(d) The provisions of the Clare County Development Plan 2023-2029,

(e) The conclusion of the Appropriate Assessment,

it is considered that subject to compliance with the conditions set out below, the proposed development would not result in flooding, adverse impacts on water quality, and would not have a significant impact on ecology or on European Sites in the vicinity, and, would be in accordance with the proper planning and sustainable development of the area.

10.0 Conditions

1.	The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, received by the Planning Authority on the 16th day of January 2025. Where such conditions require details to be agreed with the Planning Authority, the developer shall agree such details in writing with the Planning Authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars. **Reason:** In the interest of clarity.

2.	The mitigation measures contained in the Natura Impact Statement (NIS) submitted to the Planning Authority on the 16th day of January 2025 shall be implemented and shall be supervised by a suitably qualified ecologist. **Reason:** To protect the integrity of European Sites.
3.	The mitigation measures contained in the Ecological Impact Assessment (EcIA) submitted to the Planning Authority on the 16th day of January 2025 shall be implemented and shall be supervised by a suitably qualified ecologist. **Reason:** In the interest of environmental protection and nature conservation.
4.	The controls and measures contained in the Construction, Environmental Management Plan (CEMP) submitted to the Planning Authority on the 16th day of January 2025 shall be implemented in full. **Reason:** In the interest of environmental protection and nature conservation.
5.	Drainage arrangements, including the attenuation and disposal of surface water, shall comply with the detailed requirements of the Planning Authority for such works and services. **Reason:** In the interest of public health.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Ian Campbell
Senior Planning Inspector

25th June 2025

Appendix 1 - Form 1- EIA Pre-Screening

An Bord Pleanála Case Reference	ABP-322250-25
Proposed Development Summary	Alterations to the Kilfenora Wastewater Treatment Plant and Percolation Area development, approved by An Bord Pleanála under reference ABP-305756-19, and consists of: 1 - Modifications to site access and internal roads at the wastewater treatment plant to include (a) raising of access road level from the public road (L1034) to the site entrance gates, to include provision of permeable paving finish, and (b) widening/reconfiguration of internal road in focused areas, permeable paving finish, hard surface area and gully, and provision of petrol interceptor. 2 - Modifications to site access and internal road at the percolation area to include new roadside channel drain and provision of permeable paving finish. 3 - All ancillary site development and excavation works above and below ground necessary to facilitate the development.
Development Address	Killcarragh and Ballybreen Townlands, Kilfenora, Co. Clare

1. Does the proposed development come within the definition of a 'project' for the purposes of EIA? (that is involving construction works, demolition, or interventions in the natural surroundings)	**Yes**	X
	No	

2. Is the proposed development of a CLASS specified in Part 1 or Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended)?			
Yes			
No	X		No further action required.

			No Screening Required.
3. Does the proposed development equal or exceed any relevant THRESHOLD set out in the relevant Class?			
Yes			
No		Proposed development is not of a Class.	No Screening Required.
4. Is the proposed development below the relevant threshold for the Class of development [sub-threshold development]?			
No		Proposed development is not of a Class.	No Screening Required.

Inspector: Ian Campbell **Date: 25th June 2025**

Appendix 2 - Appropriate Assessment Screening Determination

Screening for Appropriate Assessment Test for likely significant effects	
Step 1: Description of the project and local site characteristics **Case file: ABP-322250-25**	
Brief description of project	Alterations to the Kilfenora Wastewater Treatment Plant and Percolation Area development approved by An Bord Pleanála under reference ABP-305756-19. Detail set out in section 2.0 of the Inspector's report. See also pages 11 – 13 of the NIS for details of construction methodology.
Brief description of development site characteristics and potential impact mechanisms	A detailed description of the development site(s) is provided in Section 1.0 of the Inspector's report and detailed specifications of the proposal are provided in the Appropriate Assessment Screening Report, the NIS and other planning documents provided by the applicant. Particulars submitted with the planning application refer the duration of works as being 6 no. weeks.

	The area is located within the Burren Limestone aquifer system which contains karst features comprising caves, collapsed features, limestone pavement, springs, swallow holes and turloughs. Ground and surface waters are closely interlinked with many rivers and streams sinking underground and flowing via both conduit and diffuse pathways before rising to the surface again, and larger open conduits which can transport groundwaters over significant distances. Beyond dilution and dispersion there is little potential for any dissolved or suspended contaminants to be attenuated in the groundwater system. The Ballybreen swallow hole is located at the Percolation Area Site and the turlough/swallow hole at the WWTP Site. In addition, a small fluvial watercourse enters the Percolation Area Site from the southeast under the R481 road in a culvert. This stream flows north and disappear down a swallow-hole located within the Percolation Area site. The site is located in proximity to a number of European Sites. Impact mechanisms include the release of polluted run-off (inc. silt, hydrocarbons etc.) to surface and ground water during the construction phase of the proposed development and disturbance to commuting bats, and the release of hydrocarbons to surface and ground water at operational phase.	
Screening report	Yes (prepared by Thorne Ecology)	

Natura Impact Statement	Yes (prepared by Thorne Ecology)
Relevant submissions	DoHLG - submission recommends; - mitigation measures outlined in the EcIA, NIS and CEMP are a condition of any grant of planning; - as Lesser Horseshoe Bat roosts could occur nearby, best practice guidelines for minimising light impacts on bat commuting and foraging areas should be followed. Environment Assessment Officer – report notes that; - the NIS does not include development permitted under PA. Ref. 19/31 under cumulative effects, and is not in keeping with the requirements of Appropriate Assessment legislation; - as water quality results downstream are not evidencing any deterioration in water quality at present there is no risk of adverse effects on the Conservation Objectives of associated European Sites. Appellant – submission raises numerous issues with regard to impacts on designated sites/the applicant's NIS, including that; - wider connectivity to European sites cannot be ruled out;

	- sampling of downstream private wells has not been undertaken in the NIS; - the NIS does not address how unauthorised development may already have impacted protected sites; - the NIS fails to consider unauthorised development on the site; - substitute consent is required for unauthorised development undertaken at the site; - it is unclear if the site was flooded during the ecological walkovers carried out on the site.	

Step 2. Identification of relevant European sites using the Source-pathway-receptor model

4 no. European sites were identified as being located within a potential zone of influence of the proposed development as detailed in Table 1 below. I note that the applicant included a greater number of European sites in their initial screening consideration with sites within 15km of the development site considered. There is no ecological justification for such a wide consideration of sites, and I have only included those sites with any possible ecological connection or pathway in this screening determination.

European Site (code)	Qualifying interests (summary) Link to conservation objectives (NPWS, date)	Distance from proposed development	Ecological connections	Consider further in screening Y/N
East Burren Complex SAC (Site Code: 001926)	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] Turloughs [3180] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Alpine and Boreal heaths [4060]	c. 6 km east of WWTP site and c. 6.7 km east of Percolation Area Site	Hydrological pathway – the River Fergus, which is understood to receive groundwater from the Kilfenora swallow holes via inputting springs, enters Lough Inchiquin (part of the SAC) c. 9km east, and therefore hydrological connectivity exists.	**Y**

	Juniperus communis formations on heaths or calcareous grasslands [5130] Calaminarian grasslands of the Violetalia calaminariae [6130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510] Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210]			

	Petrifying springs with tufa formation (Cratoneurion) [7220] Alkaline fens [7230] Limestone pavements [8240] Caves not open to the public [8310] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] Euphydryas aurinia (Marsh Fritillary) [1065] Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303]			

	Lutra lutra (Otter) [1355] https://www.npws.ie/protected-sites/sac/001926 – 18th January 2022.			
Corofin Wetlands SPA (Site Code: 004220)	Little Grebe (Tachybaptus ruficollis) [A004] Whooper Swan (Cygnus cygnus) [A038] Teal (Anas crecca) [A052] Black-tailed Godwit (Limosa limosa) [A156] Wigeon (Mareca penelope) [A855] Wetland and Waterbirds [A999]	c. 8.9 km south-east of WWTP site and c. 9.2 km south-east of Percolation Area Site	Hydrological pathway – the River Fergus, which is understood to receive groundwater from the Kilfenora swallow holes via inputting springs, enters Lough Inchiquin (part of the SPA) c. 9km east, and therefore hydrological connectivity exists.	**Y**

	https://www.npws.ie/protected-sites/spa/004220 – 31st January 2025.			
Inagh River Estuary SAC (Site Code: 000036)	Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	c. 8 km south-west of WWTP Site and Percolation Area site	Tributaries of the Deelagh River may receive some input from the Kilfenora swallow holes during periods of high flow. The Deelagh flows south to join the Inagh River within this SAC, and therefore hydrological connectivity exists.	**Y**

	https://www.npws.ie/protected-sites/sac/000036 – 27th January 2017.			
Moneen Mountain SAC (Site Code: 000054)	Turloughs [3180] Alpine and Boreal heaths [4060] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Petrifying springs with tufa formation (Cratoneurion) [7220] Limestone pavements [8240]	c. 3 km east of WWTP Site and c. 3. 7 km east of Percolation Area Site	Aquatic habitats within this SAC would not be within the hydrological zone of influence of any pollutant inputs to the Kilfenora swallow holes, however a pathway could be established to ex-situ bats foraging in the vicinity of the site.	**Y**

	Euphydryas aurinia (Marsh Fritillary) [1065] Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303] https://www.npws.ie/protected-sites/sac/000054 – 20th December 2021.			

Ecological walkover surveys of the sites were carried out on the 12th of September 2022 and the 30th of April 2024. Habitats were classified in accordance with The Heritage Council's 'A Guide to Habitats in Ireland' (Fossitt, 2000)1 and the Annex I Interpretation Manual. Both site visits were undertaken outside of the wintering bird season. Habitats on the sites are described at pages 21 – 26 of the NIS. The record of otter is c. 2.5 km from Kilfenora. The WWTP site is described as offering limited suitable habitat for birds and mammals, and negligible - low potential for bats. No mammals were observed using the WWTP Site. The turlough adjacent to the WWTP Site is not regularly holding water. Similarly, the Percolation Area Site is described as offering limited suitable habitat for birds and mammals, with the exception of hedgerows which may supports badger, foxes and hare.

Step 3. Describe the likely effects of the project (if any, alone or in combination) on European Sites

The proposed development could result in indirect effects on the above 3 no. SACs and 1 no. SPA.

Sources of impact and likely significant effects are detailed in the Table below.

Screening matrix

Site name	**Possibility of significant effects (alone) in view of the conservation objectives of the site**	
	Impacts	**Effects**
East Burren Complex SAC (Site Code: 001926)	Indirect pathway to SAC. Water pollution arising from uncontrolled release of pollutants, to ground water and surface water (e.g. run-off, silt, fuel, oils, concrete etc.).	Subsequent impacts on water quality sensitive species/habitats.
	Likelihood of significant effects from proposed development (alone): **Yes**	

	Impacts	Effects
Corofin Wetlands SPA (Site Code: 004220)	Indirect pathway to SPA: Water pollution arising from uncontrolled release of pollutants, to ground water and surface water (e.g. run-off, silt, fuel, oils, concrete etc.).	Subsequent impacts on water quality sensitive species/ habitats.
	Likelihood of significant effects from proposed development (alone): **Yes**	
	Impacts	**Effects**
Inagh River Estuary SAC (Site Code: 000036)	Indirect pathway to SAC: Water pollution arising from uncontrolled release of pollutants, to ground water and surface water (e.g.	Subsequent impacts on water quality sensitive species/habitats.

	run-off, silt, fuel, oils, concrete etc.).	
	Likelihood of significant effects from proposed development (alone): **Yes**	
	Impacts	**Effects**
Moneen Mountain SAC (Site Code: 000054)	Indirect pathway to SAC: Increased activity at site(s) during construction phase, including from lighting.	 Disturbance impacts to commuting/foraging Lesser Horseshoe Bat.
	Likelihood of significant effects from proposed development (alone): **Yes**	

Step 4 Conclude if the proposed development could result in likely significant effects on a European Site

Based on the information provided in the screening report, site visit, review of the conservation objectives and supporting documents, I consider that in the absence of mitigation measures beyond best practice construction methods, the proposed development has the potential to result significant effects on the following European Sites;

- East Burren Complex SAC (Site Code: 001926);
- Corofin Wetlands SPA (Site Code: 004220);
- Inagh River Estuary SAC (Site Code: 000036);
- Moneen Mountain SAC (Site Code 000054).

I concur with the applicants' findings that such impacts could be significant in terms of the stated conservation objectives of the SACs and SPA when considered on their own in relation to pollution related pressures and disturbance on qualifying interest habitats and species.

The Appropriate Assessment Screening report submitted by the applicant notes that the spread of Japanese Knotweed to European Sites, while unlikely, cannot be excluded and that protective measures are required to address same. Given the absence of a pathway to any European Site I do not consider that there is potential for Japanese Knotweed to reach any European Site and therefore no likelihood of significant effects arises as a result of the spread of invasive species (i.e. Japanese Knotweed).

The Appropriate Assessment Screening report submitted by the applicant also identifies a pathway for ex-situ birds associated with Corofin Wetlands SPA on the basis of the development site being used as ex-situ roosting or foraging grounds. Having regard to the distance of the development site(s) to Corofin Wetlands SPA, the developed nature of the site(s), the nature of the proposed development, and the availability of suitable alternative lands in the vicinity, I do not consider that there is a potential likelihood of significant effects on bird species associated with Corofin Wetlands SPA in the context of ex-situ effects. A potential exists for significant effects on bird species associated with Corofin Wetlands SPA as a result of impacts to water quality. This is addressed below in the Stage 2/Appropriate Assessment.

Screening Determination

Finding of likely significant effects

In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of objective information provided by the applicant, I conclude that the proposed development could result in significant effects on East Burren Complex SAC (Site Code: 001926); Corofin Wetlands SPA (Site Code:004220); Inagh River Estuary SAC (Site Code: 000036); and Moneen Mountain SAC (Site Code 000054) in view of the conservation objectives of a number of qualifying interest features of those sites.

It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] of the proposed development **is required.**

Appendix 3 - Appropriate Assessment – AA Determination

Appropriate Assessment
The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177V [or S 177AE] of the Planning and Development Act 2000 (as amended) are considered fully in this section.
Taking account of the preceding screening determination at Appendix 2 of the Inspector's report (above), the following is an Appropriate Assessment of the implications of the proposed development in view of the relevant conservation objectives of East Burren Complex SAC (Site Code: 001926); Corofin Wetlands SPA (Site Code:004220); Inagh River Estuary SAC (Site Code: 000036); and Moneen Mountain SAC (Site Code 000054) based on the scientific information provided by the applicant. The information relied upon includes the following: • Appropriate Assessment Screening Report, prepared Thorne Ecology • Natura Impact Statement, prepared Thorne Ecology • Kilfenora WWTP Upgrade & Percolation, Access Road Modifications and Surface Water Management Technical Note - WWTP & Percolation Site • Ecological Impact Assessment (EcIA)

- Environmental Impact Assessment Screening
- Hydrogeological Assessment
- Construction Environmental Management Plan (CEMP)
- Site Specific Flood Risk Assessment (SSFRA)
- Drawings

I am satisfied that the information provided is adequate to allow for Appropriate Assessment. I am satisfied that all aspects of the project which could result in significant effects are considered and assessed in the NIS and mitigation measures designed to avoid or reduce any adverse effects on site integrity are included and assessed for effectiveness.

Submissions/observations

Department of Housing, Local Government and Heritage (DoHLGH) – submission recommends/notes;

- mitigation measures outlined in the EcIA, NIS and CEMP are required by way of a condition attached to any grant of planning;
- Kilfenora sits inside a geographical belt which forms the range of the Lesser Horseshoe Bat. Lesser Horseshoe Bat roosts, and bat roosts of other species, remain undiscovered within this geographical belt and could occur nearby. It is recommended that best practice guidelines for minimising light impacts on bat commuting and foraging areas are followed.

Environment Assessment Officer (Clare County Council) - submission notes;

- NIS does not include development permitted under PA. Ref. 19/31 under cumulative effects, and is not in keeping with the requirements of Appropriate Assessment legislation.
- Water quality results downstream are not evidencing any deterioration in water quality at present and there is no risk of adverse effects on the Conservation Objectives of associated European Sites.

Appellant – appeal submission notes;

- wider connectivity to European sites cannot be ruled out.
- Sampling of downstream private wells has not been undertaken in the NIS.
- NIS does not address how unauthorised development may already have impacted protected sites.
- NIS fails to consider unauthorised development on the site.
- Substitute consent is required for unauthorised development undertaken at the site.
- It is unclear if the site was flooded during the ecological walkovers carried out on the site.

East Burren Complex SAC (Site Code 001926) **Summary of Key issues that could give rise to adverse effects (from screening stage):** **(i) Water quality degradation (construction and operation)**				
Qualifying Interest features likely to be affected	**Conservation Objectives**	**Potential adverse effects**	**Mitigation measures (summary)** NIS Page 53 – 56 (see summary below)	
Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	To restore the favourable conservation condition of Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. in East Burren Complex SAC.	Release of sediment laden waters, wastes, or other pollutants during construction and operational phases of the proposed development impacting ground - water quality, resulting in water quality	<u>Construction Phase:</u> - Standard and Best Practice Construction Procedures. - Concrete management. - No storage of fuels and no refuelling at Percolation Site. - No storage of fuels or refuelling at WWTP Site until bund operational. Use of drip trays and spill kits at WWTP Site. - Regular maintenance of machinery. - Toolbox talks. - Use of dewatering pumps.	

		degradation and/or alteration of habitat quality would undermine conservation objectives.	- Erection of silt fencing along northern boundary of access road on WWTP Site. - Monitoring of weather. - Stockpiles of road surfacing material to be 50m+ from surface water feature.	
Turloughs [3180]	To restore the favourable conservation condition of Turloughs in East Burren Complex SAC.	As above	- Direction of site lighting away from boundary hedgerow. <u>Operational Phase:</u> Percolation Site - Maintenance of vehicles. - Spill kits. WWTP Site - Storage of fuels, chemical etc. in bunded areas. - Refuelling of vehicles off-site. - Refuelling of stand-by generator in bunded area. - Regular inspection of petrol interceptor.	

			- Monitoring of water level threshold (i.e. 54 m OD) and emergency protocol.	
Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]	To maintain the favourable conservation condition of Vegetation in flowing waters Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation in East Burren Complex SAC.	As above	As above	
Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210]	To maintain the favourable conservation condition of Calcareous fens with Cladium mariscus and species of the Caricion davallianae* in East Burren Complex SAC.	As above.	As above.	

Petrifying springs with tufa formation (Cratoneurion) [7220]	To maintain the favourable conservation condition of Petrifying springs with tufa formation (Cratoneurion)* in East Burren Complex SAC.	As above.	As above.	
Alkaline fens [7230]	To maintain the favourable conservation condition of Alkaline fens in East Burren Complex SAC.	As above	As above.	
Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	To maintain the favourable conservation condition of Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* in East Burren Complex SAC.	As above.	As above.	

Lutra lutra (Otter) [1355]	To maintain the favourable conservation condition of Otter (Lutra lutra) in East Burren Complex SAC.	As above.	As above.	
The above table is based on the documentation and information provided on the file, and publicly available at https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO001926.pdf and I am satisfied that the submitted NIS has identified the relevant attributes and targets of the Qualifying Interests.				
Assessment of issues that could give rise to adverse effects view of conservation objectives **(i) Water quality degradation** Deterioration of water quality and substrates in the designated site, resulting in adverse impacts to qualifying interests that the SAC has been designated for. Changes to ground or surface water quality does not represent a threat to habitats which are terrestrial in nature. The development site(s) are outside the zone of influence for Marsh Fritillary and Lesser Horseshoe Bat. **Mitigation measures and conditions** • Standard and Best Practice Construction Procedures and specific mitigation measures set-out at pages 53 – 56 of NIS.				

I am satisfied that the preventative measures which are aimed at interrupting the source-pathway-receptor are targeted at the key threats to the qualifying interests of the SAC by arresting these pathways or reducing possible effects to a non-significant level, adverse effects can be prevented.	
In-combination effects I am satisfied that in-combination effects have been assessed adequately in the NIS. The proposed development was considered in-combination with other plans and projects in the area that could result in cumulative impacts on designated sites. I note that the Appropriate Assessment Screening report included consideration of the existing, permitted WWTP in the context of the baseline environment. No other plans and projects could combine to generate significant effects when mitigation measures are considered. I am satisfied that the applicant has demonstrated that no significant residual effects will remain post the application of mitigation measures.	
Findings and conclusions The applicant determined that following the implementation of mitigation measures the construction and operation of the proposed development alone, or in combination with other plans and projects, will not adversely affect the integrity of this European Site. Based on the information provided, I am satisfied that adverse effects arising from the proposed development can be excluded for the East Burren Complex SAC (Site Code: 001926). No direct impacts are predicted. Indirect impacts would be temporary in nature and mitigation measures are described to prevent ingress of silt laden surface water and other construction related pollutants. I am satisfied that the mitigation measures proposed to prevent such effects have been assessed as effective and can be implemented and conditioned if permission is granted.	

Reasonable scientific doubt I am satisfied that no reasonable scientific doubt remains as to the absence of adverse effects. **Site Integrity** The proposed development will not affect the attainment Conservation objectives of East Burren Complex SAC (Site code 001926). Adverse effects on site integrity can be excluded and no reasonable scientific doubt remains as to the absence of such effects.				
Corofin Wetlands SPA (Site Code 004220) **Summary of Key issues that could give rise to adverse effects (from screening stage):** **(i) Water quality degradation (construction and operation)**				
Qualifying Interest features likely to be affected	**Conservation Objectives Targets and attributes (as relevant - summary)**	**Potential adverse Effects**	**Mitigation measures (summary)** NIS Page 53 – 56 (see summary below)	
Little Grebe (Tachybaptus ruficollis) [A004]	To maintain the Favourable conservation condition of Little Grebe at Corofin Wetlands SPA.	Release of sediment laden waters, wastes, or other pollutants during construction and operational phases	<u>Construction Phase:</u> - Standard and Best Practice Construction Procedures. - Concrete management. - No storage of fuels and no refuelling at Percolation Site.	

		of the proposed development impacting ground - water quality, resulting in water quality degradation and/or alteration of habitat quality, and habitats which bird species associated with the SPA are dependent on, thereby undermining the conservation objectives of same.	- No storage of fuels or refuelling at WWTP Site until bund operational. Use of drip trays and spill kits at WWTP Site. - Regular maintenance of machinery. - Toolbox talks. - Use of dewatering pumps. - Erection of silt fencing along northern boundary of access road on WWTP Site. - Monitoring of weather. - Stockpiles of road surfacing material to be 50m + from surface water feature. - Direction of site lighting away from boundary hedgerow. <u>Operational Phase:</u> Percolation Site - Maintenance of vehicles. - Spill kits. WWTP Site	

			- Storage of fuels, chemical etc. in bunded areas. - Refuelling of vehicles off-site. - Refuelling of stand-by generator in bunded area. - Regular inspection of petrol interceptor. - Monitoring of water level threshold (i.e. 54 m OD) and emergency protocol.	
Whooper Swan (Cygnus cygnus) [A038]	To maintain the Favourable conservation condition of Whooper Swan at Corofin Wetlands SPA.	As above.	As above.	
Teal (Anas crecca) [A052]	To maintain the Favourable conservation condition of Teal at Corofin Wetlands SPA.	As above.	As above.	
Black-tailed Godwit (Limosa limosa) [A156]	To maintain the Favourable conservation condition of Black-tailed	As above.	As above.	

	Godwit at Corofin Wetlands SPA.			
Wigeon (Mareca penelope) [A855]	To maintain the Favourable conservation condition of Wigeon at Corofin Wetlands SPA.	As above.	As above.	
Wetland and Waterbirds [A999]	To maintain the Favourable conservation condition of Wetland habitats in Corofin Wetlands SPA.	As above.	As above.	
The above table is based on the documentation and information provided on the file, and publicly available at https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004220.pdf and I am satisfied that the submitted NIS has identified the relevant attributes and targets of the Qualifying Interests.				
Assessment of issues that could give rise to adverse effects: **(i) Water quality degradation** Deterioration of water quality and substrates in the designated site, resulting in adverse impacts to water dependent qualifying interests of the SPA.				

Mitigation measures and conditions • Standard and Best Practice Construction Procedures and specific mitigation measures set-out at pages 53 – 56 of NIS. I am satisfied that the preventative measures which are aimed at interrupting the source-pathway-receptor are targeted at the key threats to the qualifying interests of the SPA by arresting these pathways or reducing possible effects to a non-significant level, adverse effects can be prevented.	
In-combination effects I am satisfied that in-combination effects have been assessed adequately in the NIS. The proposed development was considered in-combination with other plans and projects in the area that could result in cumulative impacts on designated sites. I note that the Appropriate Assessment Screening report included consideration of the existing, permitted WWTP in the context of the baseline environment. No other plans and projects could combine to generate significant effects when mitigation measures are considered. I am satisfied that the applicant has demonstrated that no significant residual effects will remain post the application of mitigation measures.	
Findings and conclusions The applicant determined that following the implementation of mitigation measures the construction and operation of the proposed development alone, or in combination with other plans and projects, will not adversely affect the integrity of this European Site. Based on the information provided, I am satisfied that adverse effects arising from the proposed development can be excluded for Corofin Wetlands SPA (Site Code: 004220). No direct impacts are predicted. Indirect impacts would be temporary in nature and mitigation measures are described to prevent ingress of silt laden surface water and other construction related pollutants. I am satisfied that the mitigation measures proposed to prevent such effects have been assessed as effective and can be implemented and conditioned if permission is granted.	

Reasonable scientific doubt

I am satisfied that no reasonable scientific doubt remains as to the absence of adverse effects.

Site Integrity

The proposed development will not affect the attainment Conservation objectives of Corofin Wetlands SPA (Site Code: 004220). Adverse effects on site integrity can be excluded and no reasonable scientific doubt remains as to the absence of such effects.

Inagh River Estuary SAC (Site Code: 000036)

Summary of Key issues that could give rise to adverse effects (from screening stage):

(i) Water quality degradation (construction and operation)

Qualifying Interest features likely to be affected	**Conservation Objectives Targets and attributes (as relevant - summary)**	**Potential adverse effects**	**Mitigation measures (summary)** NIS Page 53 – 56 (see summary below)
Salicornia and other annuals colonising mud and sand [1310]	To restore the favourable conservation condition of Salicornia and other annuals colonising mud and sand in Inagh River Estuary SAC.	Release of sediment laden waters, wastes, or other pollutants during construction and operational phases of the proposed development	<u>Construction Phase:</u> - Standard and Best Practice Construction Procedures. - Concrete management.

		impacting ground -water quality, resulting in water quality degradation and/or alteration of habitat quality would undermine conservation objectives.	- No storage of fuels and no refuelling at Percolation Site. - No storage of fuels or refuelling at WWTP Site until bund operational. Use of drip trays and spill kits at WWTP Site. - Regular maintenance of machinery. - Toolbox talks. - Use of dewatering pumps. - Erection of silt fencing along northern boundary of access road on WWTP Site. - Monitoring of weather. - Stockpiles of road surfacing material to be 50m+ from surface water feature. - Direction of site lighting away from boundary hedgerow.

			<u>Operational Phase:</u> Percolation Site - Maintenance of vehicles. - Spill kits. WWTP Site - Storage of fuels, chemical etc. in bunded areas. - Refuelling of vehicles off-site. - Refuelling of stand-by generator in bunded area. - Regular inspection of petrol interceptor. - Monitoring of water level threshold (i.e. 54 m OD) and emergency protocol.
Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	To restore the favourable conservation condition of Atlantic salt meadows (Glauco-	As above.	As above.

	Puccinellietalia maritimae) in Inagh River Estuary SAC.		
Mediterranean salt meadows (Juncetalia maritimi) [1410]	To restore the favourable conservation condition of Mediterranean salt meadows (Juncetalia maritimi) in Inagh River Estuary SAC.	As above.	As above.

The above table is based on the documentation and information provided on the file, and publicly available at htttps://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000036.pdf, and I am satisfied that the submitted NIS has identified the relevant attributes and targets of the Qualifying Interests.

Assessment of issues that could give rise to adverse effects:

(i) Water quality degradation

Deterioration of water quality and substrates in the designated site, resulting in adverse impacts to qualifying interests that the SAC has been designated for.

The NIS notes that Shifting Dunes and Fixed Coastal Dunes do not interact with the Inagh River Estuary waters and there is therefore no potential for these habitats to be affected by the proposed development on the basis of hydrological connectivity.

Mitigation measures and conditions

- Standard and Best Practice Construction Procedures and specific mitigation measures set-out at pages 53 – 56 of NIS.

I am satisfied that the preventative measures which are aimed at interrupting the source-pathway-receptor are targeted at the key threats to the qualifying interests of the SAC by arresting these pathways or reducing possible effects to a non-significant level, adverse effects can be prevented.

I am satisfied that in-combination effects have been assessed adequately in the NIS. The proposed development was considered in-combination with other plans and projects in the area that could result in cumulative impacts on designated sites. I note that the Appropriate Assessment Screening report included consideration of the existing, permitted WWTP in the context of the baseline environment. No other plans and projects could combine to generate significant effects when mitigation measures are considered. I am satisfied that the applicant has demonstrated that no significant residual effects will remain post the application of mitigation measures.

Findings and conclusions

The applicant determined that following the implementation of mitigation measures the construction and operation of the proposed development alone, or in combination with other plans and projects, will not adversely affect the integrity of this European Site. Based on the information provided, I am satisfied that adverse effects arising from the proposed development can be excluded for Inagh River Estuary SAC (Site Code: 000036). No direct impacts are predicted. Indirect impacts would be temporary in nature and mitigation measures are described to prevent ingress of silt laden surface water and other construction related pollutants. I am satisfied that the mitigation measures proposed to prevent such effects have been assessed as effective and can be implemented and conditioned if permission is granted.

Reasonable scientific doubt

I am satisfied that no reasonable scientific doubt remains as to the absence of adverse effects.

Site Integrity The proposed development will not affect the attainment Conservation objectives of Inagh River Estuary SAC (Site Code: 000036). Adverse effects on site integrity can be excluded and no reasonable scientific doubt remains as to the absence of such effects.			
Moneen Mountain SAC (Site Code: 000054) **Summary of Key issues that could give rise to adverse effects (from screening stage):** **(i) Disturbance to Bats.**			
Qualifying Interest features likely to be affected	**Conservation Objectives Targets and attributes (as relevant - summary)**	**Potential adverse Effects**	**Mitigation measures (summary)** NIS Page 53 – 56 (see summary below)
Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303]	To maintain the favourable conservation condition of Lesser Horseshoe Bat (Rhinolophus hipposideros) in Moneen Mountain SAC.	Disturbance impacts to commuting Lesser Horseshoe Bat (ex-situ effects).	- Direction of site lighting away from boundary hedgerow.
The above table is based on the documentation and information provided on the file, and publicly available at https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000054.pdf, and I am satisfied that the submitted NIS has identified the relevant attributes and targets of the Qualifying Interests.			

Assessment of issues that could give rise to adverse effects view of conservation objectives

(i) Disturbance to bats

Site lighting during the construction phase of the proposed development, resulting in disturbance to commuting bats associated with Moneen Mountain SAC (ex-situ effects). The NIS notes that the closest recorded roost site is a cave c. 3.5 km east of Kilfenora which overlaps with the SAC.

The NIS notes that changes to groundwater quality do not threaten habitats which are terrestrial in nature, and that Marsh Fritillary is outside the zone of influence for the proposed development.

Mitigation measures and conditions

- Specific mitigation measures set-out at pages 53 – 56 of NIS, including the direction of site lighting away from boundary hedgerow.

I am satisfied that the preventative measures which are aimed at interrupting the source-pathway-receptor are targeted at the key threats to the qualifying interests of the SAC by arresting these pathways or reducing possible effects to a non-significant level, adverse effects can be prevented.

I am satisfied that in-combination effects have been assessed adequately in the NIS. The proposed development was considered in-combination with other plans and projects in the area that could result in cumulative impacts on designated sites. I note that the Appropriate Assessment Screening report included consideration of the existing, permitted WWTP in the context of the baseline environment. No other plans and projects could combine to generate significant effects when mitigation measures are considered. I

am satisfied that the applicant has demonstrated that no significant residual effects will remain post the application of mitigation measures.
Findings and conclusions The applicant determined that following the implementation of mitigation measures the construction and operation of the proposed development alone, or in combination with other plans and projects, will not adversely affect the integrity of this European Site. Based on the information provided, I am satisfied that adverse effects arising from the proposed development can be excluded for Moneen Mountain SAC (Site Code: 000054). No direct impacts are predicted. I am satisfied that the mitigation measures proposed to prevent such effects have been assessed as effective and can be implemented and conditioned if permission is granted. **Reasonable scientific doubt** I am satisfied that no reasonable scientific doubt remains as to the absence of adverse effects.
Site Integrity The proposed development will not affect the attainment Conservation objectives of Moneen Mountain SAC (Site Code: 000054). Adverse effects on site integrity can be excluded and no reasonable scientific doubt remains as to the absence of such effects.

Appendix 4 - Water Framework Directive (WFD) Screening Matrix

WFD IMPACT ASSESSMENT STAGE 1: SCREENING			
Step 1: Nature of the Project, the Site and Locality			
An Bord Pleanála ref. no.	**ABP-322250-25**	**Townland, address**	Killcarragh and Ballybreen Townlands, Kilfenora, Co. Clare
Description of project		The proposed development comprises, WWTP Site - modifications to site access and internal roads, specifically raising of an access road and provision of permeable paving finish; widening/reconfiguration of internal road in focused areas, permeable paving finish, hard surface area and gully, and provision of petrol interceptor; Percolation Site - modifications to site access and internal road, specifically a new roadside channel drain and provision of permeable paving finish. All ancillary site development and excavation works above and below ground necessary to facilitate the development.	

Brief site description, relevant to WFD Screening	The area is located within the Burren Limestone aquifer system which contains karst features comprising caves, collapsed features, limestone pavement, springs, swallow holes and turloughs. Local geology is described in the particulars submitted with the planning application as being characterised by a series of swallow holes along the boundary between shale bedrock to the west and limestone to the east, ground and surface waters which are closely interlinked with many rivers and streams sinking underground and flowing via both conduit and diffuse pathways before rising to the surface again, and larger open conduits which can transport groundwaters over significant distances. Beyond dilution and dispersion there is little potential for any dissolved or suspended contaminants to be attenuated in the groundwater system. The Ballybreen swallow hole is located at the Percolation Area site and the turlough/swallow hole at the WWTP site. In addition, a small fluvial watercourse enters the Percolation Area site from the southeast under the R481 road in a culvert. This stream flows north and disappear down a swallow-hole located within the Percolation Area site.
Proposed surface water details	Surface water drainage will be managed through use of permeable pavement, which meets the principles of SuDS. The only section of pavement that will be impervious will be 35m2 area, where occasional refuelling of the standby diesel

	generator will be located. This area will be collected in a surface water gully and piped through a petrol interceptor, after which it will be directed to infiltrate beneath the adjacent road pavement.
Proposed water supply source & available capacity	N/A.
Proposed wastewater treatment system & available capacity, other issues	N/A.
Others?	N/A.

Step 2: Identification of relevant water bodies and Step 3: S-P-R connection						
Identified water body	**Distance to (m)**	**Water body name(s) (code)**	**WFD Status**	**Risk of not achieving WFD Objective e.g.at risk, review, not at risk**	**Identified pressures on that water body**	**Pathway linkage to water feature (e.g. surface run-off, drainage, groundwater)**

River	c. 0.6 km	Clooneen (Clare)_010 IE_SH_27C030300	Poor	At Risk	- Agriculture - Forestry	Run-off to surface and ground water
	c. 3.7 km	Fergus_010 IE_SH_27F010100	Good	Not At Risk	N/A	Run-off to surface and ground water
	c. 1.2 km	Dealagh_010 IE_SH_28Do10350	Good	Review	N/A	Run-off to surface and ground water
Transitional	c.7.4 km	Inagh Estuary IE_SH_100_0100	Moderate	Review	N/A	Run-off to surface and ground water
Coastal	N/A	N/A	N/A	N/A	N/A	N/A
Groundwater	0	Burren	Good	Not At Risk	N/A	Infiltration to groundwater

		IE_SH_G_047				
	0	Water Discharge Facility IW_SH_G_169	Good	Not At Risk	N/A	Infiltration to groundwater
	0	Craggaunboy IW_SH_G_-069	Good	Not At Risk	N/A	Infiltration to groundwater
	0	Miltown Malbay IE_SH_G_047	Good	Not At Risk	N/A	Infiltration to groundwater
	0	Miltown Malbay IE_SH_G_047	Good	Not At Risk	N/A	Infiltration to groundwater

Step 4: Detailed description of any component of the development or activity that may cause a risk of not achieving the WFD Objectives having regard to the S-P-R linkage.							
CONSTRUCTION PHASE							Componer
No.	Component	Water body receptor (EPA Code)	Pathway (existing and new)	Potential for impact/ what is the possible impact	Screening Stage Mitigation Measures	Residual Risk (yes/no) Detail	**Determination** to proceed to Stage 2. Is there a risk to the water environment? (if 'screened' in or 'uncertain' proceed to Stage 2.**
1.	**River**	Clooneen (Clare)_010 IE_SH_27C030300	Ballybreen swallow hole and small fluvial watercourse	Siltation, pH (concrete), hydrocarbon spillages.	Standard construction practice, submissi	No.	Screened out.

			on Percolation Area Site.		on of a CEMP.		
		Fergus_010 IE_SH_27F0 10100	Ballybreen swallow hole and small fluvial watercourse on Percolation Area Site.	Siltation, pH (concrete), hydrocarbon spillages.	Standard constructi on practice, submissi on of a CEMP.	No.	Screened out.
		Dealagh_010 IE_SH_28Do 10350	Ballybreen swallow hole and small fluvial watercourse on Percolation Area Site.	Siltation, pH (concrete), hydrocarbon spillages.	Standard constructi on practice, submissi on of a CEMP.	No.	Screened out.
2.	**Transitional**	Innagh Estuary IE_SH_100_ 0100	Ballybreen swallow hole and small fluvial watercourse	Siltation, pH (concrete), hydrocarbon spillages.	Standard constructi on practice, submissi	No.	Screened out.

			on Percolation Area Site.		on of a CEMP.		
3.	**Coastal**	N/A	N/A	N/A	N/A	N/A	N/A
4.	**Groundwater**	Burren IE_SH_G_047	Pathway exists.	Hydrocarbon spillages.	Standard construction practice, submission of a CEMP.	No.	Screened out.
		Water Discharge Facility IW_SH_G_169	Pathway exists.	Hydrocarbon spillages.	Standard construction practice, submission of a CEMP.	No.	Screened out.
		Craggaunboy IW_SH_G_-069	Pathway exists.	Hydrocarbon spillages.	Standard construction practice,	No.	Screened out.

					submissi on of a CEMP.		
		Miltown Malbay IE_SH_G_04 7	Pathway exists.	Hydrocarbon spillages.	Standard construcci on practice, submissi on of a CEMP.	No.	Screened out.
OPERATIONAL PHASE							
1.	**River**	Clooneen (Clare)_010 IE_SH_27C0 30300	Ballybreen swallow hole and small fluvial watercourse on Percolation Area Site.	Hydrocarbon spillages.	SuDS Features, hydrocar bon intercept or.	No.	Screened out.

		Fergus_010 IE_SH_27F0 10100	Ballybreen swallow hole and small fluvial watercourse on Percolation Area Site.	Hydrocarbon spillages.	SuDS Features, hydrocar bon intercept or.	No.	Screened out.
		Dealagh_010 IE_SH_28Do 10350	Ballybreen swallow hole and small fluvial watercourse on Percolation Area Site.	Hydrocarbon spillages.	SuDS Features, hydrocar bon intercept or.	No.	Screened out.
2.	**Transitional**	Innagh Estuary IE_SH_100_ 0100	Ballybreen swallow hole and small fluvial watercourse on Percolation Area Site.	Hydrocarbon spillages.	SuDS Features, hydrocar bon intercept or.	No.	Screened out.

3.	**Coastal**	N/A	N/A	N/A	N/A	N/A	N/A
4.	**Groundwater**	Burren IE_SH_G_047	Pathway exists.	Hydrocarbon spillages.	SuDS Features, hydrocarbon interceptor.	No.	Screened out.
		Water Discharge Facility IW_SH_G_169	Pathway exists.	Hydrocarbon spillages.	SuDS Features, hydrocarbon interceptor.	No.	Screened out.
		Craggaunboy IW_SH_G_-069	Pathway exists.	Hydrocarbon spillages.	SuDS Features, hydrocarbon interceptor.	No.	Screened out.
		Miltown Malbay	Pathway exists.	Hydrocarbon spillages.	SuDS Features,	No.	Screened out.

		IE_SH_G_047			hydrocarbon interceptor.		
DECOMMISSIONING PHASE							
1.	N/A	N/A	N/A	N/A	N/A	N/A	N/A