



An
Bord
Pleanála

Inspector's Report ABP-303590-19

Development

Replacement of culverts and all associated ancillary works.

Location

Ballywilliam Bridge and Aughnacrew Bridge, Ballywilliam, Co. Wexford.

Local Authority

Wexford County Council

Type of Application

Application for approval made under Section 177AE of the Planning and Development Act, 2000, as amended.

Prescribed Bodies

The Minister for Culture, Heritage and the Gaeltacht

Kilkenny County Council

An Taisce

The Heritage Council

Inland Fisheries Ireland

Coras Iompair Éireann

Health Service Executive

Irish Water

Observer(s)

Inland Fisheries Ireland

The Health Service Executive (South),
Environmental Health Service.

Date of Site Inspection

29th April, 2019

Inspector

Robert Speer

1.0 Site Location and Description

1.1. The site in question is located in the village of Ballywilliam, Co. Wexford, approximately 7.5km northeast of New Ross and 12km southeast of Graiguenamanagh, and can be described as comprising two constituent parts in that the proposed development relates to the carrying out of works at two locations as follows:

1.2. *Ballywilliam Bridge:*

1.2.1. This area comprises the westernmost extent of the wider site and encompasses the Ballywilliam bridge crossing of the R731 Regional Road over the Aughnacrew River in addition to part of the river itself, the river bank, and a section of the public road. It also extends southwest to include a small field alongside the regional road that will be used as a site compound during the construction works. Although this field is presently undeveloped and may have previously been used for agricultural purposes, it was noted during the course of a site inspection that a significant number of disused / empty chemical storage tanks had been placed within the north-eastern corner of the field immediately alongside the river bank seemingly for makeshift storage purposes.

1.2.2. The immediate site surrounds are dominated by an 'end-of-life' vehicle (ELV) processing workshop and dry car storage area located on those lands to the north of the river with the intervening site boundary defined by palisade fencing. Further east (upstream), on the opposite side of the regional road, is a service station and forecourt area with an ancillary shop unit etc.

1.3. *Aughnacrew Bridge:*

1.3.1. The easternmost extent of the site comprises the Aughnacrew bridge crossing of Local Road No. L413 over the Aughnacrew River in addition to part of the river itself, the river bank, and a section of the public road. In this regard it should also be noted that the wider site area includes that stretch of river between the Aughnacrew and Ballywilliam bridges.

1.3.2. To the immediate northwest is the existing service station and shop unit whilst the lands to the southwest are occupied by a carpet / furniture business with the lands further east (upstream) in agricultural use.

2.0 Background and the Proposed Development

- 2.1. Due to the limited size of the existing culverts under both the Ballywilliam and Aughnacrew Bridges (the R731 Regional Road and Local Road No. L413 respectively) these pipes have insufficient capacity to accommodate the water flows within the Aughnacrew River during periods of heavy rainfall (it is estimated that the existing under-sized culverts are only sufficient for a 1 in 2 year flood event) with the result that flooding occurs along the road network and on private lands in the vicinity, including at the nearby petrol station and shop. These flood events disrupt traffic movement and cause damage to property, including erosion, with a resulting loss of business to commercial premises in the community. In support of the foregoing, the Strategic Flood Risk Assessment appended to the Wexford County Development Plan, 2013-2019 identifies a significant area at risk of flooding adjacent to both banks of the Aughnacrew River within Ballywilliam village and the Office of Public Works has confirmed recurrent flooding at Ballywilliam up to 2001 during periods of heavy rainfall with the village having been impassable during a flood event in 2000.
- 2.2. In 2015 the Local Authority was allocated funding to upgrade the two bridges and subsequently received approval for the proposed replacement culverts from the Office of Public Works under Section 50 of the Arterial Drainage, Act, 1945 (the OPW originally consented to the proposed culverts at both bridges in 2016, however, following design refinements, an application for the revision of the culvert at Ballywilliam Bridge was sought and obtained in 2018).
- 2.3. Accordingly, in view of the foregoing, the clear purpose of the proposed works is to alleviate flooding upstream of the bridges with the effect of reducing flood risk within the village of Ballywilliam thereby making it a more attractive place to live etc. In this respect Wexford County Council published notice in the Wexford People, New Ross Standard and the Guardian newspapers on 29th January, 2019 of the proposed works as follows:
- The excavation of the existing roadway, and demolition and removal of existing pipe culverts from the Aughnacrew River at Ballywilliam Bridge and Aughnacrew Bridge;
 - Installation of new box culverts, wingwalls and other supporting infrastructure at the bridges;

- Installation of rock armour to river banks;
- Installation of new parapets;
- Provision of new asphalt surfacing, footways and verges;
- Straightening of river bank near Ballywilliam Bridge and provision of a sheet pile wall on downstream side; and
- All ancillary site development works.

2.4. The public notice also advised that a Natura Impact Statement (NIS) had been prepared in respect of the proposed development.

3.0 Relevant Planning History

3.1.1. *On Site (alongside Ballywilliam Bridge culvert):*

PA Ref. No. 20110616. Was granted on 25th October, 2011 permitting Patrick Byrne permission for (1) Retention of existing palisade fencing, (2) Permission for change of use of premises used as a garage to include an additional use as an end-of-life vehicle (ELV) processing workshop and associated works (3) permission for dry car storage area, all at Ballywilliam, Enniscorthy, Co. Wexford.

PA Ref. No. 20120310. Was refused on 7th June, 2012 refusing Patrick Byrne permission for (1) End of life vehicle (ELV) processing unit with a bunded ELV fluid and oil storage area, (2) Permission for change of use of lands to dry car storage area, with associated site works (3) Permission for erection of canopy, all at Ballywilliam, Ballyanne, Co. Wexford, for the following reasons:

- The proposed site is immediately upstream of the New Ross water intake and it is considered that the risk that this site presents is not compatible with the proper protection of the public water supply. Therefore, the proposed development poses an unacceptable public health risk and would be contrary to the proper planning and sustainable development of the area.
- The Planning Authority is not satisfied that the proposed development would not exacerbate the risk of flooding in the area. The location of the proposed development within an area at risk of flooding would also pose a public health

risk and would be contrary to the proper planning and sustainable development of the area.

PA Ref. No. 20141026. Was refused on 18th February, 2015 refusing Patrick Byrne permission for change of use of lands to dry car storage of 1.0 hectares and associated site works at Ballywilliam. Ballyanne, Co. Wexford:

- The proposed site immediately upstream of the New Ross water intake and it is considered that the risk that this site presents is not compatible with the proper protection of the public water supply. Therefore, the proposed development poses an unacceptable public health risk and would be contrary to the proper planning and sustainable development of the area.
- Given the direct discharge of surface water from the site to the Aughnacrew Rover and the wholly inadequate nature of the Natura Impact Statement submitted in support of the proposed development, the planning authority is not satisfied that there would be no likely significant impacts on the River Barrow and River Nore SAC (Site Code: 002162). Therefore, the proposed development would be contrary to the proper planning and sustainable development of the area.
- The Planning Authority is not satisfied that the proposed development would not exacerbate the risk of flooding in the area. The location of the proposed development within an area at risk of flooding would also pose a public health risk and would be contrary to the proper planning and sustainable development of the area.

PA Ref. No. 20150916 / ABP Ref. No. PL26.245835. Was refused on 14th April, 2016 refusing Patrick Byrne trading as Byrne's Motors permission for the change of use of lands to dry car storage area of one hectare, with associated site works at Ballywilliam, Enniscorthy, Co. Wexford:

- Having regard to the nature and excessive scale of the proposed development, to its location on a site subject to significant flood risk and also located within the drainage catchment of an adjoining environmentally sensitive watercourse that drains over a short distance into a designated Natura 2000 site (River Barrow and River Nore Special Area of Conservation), as well as being located a short distance upstream of the intake for the New

Ross water supply (Polymounty), it is considered that the proposed development would pose a significant risk to the water quality of the adjoining watercourse. The proposed development would represent an inappropriate location for the proposed development, would constitute an unacceptable environmental risk and would be prejudicial to public health. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

- Having regard to the nature, excessive scale and characteristics of the proposed development, to the proximity of the facility to an adjoining watercourse (Aughnacrew River) which forms part of the River Barrow and River Nore Special Area of Conservation (Site code: 002162), it is considered that the proposed development would pose an unacceptable risk of contamination of the adjoining watercourse and subsequently a deterioration of water quality and conservation status in the designated Special Area of Conservation. It is reasonable to conclude, on the basis of the information available, that the proposed development, both individually and in combination with other plans and/or projects would adversely affect the integrity of the River Barrow and River Nore Special Area of Conservation (Site code: 002162).
- Having regard to the nature, excessive scale and location of the proposed development on the edge of a small rural settlement, it is considered that the proposed development would represent an excessive scale of development, would be detrimental to the rural character of the area and would have a disproportionate and obtrusive impact on the visual amenities of the area. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

3.1.2. On Site (alongside Aughnacrew Bridge culvert):

PA Ref. No. 20091027. Was granted on 11th September, 2009 permitting Simon & Stasia O'Dwyer permission for change of use, alterations and extension of the existing garage premises, shop and post office due to fire damage to include the following works: (1) Extension / alterations to the existing storage building at the rear / side of premises, (2) Change of use of part of the garage premises to 2 No. general

retail fully serviced units, (3) Change of use of part of the garage premises to provide additional retail space / storage to the existing shop, (4) Alterations to the existing garage facades to include blocking up of existing windows / doors and forming retail units entrances and window openings, (5) Alterations to the existing shop facades to include forming new glazed entrance and relocated fire escape along with a rendered finish with new piers to existing facades and 2 No. fixed signage panels, (6) Removal and replacement of cladding system on the walls and roofs to the entire premises, (7) New extended petrol station / shop entrance and services attendant accommodation with a mono-pitched canopy to existing facades to match the profile of the existing petrol station forecourt canopy, (8) Alterations to the existing post office within the existing premises, (9) Demolition / alterations to the façade of part of the existing ancillary garage single storey store to the side / rear of premises, (10) Replacement rendered block boundary wall / piers with decorative railings and all associated works along with connection to existing ancillary site services. All at Ballywilliam, Ballyanne, Co. Wexford.

PA Ref. No. 20120724. Was granted on 26th October, 2012 permitting Simon & Stasia O'Dwyer permission for retention of all alterations to elevations during construction with associated site works previously approved under Planning Registration No. 20091027. All at Ballywilliam, Ballyanne, Co. Wexford.

4.0 Legislative Requirements

4.1. The EU Habitats Directive 92/43/EEC:

- 4.1.1. The principle aim of the Habitats Directive is to maintain and, where necessary, restore the favourable conservation status of natural habitats and species across Europe thereby contributing to sustainable development and promoting the maintenance of Europe's biodiversity. Most notably, it establishes the Natura 2000 network which provides an ecological infrastructure for the protection of sites that are of particular importance for rare, endangered or vulnerable habitats and species within the EU. Accordingly, in the context of the subject proposal, Articles 6(3) and 6(4) of the Directive (as set out below) are of particular relevance:

4.1.2. Article 6(3):

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

4.1.3. Article 6(4):

'If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the member State shall take all compensatory measures necessary to ensure that the overall coherence of the Natura 2000 site is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.'

4.2. The Planning and Development Act, 2000, as amended:

4.2.1. Section 177AE(1) of the Planning and Development Act, 2000, as amended, states that *'where an appropriate assessment is required in respect of development by a local authority that is a planning authority, whether in its capacity as a planning authority or in any other capacity, within the functional area of the local authority concerned . . . the local authority shall prepare, or cause to be prepared, a Natura Impact Statement in respect thereof'*.

4.2.2. In accordance with subsection (3), where a Natura Impact Statement has been prepared pursuant to subsection (1), the local authority shall apply to the Board for

approval and the provisions of Part XAB shall apply to the carrying out of the Appropriate Assessment.

- 4.2.3. Section 177AE(6) states that before making a decision in respect of the proposed development, the Board shall consider the NIS submitted by the local authority, any submissions or observations made in accordance with subsections (4) or (5), and any other information furnished in accordance with subsection (5) relating to -
- i) The likely effects on the environment of the proposed development.
 - ii) The likely consequences for the proper planning and sustainable development in the area in which it is proposed to situate the said development of such development, and
 - iii) The likely significant effects of the proposed development on a European site.

5.0 Policy and Context

5.1. National and Regional Policy:

- 5.1.1. The '*Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities*' issued by the Department of the Environment, Heritage and Local Government in November, 2009 (updated 2010) provides guidance for the carrying out of 'Appropriate Assessment' with regard to possible impacts on Natura 2000 sites and / or Annex I habitats and Annex II species, in accordance with Articles 6(3) and 6(4) of the Habitats Directive. Section 5.11 relates to works carried out by a local authority.
- 5.1.2. The '*Planning System and Flood Risk Management, Guidelines for Planning Authorities*' published by the Department of the Environment, Heritage and Local Government in November, 2009 introduce comprehensive mechanisms for the incorporation of flood risk identification, assessment and management into the planning process. The core objectives of the Guidelines are to:
- Avoid inappropriate development in areas at risk of flooding;
 - Avoid new developments increasing flood risk elsewhere, including that which may arise from surface water run-off;

- Ensure effective management of residual risks for development permitted in floodplains;
- Avoid unnecessary restriction of national, regional or local economic and social growth;
- Improve the understanding of flood risk among relevant stakeholders; and
- Ensure that the requirements of the EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk management.

In achieving the aims and objectives of the Guidelines, the key principles to be adopted should be to:

- Avoid the risk, where possible,
- Substitute less vulnerable uses, where avoidance is not possible, and
- Mitigate and manage the risk, where avoidance and substitution are not possible.

5.2. **Wexford County Development Plan, 2013-2019:**

- 5.2.1. The following provisions of the County Development Plan are considered to be of relevance given the context of the subject application and the nature of the development proposed:

Chapter 12: Flood Risk Management:

Section 12.5: Principles of Flood Risk Management:

Section 12.6: Managing Flood Risk:

Objective FRM01: To carry out flood risk assessment for the purpose of regulating, restricting and controlling development in areas at risk of flooding and to minimise the level of flood risk to people, business, infrastructure and the environment through the identification and management of existing and potential future flood risk.

Objective FRM08: To facilitate the provision of necessary suitable flood risk management infrastructure by the Office of Public Works, the

Local Authority or private developers, subject to compliance with normal planning and environmental criteria and the development management standards contained in Chapter 18.

Objective FRM09: To ensure that where flood protection or alleviation works take place that the natural and cultural heritage and rivers, streams and watercourses are protected and enhanced.

Objective FRM10: To preserve appropriately sized riparian strips alongside river channels free of development and of adequate width to permit access for river maintenance.

Objective FRM12: To ensure new development does not increase flood risk elsewhere including that which may arise from surface water run-off.

Chapter 14: Heritage:

Section 14.2: Natural Heritage:

Section 14.2.1: Natura 2000 Sites

Objective NH01: To conserve and protect the integrity of sites designated for their habitat/wildlife or geological/geomorphological importance and prohibit development which would damage or threaten the integrity of these sites, including SACs, cSACs, SPAs, NHAs, pNHAs, Nature Reserves, and Refuges for Fauna.

Objective NH03: To ensure that any plan or project and any associated works, individually or in combination with other plans or projects, are subject to Appropriate Assessment Screening to ensure there are no likely significant effects on the integrity (defined by the structure and function) of any Natura 2000 site(s) and that the requirements of Article 6(3) and 6(4) of the EU Habitats Directive are fully satisfied. Where the plan/project is likely to have a significant effect on a Natura 2000 site it shall be subject to Appropriate Assessment. The plan/project will proceed only after it has been ascertained that it will not adversely affect the integrity of the site or where in the absence of alternative

solutions, the plan/project is deemed imperative for reasons of overriding public interest, all in accordance with the provisions of article 6(3) and 6(4) of the EU Habitats Directive.

Objective NH04: To ensure the protection and conservation of areas, sites and species and ecological networks/corridors of local biodiversity value outside the designated sites throughout the county.

Chapter 18: Development Management Standards:

Section 18.4: Appropriate Assessment

Section 18.6: Flood Risk Management

Vol. 7: Strategic Flood Risk Assessment

6.0 Prescribed Bodies and Other Submissions

6.1. In preparing the subject application, the Local Authority undertook consultations with Inland Fisheries Ireland.

6.2. Furthermore, in accordance with the provisions of Section 177AE(4)(b), the following prescribed bodies were notified of the proposal and copies of the application and the accompanying Natura Impact Statement were circulated to same:

- The Minister for Culture, Heritage and the Gaeltacht
- Kilkenny County Council
- An Taisce
- The Heritage Council
- Inland Fisheries Ireland
- Coras Iompair Éireann
- Health Service Executive
- Irish Water

6.3. By way of further clarity, the Board is advised that approval for the proposed culvert replacement works has been issued by the Office of Public Works under Section 50 of the Arterial Drainage Act, 1945.

7.0 Submissions Received

7.1. Inland Fisheries Ireland:

- 7.1.1. States that the Pollmounty and Aughnacrew Rivers are important salmon spawning tributaries of the Barrow River Special Area of Conservation and that the Barrow system is an important spring salmon & sea trout fishery which also supports several species listed in Annex II of the Directive including Salmon, River Lamprey, Brook Lamprey and Sea Lamprey. It is further stated that due to the navigation of the Barrow River there is limited salmon spawning or nursery habitat within the main channel with the result that almost all salmon production occurs in tributaries such as the Pollmounty / Aughnacrew. Accordingly, much of the Pollmounty / Aughnacrew River has been designated as a Special Area of Conservation because of its importance as a salmon spawning / nursery tributary of the Barrow system. It is also noted that the SAC designation of the Aughnacrew River extends to within approximately 100m downstream of Ballywilliam Bridge.
- 7.1.2. The report proceeds to state that the proposal to replace the culverts at the Ballywilliam and Aughnacrew Bridges (both of which are undersized) is to be welcomed, although the flow velocity through the Ballywilliam Bridge culvert and the hydraulic jump downstream represent a significant impediment to the free passage of fish. It subsequently raises the following concerns:
- A site inspection confirmed that although the Aughnacrew Bridge culvert is undersized, it was backwatered throughout whilst a significant pool had been scoured out immediately downstream of the culvert. Whilst it is the understanding of IFI that it is proposed to lay the proposed box culvert 500mm below the existing bed level on site, clarification is requested to confirm that this is the case.
 - An inspection of the Ballywilliam Bridge culvert identified a significant fall over the length of this double culvert. It was also noted that a concrete scour protection apron had been constructed immediately downstream of this culvert. This apron has not been embedded and the flow velocity through the double culvert and perching of the scour apron has resulted in significant scour / erosion of the river bed immediately downstream with the effect that the bed level of the Aughnacrew River downstream of the bridge has been

lowered significantly. Therefore, clarification is required on the difference in bed levels along the Aughnacrew River upstream and downstream of the existing culvert.

- Clarification is required as regards the proposal to embed the new culvert at Ballywilliam Bridge 500mm below the existing bed level.
- There are concerns that the difference in bed level upstream and downstream of Ballywilliam Bridge may be in excess of 500mm.
- There is a need to clarify whether the upstream or downstream bed level will be used as a reference for the new culvert embedment.
- It is understood that any new box culvert is likely to be laid relatively flat and if the upstream bed level is used as the reference, then there is likely to be a significant hydraulic jump at the downstream end of the culvert. If this is the case then works will be required downstream of the new culvert to ensure the free passage of fish at all times. These works will need to be carried out as part of the culvert replacement scheme. Drg. No. BR0201 highlights rip-rap scour protection for some distance upstream and downstream of the new culvert. It should be noted that the incorporation of rip-rap is unlikely to facilitate the free passage of fish at all times and, therefore, details should be provided of a long-term solution that will remain in place and guarantee the future free passage of all fish at all times.
- If the downstream bed level is used as the reference height of the replacement culvert, given the height difference there is the potential for the movement of material within the culvert, and for a hydraulic jump to develop at the upstream end of the culvert where water flows over the rip-rap placed here. If this rip-rap is embedded there is potential for back erosion upstream, which may impact upon the embedment of the culvert upstream at Aughnacrew Bridge.
- Inland Fisheries Ireland are amenable to meeting with the developer on site in order to discuss solutions that will guarantee fish-passage and protect against back erosion / scour.
- Between the two bridges the Aughnacrew River is heavily tunnelled (excessive shading with a reduction in salmonid carrying capacity) primarily

due to a line of non-native evergreen leylandii trees planted on top of the southern river bank. The excessive shading caused by this planting prevents the growth of natural bank / riparian vegetation and is a significant contributing factor to the bank erosion / bank slippage noted on site. At the time of inspection, a large section of one of these trees had fallen into the river and in a flood event could potentially result in a complete blockage of the culvert at Ballywilliam Bridge during a flood event. IFI request that the proposal address the fact that this planting is a contributing factor to bank erosion between the two bridge sites.

- The letter from RPS Consultants which accompanies the application refers to the provision of a sheet pile wall on the downstream side of Ballywilliam Bridge. IFI can find no reference to the construction of a sheet pile wall in the documents submitted by the applicant and clarification is required on this matter.
- The application as submitted includes only 'hard' engineering methods such as rock armouring to address the scour / erosion issues that arose as a result of the installation of an undersized and poorly designed double pipe culvert. IFI request that the applicant investigate the incorporation of river bank protection / stabilisation measures that reflect the sensitivity / importance of the Aughnacrew River at this location. The replacement of the undersized and perched culverts will significantly improve the fisheries habitat of the Aughnacrew at this location and will facilitate the free passage of fish thereby increasing the importance of the habitat upstream also. IFI ask that the applicant consider the incorporation of 'soft' engineering measures to maximise the environmental gain from these works.

7.1.3. The submission concludes by stating that there are serious concerns that fish passage may not be guaranteed with the proposed replacement culverts and thus these matters should be addressed.

7.2. **The Health Service Executive (South), Environmental Health Service:**

- Acknowledges the need to undertake the proposed works in order to alleviate recurring flooding due to the inadequate diameter of the existing culverts and the instability of the riverbank.

- Emphasises the importance of a publicity campaign to inform the public as regards the progress of the works and the likely temporary effects, including community severance. It is also stated that a contact number should be provided for complaints or queries for the duration of the project and that these should be dealt with promptly.
- Notes that the consideration of alternatives was not applicable in this instance. It is further noted that the Environmental Health Service was not consulted at the screening stage.
- Raises concerns that consideration of the impact of the project on population and human health was limited to the village and thus did not adequately consider downstream human impacts. In this regard it is noted that drinking water intake points downstream of the proposed works were not assessed in the documentation. It is further advised that consideration should always be given to impacts downstream and within 5km - 15km of a development depending on the settlement pattern in the area. Food premises and residences are also considered to be sensitive receptors with regard to dust emissions and pests.
- Requires pest control to be included in the Construction & Environmental Management Plan for the project in order to prevent rodent / fly infestation of adjoining food premises, commercial properties, and dwelling houses.
- States that the site compound and the access to the works area should be fenced in such a manner as to prevent unauthorised access.
- States that the river is used as a drinking water source with the nearest extraction point located 2km downstream after the Aughnacrew and Poulmounty rivers coalesce. Moreover, it is stated that the river serves as the supply for New Ross town and, therefore, it is of the utmost importance that it not be contaminated so as to prohibit treatment by the New Ross waterworks to a standard suitable for human consumption (particular reference is made to the need to prevent the release of hydrocarbons into the river).
- The reference to cherry laurel (an invasive species) is noted and although it would be usual practice to fell the specimen and to treat the stump with herbicide, concerns are raised that even the presence of a discarded

herbicide bottle cap could cause a drinking water alert downstream. It is also submitted that the riverbanks and any proposed landscaping thereof should be subject to scrutiny with no pesticide release to the river.

- It is noted that there are presently several large empty, chemical tanks within the proposed construction compound which are identified as having contained controlled and potentially toxic chemicals. It is submitted that these containers should be removed in such a manner that they do not contaminate the soil or the river. In addition, the containers should be checked for residues and cleaned away from the area on an appropriate bunded hardstanding with water traps to prevent any access of polluting chemicals to the environment.
- Litter should be removed from the area without contaminating the river prior to the commencement of any construction works.
- Any waste from staff welfare facilities should be disposed of by licensed tanker or permanent treatment works compliant with EPA guidance.
- The disturbance of sediment may give rise to increases in the turbidity of the water which can affect treatment for drinking water purposes.
- Recommends that a full assessment of the likely impact of the works on the New Ross Water Supply be carried out prior to the commencement of works with Irish Water to be consulted in advance and informed when different stages of the scheme are active.
- The Board is advised that the local aquifer is vulnerable to pollution. Furthermore, if the groundwater table is breached when deepening and re-aligning the river and / or is part of the river base water supply, the works would have the potential to pollute private wells in the vicinity, particularly those downstream from a hydrogeological viewpoint. Therefore, a survey of private wells within 500m is advised prior to works commencing (any wells would need to be monitored). In addition, if any wells are found to be present it would be important to assess if they are downstream of the works (although the village of Ballywilliam is served by a group water scheme there may also be some private wells in use).

- Dust control may be necessary as well as street cleaning during wet and dry weather.
- Although noise impacts will be temporary, people should be informed as to the type of noise anticipated and its likely duration by way of public notice.
- States that a full assessment of the likely impacts of the works on the New Ross Water Supply should be carried out prior to commencement of works with Irish Water to be consulted in advance of same and informed when the different stages of work are active.

8.0 **Appropriate Assessment**

8.1. The subject application has been submitted to the Board under Section 177AE of the Planning and Development Act, 2000, as amended, which requires that where an *'Appropriate Assessment'* is required in respect of development proposed by a local authority, the authority shall prepare a Natura Impact Statement (NIS) and the development shall not be carried out unless the Board has approved the development with or without modifications. Furthermore, Section 177V of the Act requires that the *'Appropriate Assessment'* shall include a determination by the Board as to whether or not the proposed development would adversely affect the integrity of a European site and that the *'Appropriate Assessment'* shall be carried out by the Board before consent is given for the proposed development. The legislative requirements under Section 177AE require consideration of the NIS, any submissions or observations received, and any other further information submitted, relating to three main elements, namely:

- The likely effects on the environment of the proposed development;
- The likely consequences for the proper planning and sustainable development of the area; and
- The likely significant effects of the proposed development on a European site.

8.2. **Screening for the Purposes of Appropriate Assessment:**

8.2.1. In screening the subject proposal for the purposes of appropriate assessment, in the first instance, I would refer the Board to the *'Screening for Appropriate Assessment'* provided with the application and, in particular, to Section 4.3 of that document which

has identified the following Natura 2000 sites within a 15km radius of the proposed development site:

- The Blackstairs Mountains Special Area of Conservation (Site Code: 000770)
- The Slaney River Valley Special Area of Conservation (Site Code: 000781)
- The River Barrow and River Nore Special Area of Conservation (Site Code: 002162)
- The River Nore Special Protection Area (Site Code: 004233).

8.2.2. In identifying the likely zone of impact relevant to the proposed development, the Local Authority has defined a search area using a 15km radius measured from the proposed development site in accordance with the recommendations set out in the *'Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities'* (in the interests of clarity, it should be noted that the Guidelines state that in the case of individual projects, the relevant distance may be much less than 15km and that this should be evaluated on a case-by-case basis having regard to the nature, size and location of the project under consideration, the particular sensitivities of the ecological receptors, and the potential for in-combination effects). It is further stated that in light of the nature of the works proposed, and in consideration of the catchment and sub-catchments in which the said works will be carried out, the use of a 15km radius zone of impact is appropriate to ensure that all potentially affected European sites are included in the screening process.

8.2.3. The screening exercise subsequently lists the various qualifying features of conservation interest within each of the aforementioned designated sites (Table Nos. 4.3 & 4.4) and proceeds to employ the source/pathway/receptor principle of risk assessment in determining the potential for direct or indirect connectivity between the proposed works and those Natura 2000 sites.

8.2.4. Having reviewed the available information, in light of the nature and scale of the proposed development, the intervening separation distances, the lack of connectivity between the project and several of the identified Natura 2000 sites, and the prevailing site topography, with specific reference to the direction of flow in the Aughnacrew River, in my opinion, by employing the source/pathway/receptor principle of risk assessment, I would concur with the findings of the submitted screening exercise in that it can be objectively concluded that the following Natura

2000 sites are outside the zone of influence of the proposed development works and thus are not likely to be significantly impacted by same:

- The Blackstairs Mountains Special Area of Conservation
- The Slaney River Valley Special Area of Conservation
- The River Nore Special Protection Area

8.2.5. However, on the basis that the proposed works area is situated approximately 300m upstream of the River Barrow and River Nore Special Area of Conservation, consideration must be given to the likelihood of the proposed development to have a significant effect on the conservation objectives of the European site by way of hydrological or water-based pollution / contamination impacts. In this respect I would advise the Board that any deterioration in water quality downstream as a result of the proposed construction works (such as may be attributable to sedimentation, pollution or other contamination) could potentially have a significant adverse impact on those protected habitats and species etc. within the SAC which are to be maintained and / or restored to a favourable conservation condition pursuant to the relevant conservation objectives.

8.2.6. At this point it is of relevance to note that the River Barrow and River Nore Special Area of Conservation consists of the freshwater stretches of the Barrow and Nore River catchments as far upstream as the Slieve Bloom Mountains, and also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford. The site is very important for the presence of a number of E.U. Habitats Directive Annex II animal species including Freshwater Pearl Mussel (both *Margaritifera margaritifera* and *M. m. durrovensis*), White-clawed Crayfish, Salmon, Twaite Shad, three lamprey species – Sea Lamprey, Brook Lamprey and River Lamprey, the tiny whorl snail *Vertigo moulinsiana* (it is the only site in the world for the hard water form of the Freshwater Pearl Mussel, *M. m. durrovensis*, and one of only a handful of spawning grounds in the country for Twaite Shad), and Otter. Therefore, the SAC is of considerable conservation significance and has been designated as being of special conservation interest for the following habitats and species listed on Annex I / II of the E.U. Habitats Directive:

- [1016] Desmoulin's whorl snail *Vertigo moulinsiana*
- [1029] Freshwater pearl mussel *Margaritifera margaritifera*

- [1092] White-clawed crayfish *Austropotamobius pallipes*
- [1095] Sea lamprey *Petromyzon marinus*
- [1096] Brook lamprey *Lampetra planeri*
- [1099] River lamprey *Lampetra fluviatilis*
- [1103] Twaité shad *Alosa fallax*
- [1106] Atlantic salmon (*Salmo salar*) (only in fresh water)
- [1130] Estuaries
- [1140] Mudflats and sandflats not covered by seawater at low tide
- [1310] Salicornia and other annuals colonizing mud and sand
- [1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritima*)
- [1355] Otter *Lutra lutra*
- [1410] Mediterranean salt meadows (*Juncetalia maritimi*)
- [1421] Killarney fern *Trichomanes speciosum*
- [1990] Nore freshwater pearl mussel *Margaritifera durrovensis*
- [3260] Water courses of plain to montane levels with *the Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation
- [4030] European dry heaths
- [6430] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
- [7220] *Petrifying springs with tufa formation (*Cratoneurion*)
- [91A0] Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles
- [91E0] *Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

(* indicates a priority habitat under the Habitats Directive).

8.2.7. The NPWS conservation objectives applicable to the site seek to maintain or restore the favourable conservation condition of the aforementioned habitats and species, although the status of the freshwater pearl mussel (*Margaritifera margaritifera*) as a

qualifying Annex II species for the River Barrow and River Nore SAC is currently under review. The outcome of this review will determine whether a site-specific conservation objective is set for this species.

8.2.8. Therefore, I would refer the Board to Section 5 of the submitted screening report and its assessment of the likely significant effects of the proposed development on the aforementioned site. Accordingly, I propose to review same as follows:

8.2.9. *Reduction of Habitat:*

Given the location of the works area outside of the River Barrow and River Nore Special Area of Conservation, there will be no direct reduction or loss of habitat attributable to the proposed works, however, in the absence of any site-specific control measures, the potential for indirect hydrological or water-based pollution / contamination impacts to result in a reduction in some of the protected habitat types cannot be ruled out i.e. [1130] Estuaries, [3260] Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation, [6430] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, and [91E0] *Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*).

8.2.10. *Disturbance to Key Species:*

It is my opinion that the physical act of the proposed repair works, with particular reference to the in-stream works involved in the replacement of the existing culverts, could potentially have a significant impact on species of special conservation interest within the River Barrow and River Nore SAC, including salmon, brook & river lamprey, and crayfish, which may be present in the vicinity of same. Any water-based pollution / contamination impacts arising during the construction stage of the proposed development could potentially result in the disturbance of key species further downstream within the SAC. In turn, this could impact on food sources, habitats, and the population abundance of those species.

In this regard the screening report has discounted any potential impact on the Whorl Snail on the basis that while there are recorded populations further up the Barrow catchment, the species has not been found in the Aughnacrew River and no potential habitat for same was encountered during the walkover survey of the works area. Similarly, it has been stated that all known populations of the Freshwater Pearl

Mussel *Margaritifera margaritifera* are located further upstream within the Barrow catchment whilst the Nore Freshwater Pearl Mussel *Margaritifera durrovensis* is only found in the Nore catchment, however, it has been accepted that in the absence of any mitigation measures, the proposed works could have an indirect impact on freshwater pearl mussel due to a potential reduction in juvenile salmon habitats and good water quality which the mussel requires to complete its life cycle.

With respect to the white-clawed crayfish, it has been acknowledged that although no examples were recorded at the time of the site walkover, it is known to be present in the River Barrow catchment and potentially suitable habitats were recorded along the banks of the Aughnacrew River. Accordingly, given the uncertainty as regards crayfish populations, and noting that increased siltation and reduced water flow could result in a change in the channel flora thereby creating unsustainable conditions for crayfish, the conclusion has been drawn that in the absence of appropriate mitigation, the potential for the proposed works to cause disturbance to this species cannot be ruled out.

In terms of the potential impact on protected fish species (i.e. brook lamprey, river lamprey, twaite shad, & salmon), concerns have been raised as regards the possible effects of sedimentation and water contamination. It has also been submitted that as sea lamprey are unlikely to be within Aughnacrew River and are not known to use the upper catchments of the River Barrow, this species will not be disturbed by the proposed works.

In reference to otter [1355] *Lutra lutra*, the screening report states that while no signs of same were noted during an on-site survey, otters have previously been recorded in close proximity to the subject site. Accordingly, it is considered that the proposed works could potentially impact on this species through the temporary direct loss of freshwater habitats due to the diversion of the Aughnacrew River. In addition, the damming and diversion of the river could prevent otter migration upstream thereby limiting its food source whilst any deterioration in downstream water quality could lead to a further reduction in available fish stocks. Therefore, in the absence of appropriate mitigation measures, I would concur with the Local Authority's screening report that the proposed works could impact on any otters present.

No Killarney Fern was recorded on site with the only known populations of same located upstream in the upper Barrow catchment and, therefore, there is no direct disturbance of this species as a result of the proposed works. Moreover, given that the Killarney Fern is a terrestrial plant species, and as the dominant source-receptor pathway is water-borne via the Aughnacrew River, it is unlikely that the proposed works would have any significant indirect effect on this species.

8.2.11. Habitat or Species Fragmentation:

Concerns arise as regards the possible fragmentation of otter and salmon habitats consequent on the proposed works. In this respect not only will the temporary diversion of the river during the construction stage potentially obstruct salmon travelling upstream to spawning habitats, but the failure to include for a fish pass in the completed works would serve to inhibit fish migration post construction. Similarly, commuting corridors for otter could be cut off during both the construction and operational phases of the development by reference to the diversion works and as the initial design submitted does not include for aspects which would facilitate mammal migration / movement i.e. mammal ledges.

8.2.12. Reduction in Species Diversity:

It has been stated that there may be some potential for a reduction in species diversity due to changes in hydrological function and sediment input into the river as a result of the proposed works. Populations of White-clawed crayfish, Brook Lamprey, River Lamprey, Twaite Shad, Salmon and Otter may be impacted.

8.2.13. Changes in Key indicators of Conservation Value:

The screening report has noted that the modification of structures within inland watercourses of the SAC has been identified as a 'high' potential threat to the conservation objectives of the European site, however, it should be noted that the subject works are not located within the SAC whilst it has also been submitted that the new culverts have been designed to accommodate more appropriate (improved) river flow than is the case at present.

It should also be reiterated that any deterioration in water quality downstream as a result of sedimentation, pollution or other contamination attributable to the proposed works could potentially have a significant adverse impact on those aquatic / water-dependent protected habitats and species etc. within the SAC which are to be

maintained and / or restored to a favourable conservation condition pursuant to the relevant conservation objectives.

8.2.14. *Climate Change:*

Given the limited scale and nature of the works proposed, I would concur with the screening assessment that the proposed works are unlikely to give rise to any significant effect as regards climate change considerations.

8.2.15. *Likely impacts on the European site as a whole in terms of interference with key relationships that define the structure and function of the site:*

The screening report has identified the following indirect impacts on the SAC:

- Reduction in water quality due to the release of suspended solids / silt;
- Reduction in water quality due to the release of contaminants (e.g. hydrocarbons);
- Increased risk of erosion due to the loss of terrestrial habitats (including the riparian zone) adjacent to a watercourse;
- Reduction in nutrient and food supply to a watercourse as a result of the loss of riparian zone vegetation; and
- Alterations to the shade conditions of a watercourse as a result of changes to the riparian zone.

8.2.16. Section 5.4 of the '*Screening for Appropriate Assessment*' proceeds to consider the likely significance of the effects identified in Section 5.3 of that document and, in my opinion, the pertinent issues can be summarised under the following headings:

8.2.17. *Habitat Loss and Alteration:*

- There will be no direct reduction or loss of any habitat within the SAC attributable to the proposed works, however, in the absence of any site-specific control measures, the potential for indirect hydrological or water-based pollution / contamination impacts on some of the protected habitat types cannot be discounted i.e. [1130] Estuaries, [3260] Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation, [6430] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, and [91E0] *Alluvial forests with

Alnus glutinosa and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*).

- The areas of terrestrial habitat proposed for removal outside of the SAC do not correspond with any Annex I habitat for which the SAC itself has been designated.
- Further investigation would be required during the optimal period for survey work in order to ascertain if the *Ranunculion fluitantis* vegetation recorded downstream of Aughnacrew Bridge and upstream of Ballywilliam Bridge corresponds with the designated aquatic habitat '[3260] *Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation*'. However, it should be noted that this habitat is located outside of the SAC.

8.2.18. *Habitat or Species Fragmentation:*

- Having regard to the temporary diversion of the river during the construction stage and the potential for the migration routes / commuting corridors of several of the water-based species of special conservation interest within the SAC to be cut off during both the construction and operational phases of the development, the potential for the proposed works to impact on certain protected species by way of fragmentation cannot be ruled out in the absence of appropriate mitigation measures.
- The failure to include for a fish pass post construction would serve to inhibit fish migration.
- The initial design does not include for features which would facilitate mammal (otter) migration / movement i.e. mammal ledges.

8.2.19. *Disturbance and / or Displacement of Species:*

- The physical act of the proposed works, with particular reference to the in-stream works involved in the replacement of the existing culverts, could potentially have a significant impact on species of special conservation interest within the SAC, including salmon, brook & river lamprey, white-clawed crayfish & otter, which may be present in the vicinity of same.

- In the absence of robust mitigation measures, any water-based pollution / contamination impacts (including sedimentation and siltation) arising during the construction stage of the proposed development could potentially result in the disturbance / displacement of key species further downstream within the SAC, including impacts on food sources, habitats, and the population abundance of those species.
- The proposed works could have an indirect impact on freshwater pearl mussel due to a potential reduction in juvenile salmon habitats and good water quality which the mussel requires to complete its life cycle.
- Given the uncertainty as regards populations of white-clawed crayfish, and noting that increased siltation and reduced water flow could result in a change in the channel flora thereby creating unsustainable supporting conditions, in the absence of appropriate mitigation, the potential for the proposed works to cause disturbance to this species cannot be ruled out.
- The temporary diversion of the Aughnacrew River could prevent otter migration upstream thereby limiting its food source whilst any deterioration in downstream water quality could lead to a further reduction in available fish stocks.

8.2.20. Water Quality and Resources:

- Given the nature of the proposed works, it is clear that in the absence of suitable mitigation there is considerable potential for a deterioration in water quality within the SAC through the pollution of the Aughnacrew River as a result of the accidental (or otherwise) release / discharge of substances such as fuels, oils, lubricants or other hydrocarbons (thereby having an indirect impact on aquatic species that use the river e.g. salmon, lamprey and otter).
- The potential for a deterioration in water quality within the SAC due to the uncontrolled runoff of contaminated waters / suspended solids from construction areas etc. Further possible sources of pollution include the disturbance of fine subsurface substrates during the carrying out of in-stream works.

8.2.21. *Cumulative / In-Combination Effects with other Plans or Projects:*

- With regard to the likelihood of significant cumulative / in-combination impacts when taken in conjunction with other plans or projects, it should be acknowledged that the discharge of polluting substances from point (industrial pollutants, wastewater effluents, stormwater sewers) and diffuse (urban runoff) sources associated with on-going activities within centres such as New Ross, in addition to further point (industrial pollutants, wastewater effluents) and diffuse (e.g. agriculture) sources along the wider river catchments, has the potential to contribute to a cumulative impact on the SAC.

8.2.22. *Screening Conclusions:*

Having considered the foregoing, in my opinion, it is reasonable to conclude, given the nature, scale and location of the proposed works, and in view of the relevant conservation objectives, that the likelihood for the proposed works to have a significant effect on the River Barrow and River Nore Special Area of Conservation cannot be objectively ruled out and that the preparation of a Natura Impact Statement (NIS) would be warranted to allow for further assessment in order to determine whether the project in question would be likely to adversely affect the integrity of that Natura 2000 site.

8.3. **Stage 2 Appropriate Assessment: The Natura Impact Statement:**

- 8.3.1. The Natura Impact Statement which has accompanied the subject application has focused on the River Barrow and River Nore Special Area of Conservation as identified through a screening process. In this regard it is of relevance to note that whilst the initial screening exercise which informed the accompanying ‘*Screening for Appropriate Assessment*’ identified the likely zone of impact relevant to the proposed development by reference to a search area using a 15km radius measured from the proposed development site in accordance with the recommendations set out in the ‘*Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities*’, the NIS has expanded the ‘Zone of Influence’ to include the entire catchment of all the European Sites identified within that 15km radius due to the presence of nutrient sensitive habitats / groundwater dependent habitats downstream of Ballywilliam. Having reviewed these details, I remain satisfied that in light of the nature and scale of the proposed development, the intervening separation

distances, the lack of connectivity between the project and several of the identified Natura 2000 sites, and the prevailing site topography, with specific reference to the direction of flow in the Aughnacrew River, it can be objectively concluded by employing the source/pathway/receptor principle of risk assessment that the Blackstairs Mountains Special Area of Conservation, the Slaney River Valley Special Area of Conservation, and the River Nore Special Protection Area are outside the zone of influence of the proposed development works and thus are not likely to be significantly impacted by same.

8.3.2. In addition, given the hydrological connectivity between the proposed works area and the River Barrow and River Nore Special Area of Conservation, I would concur with the NIS that consideration must be given to the likelihood of the proposed development to have a significant adverse effect on those protected habitats and species etc. within that SAC which are to be maintained and / or restored to a favourable conservation condition pursuant to the relevant conservation objectives.

8.3.3. The NIS subsequently details that the following qualifying interests were selected for impact assessment:

- [1130] Estuaries
- [3260] Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation
- [6430] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
- [91E0] Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)
- [1029] Freshwater pearl mussel *Margaritifera margaritifera*
- [1092] White-clawed crayfish *Austropotamobius pallipes*
- [1096] Brook lamprey *Lampetra planeri*
- [1099] River lamprey *Lampetra fluviatilis*
- [1103] Twait shad *Alosa fallax*
- [1106] Atlantic salmon (*Salmo salar*) (only in fresh water)
- [1355] Otter *Lutra lutra*

- [1990] Nore freshwater pearl mussel *Margaritifera durrovensis*

8.3.4. Notably, this listing would appear to exclude [1095] Sea lamprey *Petromyzon marinus* as a qualifying interest requiring assessment. Given that this is an anadromous fish which moves from sea water to freshwater to spawn I would suggest that it is necessary to consider same in the Natura Impact Assessment, however, its exclusion from the foregoing list would appear to be as a result of a simple oversight / typographical omission as the potential impacts of the project on this species have been considered in Table 5.1 of the NIS alongside brook and river lamprey.

8.3.5. The NIS also refers to the rationale for the non-selection of the remaining qualifying interests with the SAC as set out in Section 5.3 of the accompanying 'Screening for Appropriate Assessment' and I would concur with these findings as broadly summarised earlier in this report.

8.3.6. At this point, I would also advise the Board that whilst *Potamogeton sp.* and *Ranunculion fluitantis* were found both upstream and downstream of Culvert No. 2 during initial survey work, and although the presence of *Ranunculion fluitantis* suggested that this area could correspond with the designated habitat of '[3260] Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion vegetation*', following further investigation, it has since been clarified that due to the lack of *Ranunculion* cover area and the absence of certain key species, the area in question does not in fact correspond with the Annex I habitat and thus there will be no direct impact by the proposed culvert replacement works on any such protected habitat [3260]. However, it is noted that impacts (such as through the release of suspended solids or sedimentation) on any incidences of this protected habitat downstream of the works within the SAC cannot be discounted in the absence of suitable protection / mitigation measures.

8.4. **The Assessment of Potentially Significant Impacts as detailed in the NIS:**

The characteristics and conservation objectives of the various qualifying habitats and species are set out in Sections 4.6 & 4.7 of the NIS whilst Section 5.1 and Table Nos. 5.1 & 5.2 identify the potential impacts (including cumulative impacts) with the salient points summarised as follows:

8.4.1. *Loss of habitat area / reduction and degradation of habitats:*

In the absence of suitable protection / mitigation measures, given the hydrological connection between the proposed works area and protected habitats downstream (i.e. [1130] Estuaries, [3260] Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation, [6430] *Hydrophilous* tall herb fringe communities of plains and of the montane to alpine levels, and [91E0] Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*), there is the potential for indirect impacts on those habitats due to a deterioration in water quality arising from the release of suspended solids or the discharge of polluting substances to the river during the works.

8.4.2. *Distribution of key species:*

There is the potential for the proposed works to disturb key species within the SAC. The possible release of contaminants during the construction works could potentially impact on food sources, habitats and population abundance of crayfish, otter, lamprey and salmonids within the SAC.

8.4.3. *Habitat fragmentation:*

Possible otter and salmon habitat fragmentation as the river diversion works during the construction phase will act as a temporary barrier for migrating species. Given habitat potentially suitable for crayfish was recorded downstream of both culverts, there is the potential for crayfish using these habitats to become isolated during the construction process.

8.4.4. *Alteration of the hydrological regime:*

The diversion of the river during the construction works may temporarily alter the hydrological regime of the Aughnacrew River, however, this is expected to be very limited as the current hydrological regime is defined by the existing concrete pipes which pose a similar hydrological regime to the diversion to be used during the culvert replacement.

8.4.5. *Reduction in species diversity:*

There is the potential for a reduction in species diversity as a result of changes in hydrological function and sediment input into the river as a result of the proposed works.

8.4.6. *Changes key indicators of conservation value:*

Whilst the modification of structures along inland watercourses has been identified as a 'High' potential threat to the conservation objective of the River Barrow and River Nore SAC, the culverts in question are not located within the SAC and have been designed to accommodate the river flow more appropriately than the existing culverts.

The uncontrolled release of sediment / suspended solids or other polluting matter could result in a deterioration in downstream water quality which would be contrary to the targets set out in the conservation objectives for aquatic species and habitats within the SAC.

8.5. **Recommended Mitigation Measures:**

8.5.1. Having identified the likely significant impacts on Natura 2000 sites consequent on the proposed works, Section 6 of NIS has recommended the implementation of a series of mitigation measures with the key proposals summarised as follows:

8.5.2. **Construction Phase Mitigation:**

- The compilation of a final Construction Environmental Management Plan (CEMP) prior to the commencement of development for written approval by an Ecological Clerk of Works appointed by Wexford County Council (please refer to the accompanying 'Outline Construction Environmental Management Plan'). This CEMP will be prepared in accordance with industry best practice and will be effective for the duration of the works. It will operate as a live document throughout the proposed works with ongoing independent audit in consultation with the National Parks and Wildlife Service and Inland Fisheries Ireland. The Plan will be strictly adhered to by the contractor and will be monitored by an appointed Ecological Clerk of Works. Additional measures may also be incorporated into the final plan as a result of pre-construction surveys (crayfish / otter).

The proposed works will be carried out in accordance with best practice construction measures, including the following (please refer to Section 6.1.1 of the NIS):

- The appointment by the contractor of a suitably qualified person/s to the role of Environmental Clerk of Works to monitor the construction works.
- The retention of an Ecological Clerk of Works as a representative of the employer to oversee the project from an ecological perspective. This Ecological Clerk of Works will work alongside the contractor's Environmental / Ecological Clerk of Works to ensure compliance with all relevant environmental legislation. They will have the authority to review the CEMP and method statement, and to advise the contractor's clerk of works on the contract / project requirements, to decide on elements that require direct supervision and instruct action, as appropriate, including the temporary cessation of works, where necessary.
- All site staff will be informed of the biodiversity value of the surrounding landscape, particularly the River Barrow and River Nore SAC and its groundwater-dependent habitats etc. to ensure that there are no accidental or unintentional actions conducted during the construction works that could lead to a reduction in water quality etc.
- The project design has reduced the requirement for excavation. The surface water management measures proposed have been devised to ensure the protection of the SAC and its surface-water dependent annex species & habitats. Any changes in the location of these measures, including attenuation features, silt fencing etc. will be detailed for prior approval by the Wexford County Council Ecological Clerk of Works (and the Bord as the planning authority).
- Excavations will be left open for minimal periods so as to avoid acting as a conduit for surface water flows.
- No works will be permitted within the area of the Aughnacrew River during excessive weather events as defined by Met Eireann. Where ponding occurs, it will be pumped uphill to an attenuation feature before onward pumping to the main construction attenuation feature that will be located alongside the main works compound. Where

excessive water build occurs and results in a reduction in operational capacity of attenuation features, the contractor will be obliged to dispose of the water via tanker to an approved facility.

- All diesel / fuel / oil storage tanks will be bunded and spill kits etc. will be kept available on site.
 - No refuelling of plant will be undertaken within 50m of any watercourse or surface water feature (including the Aughnacrew River).
 - All spillages of fuels, oils etc. will be immediately contained and contaminated soil removed from the site for proper disposal.
 - Only emergency breakdown maintenance will be carried out on site. Dust suppression measures will be subject to agreement with the local authority. Furthermore, water will not be abstracted from or discharged to the Aughnacrew River.
 - Contaminated spoil, including that contaminated with invasive species will only be disposed of at an appropriately licensed facility and in accordance with all relevant consent requirements.
 - No harmful materials will be deposited into nearby watercourses, including drainage ditches / pipes, on or adjacent to the site.
 - The Contractor will comply with the requirements of the Public Health Acts and Fisheries Acts.
- *Mitigation measures for stream diversion and culvert replacement include (please refer to Section 6.1.2 of the NIS):*
- In-stream works will only be carried out in dry conditions effectively isolated from any flowing water during the permitted summer period of July-September inclusive outside of the Annual Closed Season in accordance with Ireland Fisheries Ireland's '*Guidelines on Protection of Fisheries During Construction Works in and adjacent to Waters, 2016*'. By excluding the months of May and June, a mitigation is introduced that would essentially eliminate any adverse impact on the maintenance of spawning by adult Brook and River Lamprey.
 - The implementation of sediment control measures including:

- The damming of the river with water piped over thereby limiting the potential for sediment loss. Pumps will be on hand to deal with any leaks through the dam.
 - At the tie-in points between the existing river bed and the new pipe both upstream and downstream a coffer dam is proposed to ensure that the culvert replacement works can be undertaken in the dry without risk of the existing channel overtopping and flooding the works area. The coffer dam material will be sufficiently stabilised so that it cannot be damaged during high river levels of flood conditions in the existing channel.
 - Any silt contaminated water pumped from the works area due to dewatering will be treated prior to discharge i.e. via settlement tanks.
 - Only clean sandbags of good integrity (preferably fully sealed) containing very clean, coarse grade sand with no fines will be used in the river. They will be carefully handled and placed so as not to burst and no other additional material (like clay or soil) will be introduced to seal gaps. The sandbags will be removed from the river on completion of the works and disposed of appropriately.
 - Best practice settling systems will be utilised to ensure the maximum removal of suspended solids prior to the discharge of any surface water or groundwater from excavations to receiving waterbodies.
 - Prior to dewatering activities, electrofishing will be undertaken to remove any individuals.
- *General sediment and erosion management measures (please refer to Section 6.1.3 of the NIS):*
 - o Construction activities will be minimised and monitored both upstream and downstream of the culvert replacement works.

- Topsoil will be stored separate from general spoil with side slopes not steeper than 1 in 3 and shall be maintained in a good condition keeping weeds under control and preventing vermin infestation. All necessary precaution will be taken to avoid runoff from topsoil stripping polluting neighbouring watercourses.
- The stockpiling of construction materials will be strictly limited to specific areas within the study area including: low lying ground and the sloped ground outside the boundary of the SAC. Elsewhere, the stockpiling of construction materials will be strictly prohibited within 5m of any ditch or water-laden channel and appropriate management of excess stockpiles will be ensured to prevent the siltation of watercourse.
- Temporary construction compounds will not be located close to road cuttings, watercourses or the Aughnacrew River or water bodies feeding into the SAC or where it is likely that groundwater will be encountered.
- Riparian vegetation will be left intact where practicable. Protection will be afforded to riparian vegetation by fencing prior to the commencement of any works. Where practicable, the fencing will be placed a minimum of 5m from the bank of the watercourse or at the edge of a woody canopy, whichever is the greatest.
- Drainage, erosion control and sediment control measures will be put in place and functioning prior to the commencement of any earthworks on site.
- Direct connections between settlement tank outfalls and the watercourse will not be permitted. Tanks will discharge to a level spreader (composed of a drainage stone filled areas measuring a minimum of 5m x 3m x 1m) to ensure sheet flow conditions. A manifold pipe will be used on the outlet from the pond to ensure even distribution of the outflow over the level spreader. The sheet flow will be allowed to disperse across at least 3m of undisturbed vegetated

ground, or where not available, the ground shall be covered with a coir mesh or similar matting prior to reaching the watercourse.

- The new channel will be constructed so as to minimise the release of suspended solids when the river is rerouted. This will include the re-creation of river substrate conditions found in the existing channel, and stabilisation of the newly formed river banks along the new culvert in and outflows using bank protection measures e.g. large boulders, planting of suitable riparian vegetation. Gravels and stone substrata which are the same as the existing riverbed composition at this location will be replicated in the realignment channel in consultation with IFI to ensure that fisheries habitat is restored.
 - The downstream end of the diversion will be opened up first whilst in-stream works will be undertaken during low flow periods in order to minimise silt disturbance and during specified times permitted by IFI i.e. 1st July, - 30th September.
- *Mitigation measures to avoid hydrocarbon loss and other waterborne pollutants (please refer to Section 6.1.4 of the NIS):*
- The storage of all oils, solvents & paints within suitably designed bunded areas with a bunded volume of 110% of the capacity of the largest tank / container.
 - Refuelling to be conducted in designated hardstanding areas only with spill kits & hydrocarbon absorbent packs to be stored along the construction areas.
 - The regular inspection of machinery for leakages.
 - Concrete (including waste and wash-down water) will be contained and managed so as to prevent the pollution of watercourses. Concrete will not be poured during periods of wet weather; quick setting mixes will be used.
 - The implementation of guidelines for minimising impacts on water quality and fisheries during construction, including, but not limited to, CIRIA C532 *'Control of water pollution from construction sites –*

Guidance for consultants and contractors', IFI guidance, and TII guidelines.

- Runoff and wash-down water will be trapped on site to allow sediment to settle out and reach neutral pH. Wexford County Council and the contractor will consult and comply with the requirements of the National Parks and Wildlife Service and Inland Fisheries Ireland.
- *Environmental Incidents and Accidents (please refer to Section 6.1.5 of the NIS):*
 - An emergency operating plan will be established to deal with any incidents or accidents during the construction works that may give rise to pollution of the River Aughnacrew.
 - Throughout all stages of the construction works good housekeeping will be maintained at all times with personnel to be made aware of the importance of the freshwater environments etc.
 - The appropriate storage / bunding etc. of all hazardous materials and oils / fuels etc.
 - Raw or uncured waste concrete will be disposed of by removal from the site.
 - There will be no discharge of unattenuated water to the River Aughnacrew.
- *Mitigation for Protected Species and Habitats (please refer to Section 6.1.6 of the NIS):*

Freshwater Pearl Mussel (Margaritifera margaritifera) & Nore Pearl Mussel (Margaritifera durrovensis):

- No freshwater pearl mussels were observed within the River Aughnacrew during the site visit.
- The Nore pearl mussel is not within the Barrow catchment and thus will not be impacted by the proposed works.
- It is unknown if *Margaritifera margaritifera* occurs within the main channel of the Barrow downstream of the River Aughnacrew, however,

it is considered unlikely as that section is tidal and the FWPM is a wholly freshwater species.

- Following implementation of the mitigation and best practice measures outlined in the NIS, there will be no degradation in water quality and thus no impact on salmonid fish, which are a key component in the FWPM life cycle.

White-clawed crayfish (Austropotamobius pallipes):

- Although no white-clawed crayfish were found during the 2018 aquatic survey, good habitat was recorded both upstream and downstream of the culvert and, therefore, a further survey will be undertaken to assess the presence of the species and their habitat.
- Due to the transitional nature of the species, it is possible that crayfish may appear within the works area during the dewatering and culvert replacement works. Therefore, a visual inspection will be carried out by a competent ecologist during the works and if the species is found to be present, a management plan will be put in place and a qualified ecologist will oversee the works and advise, where necessary, as regards the translocation of any white-clawed crayfish at Ballywilliam Bridge.
- Instream works and crayfish relocations are to be cognisant of the current and ongoing outbreak of crayfish plague and biosecurity measures will be put in place in accordance with the advice of the NPWS.
- Instream works must be carried out in accordance with OPW requirements as regards any potential flooding issues and alterations to the hydraulic regime assessed in order to avoid changes to aquatic habitats and / or species.

Brook lamprey (Lampetra planeri) & River lamprey (Lampetra fluviatilis):

- Should the waters in question contain lamprey the NPWS will be contacted in order to ascertain its requirements.

- Following dewatering, a visual inspection will be carried out by a competent aquatic ecologist for presence of lamprey and any fish left in the works area will be translocated downstream.
- No instream works will be undertaken in May & June with the works limited to the months of July – September in order to mitigate impacts on potential spawning grounds.
- Soil removed from the river bed and bank will be checked for lamprey and any protected species found will be released downstream of the works.

Salmon (Salmo salar) & Twaite shad (Alosa fallax):

- To minimise adverse impacts on the fisheries resource, works will be carried out during the period July-September. Adverse impacts to salmon redds will be avoided by restricting the instream works to July-September.
- Prior to dewatering, electrofishing will be undertaken to remove any individual fish and this will be carried out by an experienced and competent person.
- All dewatering flows will pass through settlement ponds and no water abstracted from the river bed will be fed directly back into the channel downstream.
- If any instream coarse material is removed, this will be used to reinstate the river bed.
- Operation of machinery in-stream will be minimised and machinery will only be permitted to work in sections of the river which have been dammed and dewatered.
- All construction machinery operating in-stream should be mechanically sound to avoid leaks of oils, fuels etc.
- Machinery should be steam-cleaned and checked prior to in-stream works.

- The box culverts will be inserted with a substrate composition which has been approved by IFI and will be more in line with a natural river bed; this will improve oxidation of the water column and provide refuge for juvenile fish.

Otter (lutra lutra):

- No holts or signs of otter were recorded on site whilst the habitats within the immediate works area is urbanised and the river between the two culverts straightened with concrete walls making it unsuitable for otter holts, however, otter are widespread in Ireland and have a transient nature and, therefore, given that there is a food source available within the river the presence of otter cannot be ruled out at this location.
- A pre-construction survey will be carried out in accordance with the '*Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes*' (TII) to assess any change in otter activity or the establishment of holts since the 2018 surveys. This will ensure that the prescribed mitigation measures remain adequate. The survey should be conducted no more than 10-12 months in advance of construction to ensure sufficient time to comply with all licensing requirements and that the necessary actions can be undertaken to protect otter populations.
- The pre-construction survey will aim to ensure that adequate mitigation is provided at each culvert. Where necessary, there may be a need to modify the design of culverts and to adjust the extent of the mammal fencing required to protect locations used by otters.
- Derogations will be required for any works likely to cause disturbance to active breeding holts (when present within c. 150m of a scheme). The removal of otters from affected holts, and the subsequent destruction of these holts, must be conducted under a Section 25 derogation issued under the 1997 Habitats Regulations.
- Where the culvert replacement works are in progress, mammal-resistant fencing either side of both crossings is recommended in order

to prevent otters from using the roadway to navigate the river channel and also to prevent animals from entering the workspace. This fencing should remain in place on a permanent basis.

Annex I Habitats:

Please refer to the measures set out in Sections 6.1.2 – 6.1.4 of the NIS as regards the protection of water quality and the prevention of the release of contaminants into the river.

8.5.3. Operation Phase Mitigation:

- The provision of appropriately designed and sized otter ledges within the culverts.
- Access to ledges to be provided through appropriate levelling and landscaping.
- The erection and maintenance of mammal-resistant fencing to direct otters to the ledges provided in the culverts to minimise the risk of road mortality.
- Where practical, riparian vegetative cover will be restored using the same native species as soon as possible after construction so as to limit the impact on the use of the watercourse by otters.
- Maintenance of otter ledges within the culverts at regular intervals. Obstacles such as accumulated debris etc. will be removed.
- Upon completion of the works, quarterly monitoring will be carried out over a period of at least one year to determine the success of the measures employed in an effort to protect otter populations.
- Any deficiencies in the measures will be reported to the relevant authority and corrected where possible.

8.6. Residual Impacts and NIS Conclusions:

- 8.6.1. The NIS has concluded that provided the recommended mitigation measures are implemented in full it is not expected that the proposed culvert replacement works will result in an adverse residual impact on the Natura 2000 site considered.

9.0 Planning Assessment

9.1. Under the provisions of Section 177AE(6) the Board is required to consider the following in respect of this type of application:

- a) The likely effects on the environment
- b) The likely consequences for the proper planning and sustainable development of the area and
- c) The likely impact on any European sites.

9.2. I propose to assess the subject proposal under these three broad headings as follows.

9.3. Likely Effects on the Environment:

9.3.1. The most significant potential for impacts arises in relation to water quality and these are discussed in detail in the appropriate assessment below. Aside from these, I consider the main environmental impacts of the proposal can be summarised under the following headings:

- Archaeological and built heritage considerations
- Landscape and visual impact
- Traffic
- Population and human health
- Biodiversity

9.3.2. *Archaeological and Built Heritage Considerations:*

Neither the Aughnacrew nor the Ballywilliam Bridges have been designated as protected structures in the Wexford County Development Plan, 2013-2019 whilst there are no recorded monuments within the immediate vicinity of the proposed works area.

9.3.3. *Landscape and Visual Impact:*

In terms of the visual impact of the proposed development, given the nature and scale of the works involved, I am satisfied that the submitted proposal is unlikely to give rise to any significant loss of visual amenity.

9.3.4. *Traffic:*

In light of the nature of the works proposed, temporary traffic controls will have to be put in place, however, I would suggest that the impact of same is of limited significance.

9.3.5. *Population and Human Health:*

During the course of the construction works there is an inherent potential for the generation of increased levels of noise, dust, and general disturbance, however, considering that such works will be temporary in nature, I am satisfied that the short-term impacts arising from same will not give rise to any undue loss of amenity to surrounding properties etc.

With regard to the location of the works area approximately 2km upstream of the intake for the New Ross public water supply and the need to ensure that there is no water contamination that would prohibit its treatment by the New Ross waterworks to a standard suitable for human consumption, in the first instance, it is regrettable that no submission has been received from Irish Water with regard to this matter despite it being notified of the proposal as a prescribed body in accordance with the provisions of Section 177AE(4)(b) of the Planning and Development Act, 2000, as amended. Notwithstanding the failure of Irish Water to comment on the project, in light of the mitigation measures that will be put in place in order to avoid any incidences of water pollution / contamination within the SAC located approximately 300m downstream of the works area, I am satisfied that said measures will also serve to mitigate against any impact on the public water supply intake.

By way of further comment, and in the interest of preventing any deterioration in downstream water quality as a result of the proposed works (from both a biodiversity and public health perspective), it will be necessary to ensure that the disused / empty chemical storage tanks / containers presently stored within the north-eastern corner of the field that will be used as a site compound during the construction works are suitably removed from site.

9.3.6. *Biodiversity:*

In terms of the likely effect of the proposed works on the local biodiversity of the area, and not including issues of Appropriate Assessment, the uncontrolled release of sediment / suspended solids or other polluting matter could result in a

deterioration in downstream water quality. However, having regard to the information presented in the NIS, together with the biosecurity measures proposed, it is considered that subject to best work practice and the implementation of mitigation measures, incidences of water pollution / contamination as a result of the proposed works can be avoided.

Inland Fisheries Ireland has raised concerns as regards the reference levels at which the proposed replacement box culverts will be laid and the potential for a hydraulic jump to develop at either end of same which may pose an impediment to the free passage of fish. In this regard, I would advise the Board that the submitted drawings state that the new stream levels will tie into the existing stream levels whilst a review of same would seem to indicate that the proposed bed levels within the new culverts will be comparable to the existing pipework. The application itself has also sought to stress that the new culverting will provide for improved migration potential for fish and mammals and will also improve the hydrological flow of the river thereby creating a natural flow and more oxygenated water through a natural river bed. In my opinion, it would be appropriate to require the final levels of the proposed culverts to be confirmed in advance of construction as a condition of any approval.

9.4. Likely Consequences for the Proper Planning and Sustainable Development of the Area:

The proposed development involves the replacement of the existing culverts beneath Ballywilliam and Aughnacrew Bridges in order to alleviate flooding upstream thereby reducing flood risk within the village of Ballywilliam and in this respect I am satisfied that the principle of the proposed works is acceptable and that they accord with the wider policies and objectives of the Wexford County Development Plan, 2013-2019. Furthermore, it is my opinion that, subject to suitable conditions, the proposed works will not give rise to any significant adverse impact on built heritage or archaeological considerations nor will they unduly detract from the visual or residential amenities of the area. Accordingly, I consider that the subject proposal accords with the proper planning and sustainable development of the area.

9.5. Likely Impact on any European Sites:

- 9.5.1. Having reviewed the available information, including the submitted Natura Impact Statement as summarised in Sections 8.3-8.6 above, I would accept that the River

Barrow and River Nore Special Area of Conservation (Site Code: 002162) is pertinent to the consideration of the subject proposal. Furthermore, I would concur with the findings of the NIS in its selection of the qualifying features for impact assessment.

9.5.2. The potential impacts identified in the NIS are loss / reduction of habitat area, distribution of key species, habitat fragmentation, alteration of hydrological regime, reduction in species diversity, and changes in the key indicators of conservation value (such as decrease in water quality and quantity). These are set out in detail in Table 5.1 of the NIS and can be summarised as follows:

9.5.3. *Loss / Reduction of Habitat Area:*

In assessing the potential for significant impacts to arise consequent on the proposed development in terms of habitat loss and alteration, having reviewed the available information, in my opinion, given the context of the water-dependent habitats in question, and in view of the nature of the proposed works, consideration must be given to the potential for the loss / alteration of downstream qualifying habitats by indirect means i.e. by way of a deterioration in water quality. In this respect the NIS has acknowledged that given the hydrological connection between the proposed works area and protected habitats downstream there is the potential for indirect impacts arising from the release of suspended solids or the discharge of polluting substances to the river during the works. It has also been noted that the hydrological regime of the river will be temporarily altered during its diversion to accommodate the culvert replacement works, although downstream river flow will be maintained and the diversion will be of limited duration.

Having reviewed the available information, I would consider the analysis set out in the NIS to be satisfactory and that if the mitigation measures are implemented in full the proposed culvert replacement works will not adversely affect the integrity of the SAC in view of the site's Conservation Objectives.

9.5.4. *Distribution of Key Species:*

With regard to the potential for adverse impacts on qualifying species within the identified Natura 2000 site (with particular reference to water-borne species such as salmon and lamprey) due to disturbance and / or displacement during development works, the physical act of the proposed works, with particular reference to the in-

stream works involved in the replacement of the existing culverts, could potentially have a significant impact on species of special conservation interest within the River Barrow and River Nore SAC, including salmon, brook & river lamprey, and crayfish, which may be present in the vicinity of same. The proposed diversion works could also result in the loss of migration / commuting corridors, although it should be emphasised that the diversion works will be of a temporary nature whilst the final design of the works has included for mammal ledges to accommodate otter etc. and is stated as providing for improved fish passage (when compared to the current regime). In addition, any water-based pollution / contamination impacts arising during the construction stage of the proposed development could potentially result in the disturbance of key species further downstream within the SAC which, in turn, could impact on food sources, habitats, and the population abundance of those species.

Having reviewed the available information, it is my opinion that concerns with regard to the distribution of key species can be addressed through the implementation of mitigation measures recommended in the NIS.

9.5.5. *Habitat Fragmentation:*

Concerns arise as regards the possible fragmentation of otter and salmon habitats consequent on the proposed works. In this respect, the temporary diversion of the river during the construction stage could potentially obstruct salmon travelling upstream to spawning habitats whilst the failure to include for a fish pass in the completed works would serve to inhibit fish migration post construction. Similarly, commuting corridors for otter could be cut off during both the construction and operational phases of the development by reference to the diversion works and as the initial design submitted did not include for aspects which would facilitate mammal migration / movement i.e. mammal ledges.

Similar to the consideration of the potential for adverse effects on the distribution and disturbance of key species, in my opinion, the implementation of the mitigation measures set out in the NIS will ensure that the proposed works will not affect the integrity of the SAC in view of the site's Conservation Objectives by way of the habitat fragmentation.

9.5.6. *Alteration of Hydrological Regime:*

The hydrological regime of the river will be temporarily altered during its diversion to accommodate the works, although downstream river flow will be maintained and the diversion will be of limited duration. Furthermore, during the operational phase of the scheme, and given that the existing regime on site is not favourable for fish migration, the culvert design with suitable substrate will ensure that the potential for the migration of fish species is greatly increased.

In addition to the foregoing, it should be noted that the purpose of the proposed works is to alleviate flooding upstream of the bridges with the effect of reducing flood risk within the village of Ballywilliam

9.5.7. *Reduction in Species Diversity:*

Whilst there is the potential for a reduction in species diversity as a result of changes in hydrological function and sediment / contaminants input into the river as a result of the proposed works, I am satisfied that such issues can be satisfactorily addressed by way of the mitigation measures set out in the NIS.

9.5.8. *Changes in the Key Indicators of Conservation Value:*

The structures to be modified as part of the proposed works are not located within the SAC and have been designed to accommodate the river flow more appropriately than the existing culverts.

Adherence to the mitigation measures recommended in the NIS will prevent the uncontrolled release of sediment / suspended solids or other polluting matter that could result in a deterioration in downstream water quality which would be contrary to the targets set out in the conservation objectives for aquatic species and habitats within the SAC.

9.5.9. *Cumulative and In-Combination Effects:*

With regard to the likelihood of significant cumulative / in-combination impacts when taken in conjunction with other plans or projects, it should be acknowledged that the discharge of polluting substances from point (industrial pollutants, wastewater effluents, stormwater sewers) and diffuse (urban runoff) sources associated with on-going activities within centres such as New Ross, in addition to further point (industrial pollutants, wastewater effluents) and diffuse (e.g. agriculture) sources

along the wider river catchments, has the potential to contribute to a cumulative impact on the SAC. However, adherence to the mitigation measures set out in the NIS will ensure that no cumulative / in-combination effects arise which would adversely affect the integrity of European Site No. 002162 in view of the site's conservation objectives.

9.5.10. Mitigation & Residual Impacts

Having identified the likely significant impacts on Natura 2000 sites consequent on the proposed works, Section 6 of the NIS has set out a comprehensive list of mitigation measures and thus it has been submitted that if the mitigation measures are implemented in full it is not expected that the proposed culvert replacement works will result in an adverse residual impact on the Natura 2000 sites considered.

9.5.11. Conclusions:

Having regard to the foregoing, I consider it reasonable to conclude on the basis of the information available, which I consider adequate, that the proposed development, subject to the implementation of the recommended mitigation measures, both individually and in combination with other plans or projects, would not adversely affect the integrity of European Site No. 002162, or any other European site, in view of the sites' conservation objectives. Furthermore, I am satisfied that the submitted proposal will not give rise to any undue effects on the environment and that it accords with the proper planning and sustainable development of the area.

10.0 Recommendation

10.1. Approve, subject to conditions, the proposed development based on the reasons and considerations set out below.

11.0 Reasons and Considerations

Having regard to:

- a) the EU Habitats Directive (92/43/EEC);
- b) the European Communities (Birds and Natural Habitats) Regulations 2011;

- c) the EU Water Framework Directive 2000 (2000/60/EEC);
- d) the document entitled “Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities issued by the Department of the Environment, Heritage and Local Government in 2009 (updated 2010);
- e) the nature and extent of the proposed culvert replacement works as set out in the application for approval,
- f) the information submitted in relation to the potential impacts on habitats, flora and fauna, including the Natura Impact Statement
- g) the policies and objectives of the Wexford County Development Plan, 2013-2019;
- h) the submissions and observations received in relation to proposed development, and the report of the Inspector; and
- i) the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on a European site.

The Board considered the Natura Impact Statement and associated documentation submitted with the application for approval, the mitigation measures contained therein, the submissions and observations on file, and the Inspector’s assessment. The Board completed an appropriate assessment of the potential impacts of the proposed development on the affected European sites, namely, the River Barrow and River Nore Special Area of Conservation (Site Code: 002162). The Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European sites, in view of the sites’ conservation objectives.

The Board considered, having regard to the nature, scale and extent of the proposed development and the location of the subject site that, subject to compliance with the conditions set out below, the proposed development would not adversely affect the environment, would not seriously injure the amenities of the area or property in the vicinity, and would be acceptable in terms of traffic safety, landscape and visual

impact. The proposed development would therefore be in accordance with the proper planning and sustainable development of the area.

12.0 Conditions

1. The proposed development shall be carried out and completed in accordance with the plans and particulars, including the Natura Impact Statement and other associated documentation, lodged with An Bord Pleanála, except as may otherwise be required in order to comply with the following conditions.

Reason: In the interest of clarity and the proper planning and sustainable development of the area and to ensure the protection of the environment.

2.

- (1) The mitigation measures contained in the Natura impact statement submitted with the application shall be implemented in full.
- (2) A suitably qualified ecologist shall be appointed by the local authority to oversee the site set-up and construction of the proposed development in accordance with the mitigation measures set out in the Natura Impact Statement. The ecologist shall be present on site during construction works. Upon completion of the construction stage, an audit report of the site works shall be prepared by the appointed ecologist and submitted to the local authority to be kept on file as part of the public record.

Reason: In the interest of nature conservation, to prevent adverse impacts on the European site and to ensure the protection of the Annex I habitats and Annex II species and their Qualifying Interests for which the site was designated.

3. Prior to commencement of development, the local authority, or any agent acting on its behalf, shall prepare in consultation with the relevant statutory agencies, a Construction Environmental Management Plan (CEMP), generally in accordance with the outline Construction Environmental Management Plan submitted with the application, that adheres to best practice environmental management. The CEMP shall include specific proposals for monitoring of the

effectiveness of the environmental management measures outlined in the CEMP.

Reason: In the interest of protecting the environment, the protection of European Sites and in the interest of public health.

4. Prior to commencement of development, details of measures to protect fisheries and the water quality of the river systems shall be outlined and placed on file by the local authority, generally in accordance with the Inland Fisheries Ireland's published updated guidelines for construction works near waterways (Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters, 2016). A programme of water quality monitoring shall be prepared in consultation with the contractor, the local authority and relevant statutory agencies and the programme shall be implemented thereafter.

Reason: In the interest of the protection of receiving water quality, fisheries and aquatic habitats.

5. Prior to commencement of development, the local authority, or any agent acting on its behalf, shall confirm the final levels and falls of the replacement culverts. These details shall be placed on the file and retained as part of the public record.

Reason: In the interest of the protection of receiving water quality, fisheries and aquatic habitats.

6. The local authority, or any agent acting on its behalf, shall ensure that all plant and machinery used during the works should be thoroughly cleaned and washed before delivery to the site to prevent the spread of hazardous invasive species and pathogens.

Reason: In the interest of the proper planning and sustainable development of the area and to ensure the protection of the European Site.

7. Prior to the commencement of works, the disused chemical storage tanks / containers located on those lands to the southwest of the Ballywilliam Bridge culvert shall be suitably removed from site.

Reason: In the interest of the protection of water quality, fisheries and aquatic habitats.

Robert Speer
Planning Inspector

8th August, 2019