



An  
Bord  
Pleanála

## Inspector's Report ABP 310430-21

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<b>Development</b>	Repair and replacement of the stone pitched flooring on the western arch of Inch Bridge.
<b>Location</b>	Stradbally. Co Laois.
<b>Local Authority</b>	Laois Co. Council.
<b>Type of Application</b>	Application for approval made under Section 177(AE) of the Planning and Development Act, 2000 (local authority development requiring appropriate assessment).
<b>Prescribed Bodies</b>	Department of Housing, Local Government and Heritage.
<b>Observer(s)</b>	None.
<b>Date of Site Inspection</b>	July 7th, 2021.
<b>Inspector</b>	Breda Gannon.

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## 1.0 Introduction

- 1.1. Laois County Council is seeking approval from An Bord Pleanála to undertake repair works to Inch Bridge within the River Barrow and River Nore SAC which is a designated European site. A Natura Impact Statement (NIS) and application under Section 177AE was lodged by the Local Authority on the basis of the proposed development's likely significant effect on a European site.
- 1.2. Section 177AE of the Planning and Development act 2000 (as amended) requires that where an appropriate assessment is required in respect of development by a local authority, the authority shall prepare an 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 Planning and Development Act, 2000 (as amended) 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 the appropriate assessment shall be carried out by the Board before consent is given for the proposed development.

## 2.0 Proposed Development

- 2.1. It is proposed to repair and replace the stone pitched flooring of the western arch of Inch Bridge, which has been washed out causing the adjacent pier and cutwater to experience scour. The project involves the installation of a new stone-pitched floor on the bed of the river under the western arch.
- 2.2. The western arch will be dewatered using double lined and sealed sandbags in order to carry out the works. It is proposed to install 1m x 1m x 0.5m angular boulders upstream and downstream of the arch to lock in the new floor. The floor will be installed on the bed of the river underneath the arch using selected stone (0.450m x 0.250m x 0.150m). The boulders will be embedded into the channel bed at a minimum two-thirds the height of the stone. Imported rock will be placed beneath the pitch floor (min.500mm thick layers).
- 2.3. The two remaining arches will remain open during the works to convey flows. Water management through these arches will be necessary to allow work to be carried out

in the dry. Sand bags (1tonne) will be needed to deflect flows in high water conditions.

- 2.4. The works also include the repair of the scoured pier, abutment, wingwall and repairs to the masonry elements of the bridge. It will include the repointing of the spandrels and parapets with lime mortar and specific materials for repointing below the water level and for repointing/repairs inside the arch barrels and above water level. Temporary props may be needed to support the repairs to the pier and abutment and it will be necessary to erect scaffolding within the river channel to gain access to the spandrel and parapet wall.
- 2.5. It is anticipated that the works will take 4-6 weeks to complete.

### **3.0 Site and Location**

- 3.1. The site is located at Inch Bridge (Curraclone Bridge) and northeast of Stradbally in Co Laois. The bridge is a 3 arch masonry structure that carries the L7950 local road and spans the Stradbally River, which is a tributary of the River Barrow. The area surrounding the site consists of open agricultural land which is used for pasture and tillage. The banks of the river are largely exposed and comprise low lying vegetation with few trees/hedgerows adjacent to the banks.
- 3.2. The area is rural in character with isolated dwellings and farm holdings. The closest settlement is Stradbally which provides a range of services, for the local community. Vicarstown to the northeast provides amenities associated with the Grand Canal.
- 3.3. The bridge is not listed as a Protected Structure and is not included in the National Inventory of Architectural Heritage (NIAH). There is an ecclesiastical enclosure which is included in the Record of Monuments and Places (RMP) located to the north east of the bridge.

### **4.0 Planning History**

- 4.1. No details of any relevant planning history relevant to the site or its immediate area have been forwarded by the planning authority.

## 5.0 Legislative and Policy Context

- 5.1. **The EU Habitats Directive (92/43/EEC):** This Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) and 6(4) require an appropriate assessment of the likely significant effects of a proposed development on its own and in combination with other plans and projects which may have an effect on a European Site (SAC or SPA).
- 5.2. **European Communities (Birds and Natural Habitats) Regulations 2011:** These Regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in CJEU judgements. The Regulations in particular require in Reg 42(21) that where an appropriate assessment has already been carried out by a 'first' public authority for the same project (under a separate code of legislation) then a 'second' public authority considering that project for appropriate assessment under its own code of legislation is required to take account of the appropriate assessment of the first authority.
- 5.3. **National nature conservation designations:** The Department of Housing, Local Government and Heritage and the National Parks and Wildlife Service are responsible for the designation of conservation sites throughout the country. The three main types of designation are Natural Heritage Areas (NHA), Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) and the latter two form part of the European Natura 2000 Network.
- 5.4. The applicant identifies the following two European sites within the zone of influence of the proposed development:
- River Barrow and River Nore SAC (Site code 002162).
  - Ballyprior Grassland SAC (Site code 002256).
- 5.5. **Planning and Development Acts 2000 (as amended):** Part XAB of the Planning and Development Acts 2000-2017 sets out the requirements for the appropriate assessment of developments which could have an effect on a European site or its conservation objectives.

- 177(AE) sets out the requirements for the appropriate assessment of developments carried out by or on behalf of local authorities.
- Section 177(AE) (1) requires a local authority to prepare, or cause to be prepared, a Natura Impact Statement in respect of the proposed development.
- Section 177(AE) (2) states that a proposed development in respect of which an appropriate assessment is required shall not be carried out unless the Board has approved it with or without modifications.
- Section 177(AE) (3) states that where a Natura impact assessment 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.
- Section 177(V) (3) states that a competent authority shall give consent for a proposed development only after having determined that the proposed development shall not adversely affect the integrity of a European site.
- Section 177AE (6) (a) states that before making a decision in respect of a proposed development the Board shall consider the NIS, any submissions or observations received and any other information relating to:
  - The likely effects on the environment.
  - The likely consequences for the proper planning and sustainable development of the area.
  - The likely significant effects on a European site.

## 5.6. Laois County Development Plan

The operative development plan is the Laois County Development Plan 2017-2023. The site is located in a rural area and outside the development boundary identified in the settlement plan for Stradbally.

Section 7.12 of the Plan seeks to protect European sites including SAC's and SPA's (Policy NH9).

Section 7.16 of the development plan sets to protect riparian zones from inappropriate development. It includes the following policies:

**NH33** – Ensure that no development including clearance and storage of materials takes place within a minimum distance of 10-15m from each bank of any river, stream or watercourse.

**NH35** – Work with State Agencies, landowners, local communities and other relevant groups to protect and manage inland waters, river corridors and their floodplains from degradation and damage, and to recognise and promote them as natural assets of the urban and rural environment.

## 6.0 The Natura Impact Statement

6.1. Laois County Council's application for the proposed development was accompanied by a Natura Impact Statement (NIS) which scientifically examined the proposed development and the European sites. The NIS identified and characterised the possible implications of the proposed development on the European sites, in view of the site's conservation objectives, and provided information to enable the Board to carry out an appropriate assessment of the proposed works.

6.2. The NIS describes the elements of the development (alone or in combination with other projects and plans) that are likely to give rise to significant effects on the European sites. Potential significant effects are set out, as well as an assessment of their effect and the mitigation measures that are to be introduced to avoid, reduce or remedy the adverse effects on the integrity of the European sites.

## 7.0 Consultations

7.1. The application was circulated by Laois Co. Council to the following bodies:

- An Taisce
- Arts Council
- Inland Fisheries Ireland
- National Parks and Wildlife Service
- Office of Public Works

- The Heritage Council
- Failte Ireland
- Environmental Protection Agency
- Waterways Ireland
- Department of Agriculture
- Department of the Environment, Climate & Communications.

Submissions were received from the Department of Housing, Local Government and Heritage and Geological Survey Ireland.

There were no submissions from the public.

## 7.2. Department of Housing, Local Government and Heritage (DAU)

### Archaeology

The works will occur in proximity to the early medieval ecclesiastical remains of Curracloe, Co Laois (LA014-035003-), which is subject to statutory protection. The ecclesiastical enclosure runs off the Stradbally River which may have acted as the enclosing elements of the remains on the west side.

It is recommended that an underwater archaeological impact assessment be carried out in accordance with the specifications of the Department of Housing, Local Government and Heritage.

### Nature Conservation

It is recommended that provision be made for any flooding of the works area, either through the failure of the sandbag dam or heavy rain. Any rain being pumped out of the works area shall be passed through a system of silt traps before entering the river.

The measures to mitigate water quality must be made specific e.g., the locations of the chemical/fuel and oil store be clearly specified.

While not part of the AA process, many bat species are associated with roosting in bridges. Any bridge works should be accompanied by a bat survey, which would involve surveying suitable crevices and if any are found, a dawn/dusk survey should



be conducted. If bats are discovered, alternative solutions to disturbance or destruction of the roost must be examined and a derogation licence applied for from the Department, if necessary.

### 7.3. **Geological Survey Ireland**

The Geological Survey Ireland stated they had no specific comments to make on the proposed development.

## 8.0 **Further Information**

8.1. The Board requested further Information from the applicant on 27<sup>th</sup> September, 2021 on the following matters:

- Locational details of access to the river and working area, construction compound/storage area for chemicals/fuels/ oils and welfare facilities for staff. Details of extent of the repair and replacement works proposed, temporary river control measures and location of in-stream structures required for the works and to mitigate the mobilisation of silt.
- Details of site preparation, instream works, construction methodology, sequencing of works, details of machinery to be used and details of construction materials, including source of gravel/stone for instream works. Evidence of consultation with IFI.
- Detailed and comprehensive response to the matters raised by the Development Applications Unit including a river hydromorphology assessment and a revised Natural Impact Statement assessing all aspects of the proposal.

8.2. The applicant's response was received on April 1<sup>st</sup>, 2022. It included the following:

- Site layout plans (Appendix A of Method Statement).
- Method Statement.
- River Hydromorphology Assessment (SLR Consulting).
- Revised Natural Impact Statement (Atkins).
- Underwater Archaeological Impact Assessment (ADCO).

- 8.3. The further information provides more detailed information on the construction methodology and sequencing of the works. In advance of the works a small site compound (40m x 20m) would be created on the western bank of the river. It would function as the main access point to the river and also provide a storage area for materials. Imported crushed stone would be used to create a compact level surface for the hardstand area adjacent to the bridge and c 5m from the riverbank. It would form the works platform for the wheeled/tracked excavator to be used during the works.
- 8.4. A series of pre-filled 1 tonne sandbags would be placed upstream and downstream of the works and silt mats would be placed 10m and 20m downstream of the sandbags. Polythene sheeting would be placed on the riverbed to create a sealed dam and the area of the works would be dewatered. All waters would be passed through a constructed swale/settlement pond at the construction compound site to remove suspended solids. Additional measures such as silt fencing would be used if required to promote the settling of fines before the water is discharged back to the river channel.
- 8.5. Once the area has been successfully dewatered, the remaining stones would be removed from the riverbed and the area would be excavated down to a depth of 75mm below the existing surface of the stone apron/sill, to accommodate a layer of clean stone (cl 503 material) which would be spread out along the river bed and levelled to match the level of the other arches. At the upstream and downstream face of the bridge the area would be excavated deeper to accommodate the 1m deep stones, which would lock the new stone bed to the arch in place and prevent scouring. Once these are secure, the main stone floor stones would be installed into the cl 503 stone bed. When these are secure, the stoneworkers will beat in smaller wedge stones into the joints to secure and lock the floor in place by wedging.
- 8.6. Following the completion of the works to the river bed, the repair of the scored pier abutment and wing wall and repairs to all masonry elements of the bridge would take place. This would involve the demolition of the retaining wall and part of the wing/parapet wall on the western end and reconstruction with original stone and lime mortar to match existing. The upstream concrete capping would be replaced with stone coping to match the original coping on the south parapet.

- 8.7. Once the main floor replacement and lower-level pointing are completed, scaffolding would be erected within the river channel to gain access to the spandrel and parapet walls for repointing with lime mortar. Following completion of the repointing works, the scaffolding would be removed, and loose sand/gravel would be removed prior to removal of the sand bags to reduce the amount of fines material going back to the river channel. Once the water is running through the arch again, the construction compound would be removed, and the area would be topsoiled and restored to its original condition. The area of hedging removed to create the site access will be reinstated.
- 8.8. The Hydromorphology Assessment report was prepared to assess the potential impacts from the repair works on the rivers hydromorphology and to inform the NIS for the proposed development. The assessment included a desk study and walkover survey to establish existing hydromorphological conditions prior to any remedial works to the bridge.
- 8.9. The desk top study indicates that the entire length of the Stradbally River has been modified to improve drainage for agriculture. This has resulted in the fundamental alteration of the hydromorphology of the river system with the artificial modification of the river channel and a disconnect between the river channel and many former sections of the rivers floodplain.
- 8.10. A hydromorphological baseline audit conducted as part of the assessment is detailed in the report. The hydromorphology of the river is classified as 'Bad' status under the Water Framework Directive Hydromorphology classification scheme. This reflects the high degree of human impacts on the river channel across the study area associated with channel modification (straightening and deepening), loss of natural floodplain area and riparian vegetation and land use. While the river is part of an SAC and of European importance from an ecological perspective, the importance of the river hydromorphologically is considered to be Low.
- 8.11. The Hydromorphological Assessment, revised NIS and the Underwater Impact Assessment submitted in response to further information are discussed below in Section 9 (Assessment) of this report.

## 9.0 Assessment

### 9.1. Introduction

In accordance with the requirements of section 177AE(6)(a) this assessment includes consideration of the following:

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

#### **The likely consequences for the proper planning and sustainable development of the area:**

- 9.2. The proposed development seeks to remedy a deterioration in scour protection at Inch Bridge. The works are required to protect the integrity and safety of the bridge which is of importance in terms of the county's road infrastructure. The proposed development is wholly in accordance with the policies and objectives of the development plan in terms of the provision of sustainable infrastructure and supporting improvements to the local road network. I consider that the proposed development is therefore acceptable in principle.

#### **The likely effects on the environment**

- 9.3. The proposed works would be restricted to the underside of the bridge and the spandrel and parapet walls, which limits the potential for impacts on the wider environment. With the exception of potential impacts on water and ecology, which is considered in more detail below under Appropriate Assessment, there is limited potential for significant effects on other environmental media (population/human health, air/climate, land, soil, landscape, material assets).
- 9.4. The bridge is not listed as a Protected Structure and as the works will be largely hidden from public view and tailored to match the existing bridge, there are no significant impacts from an architectural perspective. The bridge is located c.100m to the southwest of the RMP site and the walkover survey did not observe any elements of the ecclesiastical enclosure (listed on the RMP) extending to the riverbank.

- 9.5. Only one feature of archaeological/historic interest was encountered, and this comprises an arched masonry culvert that accommodates flow from a small stream located 83m east-northeast of Inch Bridge. It is considered likely that it was constructed at the same time as the bridge and could be considered an associated structure. The works to Inch Bridge which are confined to the vicinity of the bridge are highly localised will not impact on the culvert.
- 9.6. Issues were raised by the DAU regarding potential impacts that could arise from as yet undiscovered underwater archaeology. The Underwater Archaeological Impacts Assessment (UAIA) submitted as further information included a walkover survey of the riverbank and a targeted metal-detection survey of the riverbed.
- 9.7. The metal detection survey encountered a high target ratio of metallic objects within the riverbed deposits on either side of the bridge and the assessment concluded that the archaeological potential of the riverbed area can be considered relatively high. Three items of historic interest a (coin, horse-harness fitting and late Victorian medal) ranging in date from the late 1600s to late 1800s were recovered as part of the survey.
- 9.8. There is potential for impacts to occur on sub surface archaeological material that may exist associated with the construction of the temporary construction compound and the excavation and removal of material on the riverbed. To mitigate these impacts, the DAU recommends that archaeological monitoring be carried out by an archaeologist experienced in river/estuarine environments during the removal of riverbed deposits/excavation of the riverbed and during the removal of topsoil to accommodate the hardstand area. Subject to the implementation of these measures, I consider that any potential impacts on the archaeological resource can be effectively mitigated.
- 9.9. The DAU also raise the potential for bat roosts to exist in crevices on the underside of the bridge and recommends that a bat survey be carried out. Should the Board be minded to grant approval for the development, I consider that this matter can be adequately addressed by way of condition.

**The likely significant effects on a European site**

- 9.10. The areas addressed in this section are as follows:

- Compliance with Articles 6(3) of the EU Habitats Directive
- The Natura Impact Statement
- Appropriate Assessment

**Compliance with Articles 6(3) of the EU Habitats Directive:**

- 9.11. The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site.
- 9.12. The proposed development is not directly connected to or necessary to the management of any European site and is therefore subject to the provisions of Article 6(3).

**Natura Impact Statement**

- 9.13. The application was accompanied by an NIS (revised in response to further information) which described the proposed development, the project site and the surrounding area. The NIS outlined the methodology used for assessing potential impacts on the habitats and species within the River Barrow and River Nore SAC that have the potential to be affected by the proposed development. It predicted the potential impacts for the site and its conservation objectives, it suggested mitigation measures, assessed in-combination effects with other plans and projects and it identified any residual effects on the European site and its conservation objectives.
- 9.14. The NIS was informed by the following studies, surveys and consultations:
- A desk top study,
  - An examination of aerial photography, on line mapping systems and recognised databases (NPWS, National Biodiversity Centre, EPA, IFI )
  - An ecological walkover survey of the proposal site and surroundings
  - Hydromorphology Report prepared in response to further information request.

- 9.15. The NIS report concluded that, subject to the implementation of best practice and the recommended mitigation measures, the proposed development would not individually, or, in combination with other plans or projects adversely affect the integrity of the European site.
- 9.16. Having reviewed the revised NIS and the supporting documentation, including information supplied in response to the further information request, I am satisfied that it provides adequate information in respect of the baseline conditions, clearly identifies the potential impacts, and uses best scientific information and knowledge. Details of mitigation measures are provided and they are summarised in Section 7.3 of the revised NIS. I am satisfied that the information is sufficient to allow for appropriate assessment of the proposed development (see further analysis below).

### **Screening the need for Appropriate Assessment**

- 9.17. The first test of Article 6(3) is to establish if the proposed development could result in likely significant effects to a European site. This is considered Stage 1 of the appropriate assessment process i.e., screening. The screening stage is intended to be a preliminary examination. If the possibility of significant effects cannot be excluded on the basis of objective information, without extensive investigation or the application of mitigation, a plan or project should be considered to have a likely significant effect and Appropriate Assessment carried out.
- 9.18. The applicant carried out an appropriate assessment screening exercise, which is contained in the Natura Impact Statement submitted with the application. The screening report identifies two European sites within the zone of influence of the proposed development, the River Barrow and River Nore SAC (Site code 002162) and Ballyprior Grasslands SAC (Site code 002256).
- 9.19. There are no SPA's within the zone of influence of the proposed project. The screening assessment notes that nearest sites are the River Nore SPA (Site code: 004233) designated for Kingfisher and the Slieve Bloom Mountains SPA (Site code: 004160) which is designated for Hen Harrier. The development site is not located within the same catchment as the River Nore SPA (c 24km to the west) and while Kingfisher may occur on the Stradbally River, there are no suitable nest sites at Inch Bridge. Slieve Bloom Mountain SPA is located c 21km to the west of Inch Bridge and

the works area lies well outside the known foraging and breeding areas for Hen Harrier<sup>1</sup>.

- 9.20. Ballyprior Grasslands SAC is located c 6km to the south-west of the site and is designated for one habitat *Orchid-rich Calcareous Grassland* which is listed on Annex 1 of the E.U Habitats Directive and is a priority habitat. Potential effects on Ballyprior Grasslands SAC were excluded due to the lack of hydrological or other ecological connectivity between the development site and the European site.
- 9.21. The Stage 1 Screening Assessment concluded that the proposed development could potentially result in significant effects on one European site, the River Barrow and River Nore SAC. The works will take place within the Stradbally River, which is part of the SAC. Therefore, the proposed works has the potential to impact directly on the SAC at this location associated with physical disturbance to qualifying interests/possibly mortality during the works and indirectly via impacts on water quality by the mobilisation of silt, sediment and pollutants. No other source-pathway-receptor linkages have been established with any other European site.

#### Conclusion on Stage 1 Screening for Appropriate Assessment

- 9.22. Having regard to the information and submissions made, the nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source-pathway-receptor principle and sensitivities of the ecological receptors, I accept that the River Barrow and River Nore SAC is the only European site which has the potential to be significantly affected by the proposed development. I accept that Ballyprior Grasslands SAC (Site code 002256) can be screened out from further assessment because of the nature and scale of the works, the lack of hydrological or other ecological significant connections and the separation distance between the works and European site.
- 9.23. It is therefore reasonable to conclude on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have significant effects on Ballyprior Grasslands SAC (Site code:002256) in view of the site's conservation objectives and Appropriate

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<sup>1</sup> Assessing Connectivity with Special Protection Area (SPAs) Scottish Natural Heritage (Version 3- June 2016) Hen harrier-core range during breeding season of 2km with maximum range of 10km



Assessment is not therefore required for this European sites. I would conclude that a Stage 2 Appropriate Assessment is required for the River Barrow and River Nore SAC (Site code 002162) as the possibility of significant effects cannot be ruled out.

- 9.24. No measures designed or intended to avoid or reduce any harmful effects on a European site have been relied upon in this screening exercise.

### **Appropriate Assessment -Stage 2**

- 9.25. The AA Screening report concluded that it is not possible to rule out the potential for significant effects on the River Barrow and River Nore SAC (Site code 002162) and that a Stage 2 Appropriate Assessment (NIS) was required.

### **River Barrow and Nore SAC**

- 9.26. The site as described in the NWPS site synopsis 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 Stradbally River is one of the larger tributaries.
- 9.27. The site is of considerable conservation significance for the occurrence of good examples of habitats and of populations of plant and animal species that are listed on Annexes 1 and 11 of the EU Habitats Directive. Annex 11 animal species include Freshwater Pearl Mussel, White-clawed Crayfish, Salmon, Twaite Shad, three lamprey species, Desmoulin's Whorl Snail and Otter. This is the only site in the world for the hard water form of the Freshwater Peral Mussel (limited to a 10km stretch of the River Nore) and one of only a handful of spawning grounds in the country for Twaite Shad. The freshwater stretches of the River Nore main channel is a designated salmonid river.
- 9.28. The main threats to the site and current damaging activities include high inputs of nutrients into the river system from agricultural run-off and several sewage plants overgrazing in woodland areas and non-invasive species.
- 9.29. Site specific conservation objectives have been published for the site with the overall objective being to maintain or restore the favourable conservation condition of the Annex 1 habitat(s) and/or Annex 11 species for which the site is selected.

The qualifying interests of the SAC are listed below, with those likely to be impacted by the works highlighted in bold.

European site (SAC/SPA)	Qualifying Interests	Within Zone of Influence
River Barrow and River Nore SAC (Site code: 002162)	<ul style="list-style-type: none"> <li>• Estuaries</li> <li>• Mudflats &amp; Sandflats</li> <li>• Reefs</li> <li>• Salornica and other annuals colonising mud and sand</li> <li>• Atlantic salt meadows</li> <li>• <b>Water courses of plain to montane levels</b></li> <li>• European dry heaths</li> <li>• Hydrophilous tall herb communities</li> <li>• Petrifying springs</li> <li>• Old sessile oak woods</li> <li>• Alluvial forests</li> <li>• Desmoulin's Whorl Snail</li> <li>• Freshwater Pear Mussel</li> <li>• <b>White-clawed Crayfish</b></li> <li>• <b>Sea Lamprey</b></li> <li>• <b>Brook Lamprey</b></li> <li>• <b>River Lamprey</b></li> <li>• Twaite Shad</li> <li>• <b>Salmon</b></li> <li>• <b>Otter</b></li> <li>• Killarney Fern</li> <li>• Nore Pearl Mussel</li> </ul>	Yes. Inch Bride spans the Stradbally River and is within the SAC

**Appropriate Assessment of the implications of the proposed development on the River Barrow and River Nore SAC (Site code:002162)**

9.30. The following is an objective assessment of the implications of the project on the relevant conservation objectives of the River Barrow and River Nore SAC (Site code: 002162). All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are examined and assessed.

- 9.31. The proposed development requires instream works in the Stradbally River which is part of the SAC. The works have the potential for direct/indirect effects on habitats and species for which the site is selected through disturbance/mortality and indirectly through a deterioration in water quality. The NIS examines the potential for likely significant effects on each of the Qualifying Interests (QI's) of the SAC and the revised NIS includes consideration of conservation objectives relevant to the QI's that occur within the zone of influence of the proposed development.
- 9.32. The majority of the qualifying habitats for which the site is selected will not be impacted by the proposal due to the considerable separation distance and the assimilative capacity of intervening waterways. This includes estuarine/marine habitats (*estuaries, mudflats & sandflats, Reefs, Salornica mud, Atlantic salt meadows* and *Mediterranean salt meadows*). Other habitats are also screened out due to lack of ecological connectivity, distance and lack of presence within/adjacent to the site (*European dry heaths, Hydrophilous tall herb communities, Petrifying Springs, Alluvial forests, Old sessile oak woods, Killarney Fern*). These habitats are located outside of the zone of influence of the proposed development and no direct or indirect effects on these qualifying habitats are predicted. None of the habitats resembling the qualifying interests of the SAC were identified during the site survey.
- 9.33. The NIS concludes that likely significant effects are uncertain in the case of the one habitat (*Floating River Vegetation*). While not recorded in the immediate vicinity of the bridge during the site survey, it is acknowledged that the reaches of the river upstream and downstream have the potential to support this habitat.
- 9.34. With regard to qualifying species, effects on *Desmoulins Whorl Snail* are screened out as it occurs a considerable distance downstream and the habitats and hydrological conditions that occur in the vicinity of the development site are unsuitable for the species. *Nore Pearl Mussel* is confined to the River Nore and not found in the River Barrow. *Freshwater Pearl Mussel* has not been recorded on the Stradbally River. It does occur a significant distance downstream (50km) and is not considered to be within the zone of influence of the proposed works. *Twaite Shad* is an anadromous species with adult fish migrating from saltwater to spawn in freshwater rivers. Due to the location of the main spawning ground in the lower reaches of the River Barrow, this species is not considered to be within the zone of influence of the proposed development.

- 9.35. There are records of *White-clawed Crayfish* on the Stradbally River. *Sea Lamprey* has not been recorded but does occur in the wider catchment and *River Lamprey* and *Brook Lamprey* have been recorded in the Stradbally River and in the main channel of the River Barrow. Salmon have been recorded in the river and at Inch Bridge and the river is noted to contain suitable spawning and nursery habitat. Otter is widespread across freshwater habitats and Stradbally River provides potential foraging, commuting and holting habitat for the species.
- 9.36. The NIS therefore concludes that likely significant effects are uncertain in the case of the one habitat (*Floating River Vegetation*) and 6 no. species (*White-clawed Crayfish, Sea, Brook and River Lamprey, Salmon and Otter*).

#### Potential Impacts during construction

- 9.37. The construction stage of the development has the potential, in the absence of mitigation to result in direct effects on Floating River Vegetation, White-clawed Crayfish, Sea, Brook and River Lamprey, Salmon and Otter associated with destruction of habitat, disturbance, injury or death of species and indirect impacts associated with a reduction in water quality as a result of sediment laden water or other pollutants entering the water course. The potential impacts of the works on the qualifying interests of the SAC within the zone of influence of the proposed works are considered below.
- 9.38. Floating River Vegetation –the NPWS Site Synopsis for the SAC states that floating river vegetation is well represented in the River Barrow and many of its tributaries, but the full distribution of the habitat is not currently known. The Conservation Objective is to maintain its favourable conservation condition.
- 9.39. The habitat is not located in the vicinity of Inch Bridge and as such there is no potential for direct impacts arising from the works. As noted in the hydromorphology assessment report, no negative hydromorphological impacts on the river are anticipated (alterations to river channel, hydrological regime, substratum composition etc) channel which would impact on the availability of suitable areas for floating river vegetation.
- 9.40. The habitat is however dependent on good water quality and may be indirectly impacted by a deterioration in water quality arising from the mobilisation of silt and sediments from the works.

- 9.41. White-clawed Crayfish –The proposed works at Inch Bridge will not remove habitat suitable for use by crayfish but have the potential to result in injury or death of the species. Other threats to the species include non-native crayfish species which have not been identified from the environs of Inch Bridge and crayfish plague which has been noted within the catchment of the River Barrow.
- 9.42. The species is dependent on good water quality and substrate within the river channel. It has the potential to be indirectly impacted by a mobilisation of silt/sediment associated with the works. The Conservation Objective is to maintain the favourable condition of the species.
- 9.43. Sea, Brook and River Lamprey and Salmon – are mobile species using different areas within the SAC. Brook and River Lamprey have been recorded in the Stradbally River and Sea Lamprey occurs further downstream. Salmon has also been recorded in the river at Inch Bridge. The area under the arch where the new riverbed is to be installed does not support suitable habitat for any of the lamprey species or for salmon. The proposed works will not result in a loss of habitat area or heterogeneity. Instream elements of the project such as instream access for personnel, placement of sandbags and dewatering have the potential to disturb qualifying interests. It also has the potential to result in possible mortality of crayfish, lamprey species and their ammocoetes and salmon.
- 9.44. There is potential for injury death during the works but the main impact on these species is indirect associated with the potential mobilisation of silt and sediment associated with the works. The Conservation Objective is to restore the favourable condition of each of these species.
- 9.45. Otter –it is considered that the Stradbally River would provide suitable foraging, commuting and holting habitat for otter, but no activity signs or holts were recorded during the site visit. The Conservation Objective is to restore the favourable conservation condition of the species. The proposed development will not result in any reduction of terrestrial /freshwater habitat and two arches will remain open to river flow during the duration of the works, allowing otter to move upstream/downstream. There is potential for disturbance associated with noise during construction and the location of the construction compound close to the river

bank. There is also potential for indirect effects on otter associated with a reduction in prey sources associated with any deterioration in water quality.

- 9.46. In summary, the works have the potential to result in direct effects on species associated with the works within the river channel. Potential indirect effects are associated with the release of silt, sediment, nutrients, hydrocarbons and other materials into the watercourse, with indirect effects on floating river vegetation, white-clawed crayfish, sea, brook and river lamprey and salmon. There is also the potential for indirect effects on otter associated with a deterioration in water quality and a reduction in food resources, in the absence of mitigation.
- 9.47. I would point out to the Board that an aquatic survey was not conducted which would yield better baseline information. However, the precautionary approach is adopted (where it is assumed that all qualifying interests are potentially present), as reflected in the proposed mitigation measures. I note that the DAU have raised no objection to the development and have made recommendations regarding certain matters, which I consider can be adequately addressed by condition.
- 9.48. The works will be highly localised and cover less than 100m of the river channel and as noted in the Hydromorphology Assessment will not result in a reduction of the hydromorphology of the river channel. The repair works do have the potential to result in channel bank destabilisation and erosion of the compound site, which will result in increased erosion and the loss of agricultural land. This would have potential implications for the hydromorphology of the river and potentially its ecological status which is considered in the revised NIS.
- 9.49. The potential impacts associated with the proposed remedial works to Inch Bridge on the hydromorphology of the river are identified as follows:
- Increased sediment input to the river channel arising from dewatering
  - Increased sediment following remediation works
  - Channel bank destabilisation and erosion from construction activities; and
  - Post construction remediation channel bank erosion.
- 9.50. In terms of significance the impacts are assessed as being 'slight' to 'Imperceptible' in the absence of mitigation. A suite of measures is outlined in the revised NIS to

mitigate these impacts and to ensure that the hydrological and hydraulic regime in the watercourse is not altered.

#### Potential impacts during operation

The proposal is to replace the existing floor of the bridge with like for like stone pitching. No change in river bed level or channel width is proposed and there will be no change to the arch or abutments of the which would reduce the width of the channel. The works when completed will not result in any hydromorphological changes to the river or introduce a barrier to fish migration on the river

#### Potential in-combination and cumulative effects

- 9.51. The potential for in-combination effects with other plans and projects is considered in Section 7.5 of the revised NIS.
- 9.52. The site is located in a rural area and agricultural activity is identified with the potential to result in potential impacts on the SAC. However, as impacts on the SAC are not predicted as a result of the proposed development, it is concluded that agricultural development/operations will not act in combination to create cumulative impacts. I accept that subject to the mitigation measures proposed to be implemented as part of the works, the potential for cumulative effects will not arise.
- 9.53. The Laois County Development Plan 2017-2023 has itself been subject to Strategic Environmental Assessment which concluded that significant environmental effects are not likely to arise from the adopted development scenario. An AA determination of the plan concluded that subject to the inclusion of achievable mitigation measures, significant effects on the integrity of any European site is not likely to arise.

#### **Mitigation measures**

- 9.54. A suite of measures is proposed to mitigate potential impacts on the qualifying features of the SAC. These include measures to prevent sediment and other pollutants from entering the water course during construction and measures to mitigate effects on the river's hydromorphology, disturbance to species and the introduction of invasive species:

#### Measures to mitigate impacts to water quality

- The extent of the works area in the river shall be 20m either side of the bridge.

- Works will be carried out between July 1<sup>st</sup> to September 30<sup>th</sup> inclusive unless otherwise agreed with NWPS and IFI. The works will take place in a dry environment, which will be achieved by setting up a dam system upstream and downstream of the bridge arch.
- The works will be subject to suitable weather conditions and river water levels.
- The development will be carried out in accordance with best practice guidance for the protection of water quality and fisheries during construction.
- No refuelling or servicing of plant/machinery will take place within 20m from any watercourse. Chemicals, fuels and oil stores will be located on an impervious base within a secured bund provided with 110% storage capacity. Biodegradable oils and fuels only will be used.
- Standard best practice mitigation will be employed to prevent leakage of hydrocarbons, including the placing of drip trays underneath standing machinery, availability of emergency spill kits and daily checks of machinery for leakages.
- Equipment will not be washed out within the works area or adjacent to a watercourse.
- Plant will be removed from the river bank at the end of each working day and parked within the farmyard complex c 200m from the river.
- All waste material will be removed off site and disposed of to a licensed facility.
- Monitoring of measures.

#### Measures to mitigate effects on the river's hydromorphology

The revised NIS incorporates additional mitigation measures as set out in the Hydromorphology Assessment report to mitigate impacts on the hydromorphology of the river during the works phase:

- All waters from the dewatering process shall be passed through a constructed swale/settlement pond at the construction compound to remove suspended solids. Additional measures will be used as required including a drainage



geotextile, Terra silt fencing or similar, to promote the settling of fines before the water is discharged back into the river.

- The treated water will be piped back to the river via an overflow pipe. It will not be allowed to flow over ground which would have the potential to result in bank erosion.
- Rainfall on the compound area will be directed to the swale/settlement lagoon for treatment prior to discharge to the river, in order to prevent any suspended solids in storm water run-off entering the river.
- A 5m standoff will be maintained between at the site compound to the river bank. No works, machinery or stockpiling of materials will be allowed within the zone in order to prevent the collapse and erosion of the channel bank.
- All stockpiled fines materials to be used in the foundations will be covered to prevent erosion by rainfall run-off and discharge to the river channel.
- Following the completion of the remediation works loose sand and gravel will be removed from the dry working area by hand prior to the removal of the sand banks, in order to minimise the amount of fines material going back to the river channel.
- Before the sand bags are removed the dry section between the bags will be filled with water by over pumping from the river, at approximately the same level as the river. This measure will reduce the velocity of the water when the bags are removed and will reduce the entrainment and potential erosion of the restoration works area,
- An Erosion and Sediment Control Plan will be prepared for the proposed remediation works and will be implemented at the site during the works to ensure that all mitigation measures are adopted and implemented by the contractor.

#### Measures to mitigate disturbance of species

- Prior to commencement of instream works a crayfish search shall be carried out under the supervision of an ecologist. The crayfish search will be carried out prior to electrofishing. Any crayfish found during the search will be

translocated upstream to a suitable receptor area. Consultation will take place with NWPS to agree a safe release site.

- Electrofishing of the dammed area for both Salmonid and Lamprey species using appropriate standard methodologies will be conducted, supported by IFI. Any species recovered will be translocated to suitable habitat upstream of the works.
- To mitigate impacts on Otter working hours will be restricted to daylight hours only and there will be no overnight artificial lighting of the site.
- The river channel and river banks will not be artificially lit during hours of dusk and darkness.

#### Measures to mitigate introduction of invasive species

- All equipment to be used on the site will be dry and free from debris before being brought on the site.
- If this is not possible, equipment shall be power hosed to a suitably high temperature. Any equipment removed off site to be used elsewhere will be cleaned and disinfected prior to being brought back to the works area.
- Appropriate facilities will be provided for the containment, collection and storage of material/and/or water from washing of equipment, vehicles and personnel.
- The importation of material onto the site will comply with Regulation 49 of the EC (Birds and Habitats) Regulations, 2011.

#### **Mitigation post works**

9.55. No mitigation is considered necessary post construction. The proposed development will replace the floor of the western arch with like for like stone-pitching and will not impact on the hydrological and hydraulic regime of the watercourse.

#### **Assessment**

9.56. The works proposed are small in scale and cover a very limited area of the river bed. The river channel will not be impacted by the proposed development and no changes will occur which would impact on flow velocities or the hydromorphology of the river. Following the completion of the works, no barrier would be created which

would create any artificial barriers to movement or reduce the area of river accessible to the species. The proposed development will not therefore impact on the distribution, population size/structure of the habitat that supports floating river vegetation or species including white-clawed crayfish, sea, river and brook lamprey, salmon and otter.

- 9.57. Subject to the mitigation measures proposed to protect water quality during construction, the appropriate timing of the works and their supervision by an experienced ecologist and compliance with IFI guidance regarding instream works, I accept that significant adverse effects on the habitats and species for which the SAC is selected is not likely to arise.

### **Conclusion on Appropriate Assessment**

- 9.58. The proposed development has been considered in light of the assessment requirements of sections 177U and 177V of the Planning and Development Act 2000 as amended.

- 9.59. Having regard to the nature and scale of the proposed development and the mitigation measures proposed, the information presented with the application and further information including the revised Natura Impact Statement, which I consider is adequate to carry out an assessment of the implications of the proposed development on the integrity of European sites, I consider it reasonable to conclude that the proposed development, individually or in combination with other plans and projects would not adversely affect the integrity of the River Barrow and River Nore SAC (Site code: 002162) or any other European site, in view of the site's Conservation Objectives.

Taking into account the application of the full suite of mitigation measures, the proposal to carry out repair works at Inch Bridge will not cause delays or interrupt progress towards achieving the conservation objectives of the River Barrow and River Nore SAC. The proposed development will not adversely affect the integrity of the European site in view of its conservation objectives. This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.

- 9.60. This conclusion is based on:

- the nature, limited scale and duration of the proposed works,
- prevention of possible construction related pollutants entering the Stradbally River by best practice and effective mitigation measures;

## 10.0 Recommendation

On the basis of the above assessment, I recommend that the Board approve the proposed development subject to the reasons and considerations below and subject to conditions including requiring compliance with the submitted details and with the mitigation measures as set out in the NIS.

### Reasons and Considerations (Draft Order)

In coming to its decision, the Board had regard to the following:

- the EU Habitats Directive (92/43/EEC),
- the European Union (Birds and Natural Habitats) Regulations 2011-2015,
- 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 conservation objectives, qualifying interests and special conservation interests for the River Barrow and River Nore SAC (Site code:002162)
- the policies and objectives of the Laois County Development Plan, 2017-2023,
- the nature and extent of the proposed works as set out in the application for approval,
- the information submitted in relation to the potential impacts on habitats, flora and fauna, including the revised Natura Impact Statement,
- the submissions and observations received in relation to the proposed development, and
- the report and recommendation of the person appointed by the Board to make a report and recommendation on the matter.

### **Appropriate Assessment: Stage 1**

The Board agreed with and adopted the screening assessment and conclusion carried out in the Inspector's report that the River Barrow and River Nore SAC (Site code:002162) is the only European Sites in respect of which the proposed development has the potential to have a significant effect.

### **Appropriate Assessment: Stage 2**

The Board considered the revised 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 implications of the proposed development for the affected European Site, namely the River Barrow and River Nore (Site code: 002162), in view of the site's conservation objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment. In completing the appropriate assessment, the Board considered, in particular, the following:

- i. the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects,
- ii. the mitigation measures which are included as part of the current proposal, and
- iii. the conservation objectives for the European Site.

In completing the appropriate assessment, the Board accepted and adopted the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the integrity of the aforementioned European Site, having regard to the site's conservation objectives.

In overall conclusion, 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 site's conservation objectives.

### **Proper Planning and Sustainable Development/Likely effects on the environment:**

It is considered that, subject to compliance with the conditions set out below, the proposed development would not have significant negative effects on the

environment or the community in the vicinity, would not give rise to a risk of pollution, would not seriously injure the amenities of property in the vicinity, would not adversely impact on the archaeological and built heritage of the area and would not interfere with the existing land uses in the area. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

## **Conditions**

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application and the information contained in the Natura Impact Statement, as amended by the further information received by An Bord Pleanála on the 1<sup>st</sup> day of April, 2022 except as may otherwise be required in order to comply with the following conditions. Where any mitigation measures or any conditions of approval require further details to be prepared by or on behalf of the local authority, these details shall be placed on the file and retained as part of the public record.

**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 The mitigation measures contained in the revised Natura Impact Statement submitted with the application shall be implemented in full.

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

- 3 The works within the river channel shall take place within a dry environment. No works shall take place at or in the river between the 1<sup>st</sup> day of October and the 30<sup>th</sup> day of June in any one year, unless otherwise agreed with Inland Fisheries Ireland and National Parks and Wildlife Service.

**Reason:** In the interest of nature conservation and to ensure the protection of the European site.

- 4 Prior to the commencement of development, the local authority, or any agent acting on its behalf, shall prepare in consultation with the Inland Fisheries Ireland (IFI) a Construction Environmental Management Plan (CEMP), incorporating all mitigation measures indicated in the Natura Impact

Statement and demonstration of proposals to adhere to best practice and protocols. The CEMP shall include:

- (a) location of site and materials compound including areas identified for the storage of construction waste.
- (b) location of areas for construction site office and staff facilities,
- (c) location of chemical/fuel oil storage areas and proposals for containment within specifically constructed bunds to ensure that fuel spillages are fully contained. The bunds shall be roofed to exclude rainwater,
- (d) details of how it is proposed to manage excavated material,
- (e) details of the type and location of sediment features/barriers required to protect water quality during construction.
- (f) details of the source of stone/materials to be used in the construction of the river bed,
- (g) measures to protect water quality during high water levels and flood events
- (h) Erosion and Sediment Control Management Plan.
- (i) Specific proposals as to how the measures outlined in the CEMP will be measured and monitored for effectiveness.

A record of daily checks that the works are being undertaken in accordance with the Construction and Environmental Management Plan shall be maintained on file as part of the public record.

**Reason: In the interest of protecting the environment and the European Site.**

- 5 Prior to the commencement of development, details of measures to protect fisheries and water quality of the river systems shall be outlined and placed on file as part of the public record. Full regard shall be had to Inland Fisheries Ireland's published 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 protecting of receiving water quality, fisheries and aquatic habitats.**

6. The County Council and 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 sites.

7. A suitably qualified freshwater ecologist shall be retained by the local authority to oversee the site set up and construction of the proposed development and implementation of mitigation measures relating to ecology set out in the NIS. The ecologist shall be present during site construction works. Upon completion of works, an ecological report of the site works shall be prepared by the appointed ecologist to be kept on file as part of the public record.

**Reason:** In the interest of nature conservation and the protection of terrestrial and aquatic biodiversity.

8. The County Council and any agent acting on its behalf shall facilitate the preservation, recording, protection or removal of archaeological materials or features that may exist within the site.

In this regard, the County Council shall:

- a) employ a suitably qualified archaeologist prior to commencement of the development who shall assess the site and monitor all site investigations and other excavation works, and
- b) undertake an Underwater Archaeological Impact Assessment in advance of any works. The assessment shall be carried out in accordance with the requirements of the Department of Housing, Local Government and Heritage and shall include the following: detailed desktop study and archaeological assessment to include the river banks and a dive survey.



The assessment shall include survey and recording of the area of the river that will be impacted and adjacent areas,

- i. a metal detection survey,
- ii. the nature and location of any archaeological material on the site,
- iii. the impact of the proposed development on such archaeological material

A report containing the results of the assessment and any recommendations to mitigate any negative impacts shall be submitted to the Underwater Archaeological Unit for consideration in advance of any works commencing on the site.

- c) provide arrangements, acceptable to the Department of Culture Heritage and the Gaeltacht for the recording and removal of any archaeological material which it is considered appropriate to remove.

**Reason:** In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

9. The local authority, or any agent acting on its behalf shall retain the services of a suitably qualified and experienced bat specialist to survey the bridge for the presence of bat roosts, prior to commencement of development. In the event that any roosts are identified, the National Parks and Wildlife Service shall be consulted regarding how best to deal with such roosts. The removal of any roosts identified shall be carried out only under licence from the National Parks and Wildlife Service.

**Reason:** In the interests of protecting ecology and wildlife in the area.

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Breda Gannon  
Senior Planning Inspector

10th May 2022