



An
Bord
Pleanála

Memo to Inspector ABP-305226-19

Development	Footbridge at Castlecomer. Co Kilkenny.
Applicant	Kilkenny County Council
Topic	Support for Appropriate Assessment:
Date of oral hearing	Thursday 30 th January, 2020 Avalon House Hotel, The Square, Castlecomer. Co Kilkenny.
Date of Site Inspection	30.01.2020
Ecologist (Inspectorate)	Dr Maeve Flynn MCIEEM

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1.0 Proposed Development

- 1.1. Kilkenny County Council is seeking planning permission for the construction a two-span pedestrian foot bridge on the eastern side of Castlecomer Town, Co. Kilkenny running parallel to the existing N78 bridge crossing of the River Dinin.
- 1.2. The planning application is supported by a Natura Impact Statement (NIS) prepared by RPS Group on behalf Kilkenny County Council (commissioned by Transport Infrastructure Ireland TII and Kildare County Council acting as lead local authority - Section 85 Agreement). An outline Construction Environmental Management Plan (CEMP) was also submitted detailing how best practice construction measures and mitigation will be implemented.
- 1.3. The proposed pedestrian bridge would be constructed over the River Dinin, which is a major tributary of the River Nore catchment. The development would involve in-stream works associated with site investigation works and the construction of the abutments, single pier and ancillary works. These works would take place within the River Barrow, River Nore SAC and the abutments and pier would become permanent features within the SAC boundary.
- 1.4. A limited agenda Oral Hearing was held on 30th January 2020 in Castlecomer to address issues raised by both the National Parks and Wildlife Service (NPWS) of the Department of Culture, Heritage and the Gaeltacht and Inland Fisheries Ireland (IFI) with Kilkenny County Council, TII, and consultants acting on their behalf. I attended the oral hearing to provide technical support to the Senior Planning Inspector in my capacity as Inspectorate Ecologist with An Board Pleanála. This memo has been prepared for the Board as record of my attendance and to support the Appropriate Assessment process of the implications of the proposed bridge on the integrity of the River Barrow, River Nore Special Area of Conservation (SAC) in particular, and also River Nore Special Protection Area (SPA) and the Lower River Suir SAC.
- 1.5. Having attended the oral hearing and examined the updated information as presented, I am satisfied that detailed information provided will allow for a complete evaluation and assessment of the proposal by the Board.

2.0 Oral Hearing (limited agenda)

2.1. Background

The Natura Impact Statement prepared for the scheme identified that the proposed footbridge in Castlecomer would result in localised short and long-term interference with the River Dinin, part of the River Barrow and River Nore SAC and that, in the absence of appropriate mitigation measures, significant adverse effects on the Qualifying Interests of the River Barrow and River Nore SAC, Lower River Suir SAC and River Nore SPA and their respective Conservation Objectives are likely to arise from the proposed works. The NIS provides detailed mitigation measures to address the potential adverse effects and concludes that with the implementation of best practice and the recommended mitigation measures it is considered that the proposed development will not adversely affect the integrity of River Barrow and River Nore SAC, Lower River Suir SAC and River Nore SPA.

Notwithstanding the detail provided in the NIS, a number of issues raised during the statutory consultation required further clarification. These issues largely relate to the installation of a two-span pedestrian bridge with a single pier installed in the riverbed as opposed to the provision of a single span structure.

Inland Fisheries Ireland's (IFI) policy on Bridge construction is that there should be no interference with the riverbed to avoid habitat loss during construction and long term. Therefore, the preferred options are clear span structures.

The National Parks and Wildlife Service (NPWS) of the Department of Culture, Heritage and the Gaeltacht raised concerns regarding the potential for the installation of the in-channel pier to conflict with the conservation objective to restore the favourable conservation condition for Salmon and Lamprey species in the River Barrow and River Nore SAC as defined by the attributes related to distribution and accessibility to upper reaches of the catchment. Artificial barriers such as weirs can

block upstream migration for fish species, thereby limiting species to lower stretches and restricting access to spawning areas. The existing bridge sill and weir in the River Dinin at the Castlecomer Bridge have been identified as serious upstream migration barriers (O'Sullivan, 2007¹). Upstream migration is limited to large salmonids (Salmon and Trout) in high flow rates. The concern raised by the NPWS relates to the possible interference of the bridge pier with any future conservation plan to remove/adapt the weir for improved fish passage at this location.

2.2. Issues

The oral hearing was structured around a limited agenda related to ecological and cultural heritage issues. The oral hearing was confined to the consideration of the following issues ecological issues:

- Habitat loss (spawning and nursery) and disturbance during the construction and operational phase of the development, with particular reference to the proposed in-channel pier.
- Impact of the proposed pier on salmon and lamprey migration, including flow rates and barriers to free movement of fish.
- Potential implications for future conservation works, particularly the removal of the weir, arising from the construction of the pier.

2.3. Observers

Representatives from the National Parks and Wildlife Service of the Department of Culture Heritage and the Gaeltacht and Inland Fisheries Ireland were in attendance and provided statements related to their scientific concerns regarding the installation of the two-span bridge at this location.

¹ Assessment of fish passage and the ecological impact of migration barriers on the River Nore catchment (2007), Nore Suir Rivers Trust &OPW



A photomontage of the proposed pedestrian foot bridge with in-stream pier, note weir in the foreground.

3.0 Response to issues (summary)

Expert witness on behalf of the Kilkenny County Council included;

- Dr Letizia Cocchiglia, Ecologist with RPS group and author of the NIS prepared for the proposed development. Dr Cocchiglia is a freshwater ecologist with extensive and demonstrated experience in similar projects and assessments.
- Anthony O'Brien, technical director with RPS group and project manager for the proposed development.

3.1. Habitat Loss

Will construction of the pier cause the loss of spawning and nursery habitat (Salmon, lamprey species)?

Dr Cocchiglia described the aquatic habitat at the proposed location of the pier to be unsuitable for spawning for salmonid species and lamprey. An aquatic survey was undertaken by RPS ecologists on 24th September 2018 as part of the scientific baseline for the Natura Impact Statement. Evaluation of the salmonid /lamprey spawning habitat downstream and upstream of the existing bridge was rated as 'poor to none'. This is due to the thick layer of silt under the river substrate and no clean gravel. Downstream of the existing Castlecomer Bridge there were some signs of juvenile salmonid habitat (nursery habitat) with submerged boulders and over hanging vegetation providing suitable cover, shallow fast flowing water and coarse substrate.

The location of the proposed pier is on a small in-stream island with vegetation cover. Evidence was presented that showed that area is stable and not an ephemeral island, being elevated above the water level at most flow levels. This area is unsuitable for salmonid or lamprey spawning.



A picture of the proposed location of the in-channel pier as delineated by the marked-out area on the in-stream island. This area is unsuitable for salmonid or lamprey spawning (30.01.2020).

3.2. Potential impacts of the pier on water flow in the Dinin River

The presence of the pier in the river could change flow rates and instream channels and possibly allow the collection of debris which would create a barrier to the free movement of fish. Both IFI and the NPWS raised concerns regarding the impacts of the pier on water levels and flow velocity in the river and on future conservation works to improve fish passage.

In his evidence to the oral hearing, Mr O'Brien confirmed that results of hydraulic modelling indicated clearly that water levels and flow velocities are not sensitive to the addition of the pier in the river, with negligible changes in water levels and flow velocities anticipated.

3.3. Implications for the Conservation Objectives of the River Barrow, River Nore SAC – Salmon and Lamprey species

The pier may impact on any future conservation works to improve fish passage and open up the catchment for upstream migrating species (salmon, brook and river lamprey) which is a target set for achieving conservation objectives to restore the favourable conservation condition for these species.

The existing weir and bridge sill are acknowledged as barriers to upstream fish migration, with recommendations that that the weir be removed and that a partial rock ramp be constructed on the bridge sill to improve access upstream for fish. As outlined, both IFI and the NPWS have concerns that the proposed in-stream pier would impact on the potential future options for removal and/or redesign of the weir and bridge sill.

At the oral hearing, Mr O'Brien confirmed that the location of the pier is sufficiently removed from the existing weir and the design of the pier and its foundation is sufficiently robust to conclude that the pier will not impact on any possible options for

removal and /or redesign of the weir in the future. The pier would be located 7.5 m from the existing weir and its foundation would be 5.75m from the base of the existing weir. It would be supported on piled foundations and any potential future works that involve excavation of the riverbed or other intrusive works adjacent to the bridge would not result in undermining or loss of support for the bridge pier. He confirmed that hydraulic modelling indicates that the removal of the weir at some future date would have negligible impacts on water levels and flow velocities at the proposed bridge location (Section 4.2 Submission 1).

Due to the protected status of the weir, it was Mr O' Brien's opinion that provision of a fish pass would be the most likely type of conservation work that would take place in this location. Appendix B of his Brief of Evidence includes a drawing (MCT0759PL0104) showing two possible options to support this proposal. Both are partial-width rock ramps and deal with the existing bridge apron and the existing weir. He stated that the drawings show that the footbridge pier would not impact on the provision of a fish pass in the future.

Following questions from the Inspector, it was confirmed by IFI that there are no specific designs or certainties regarding the modifications required to the weir and bridge sill or timeframes. In response to questions from the Inspector, Mr Alan Cullagh (IFI) stated that conservation works were on a list for attention but that larger projects were taking precedence. He acknowledged that it may be possible to install fish passes to improve fish migration and would welcome discussion on how it could be provided as part of the development.

At the closing statement of the oral hearing, the NPWS reiterated their focus was on the conservation objectives of the River Barrow, River Nore SAC and that following the evidence presented at the hearing, they were satisfied that all aspects of the proposed project had been addressed and there was enough information for the Competent Authority, An Board Pleanála to make a sound decision in terms of Appropriate Assessment.

3.4. **Mitigation measures**

A suite of mitigation measures has been proposed to address the potential adverse effects of construction. The measures are set out in Section 6 of the NIS and were updated in the submissions made during the oral hearing (Submission No 2a & 3). The measures proposed are targeted to avoid /reduce potential impacts to a non-significant level in view of the conservation objectives of the European Sites and their qualifying interests. These measures include:

- In-stream activities being restricted to the period from 1 July to 30 September.
- Removal of individuals of those species listed in the NIS by electrofishing from the area to be dewatered prior to the commencement of construction.
- Implementation of a Construction Environmental Management Plan (CEMP).
- Implementation of a Construction Erosion and Sediment Control Plan.

The CEMP integrates all mitigation measures and management requirements detailed in the NIS. It has been prepared in-line with best international practice and is key tool in the implementation of all mitigation measures by the eventual contractor.

4.0 **Conclusion**

Following an examination and evaluation of the material presented at the oral hearing I am satisfied that the information presented addresses all issues raised and conforms to the best available scientific information in relation to the local fisheries habitat at the proposed bridge crossing of the River Dinin. Mitigation measures proposed are in line with best international practice and will ensure no adverse effects during the site investigation works and construction of the proposed pedestrian bridge. Examination of the scientific information and modelling of water flows demonstrates that the insertion of the bridge pier would not impede any future fisheries conservation works that may take place to improve fish passage at the existing weir structure.

Having attended the oral hearing and examined the updated information as presented, I am satisfied that detailed information provided will allow for a complete evaluation of the proposal and will enable the Board to reach, precise and definitive findings for the purpose of Appropriate Assessment.



Dr Maeve Flynn
Inspectorate Ecologist

2nd March 2019