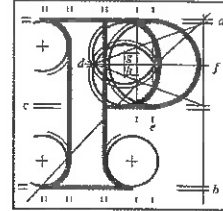


ur Case Number: ABP-311746-21



An
Bord
Pleanála

Development Applications Unit
The Manager
Development Applications Unit (DAU)
Government Offices
Newtown Road
Co. Wexford
Y35 AP90

Date: 13 December 2021

Re: Waterford City Public Infrastructure Project - Flood Defences West. Development of c.1.1km of flood protection measures.
Townland of Mountmisery, Co. Waterford and the townland of Newrath in both Co. Kilkenny and Co. Waterford.

Dear Sir / Madam,

An Bord Pleanála has received your recent submission in relation to the above mentioned proposed development and will take it into consideration in its determination of the matter.

Please note that the proposed development shall not be carried out unless the Board has approved it with or without modifications.

If you have any queries in relation to the matter please contact the undersigned officer of the Board. Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

Sarah Caulfield
Executive Officer
Direct Line: 01-8737287

AA02

Teil	Tel	(01) 858 8100
Glaó Áitiúil	LoCall	1890 275 175
Facs	Fax	(01) 872 2684
Láithreán Gréasáin	Website	www.pleanala.ie
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64 Sráid Maoilbhríde	64 Marlborough Street
Baile Átha Cliath 1	Dublin 1
D01 V902	D01 V902



Your Ref: ABP- 311746-21

Our Ref: 177AE Waterford Flood Defence

(Please quote in all related correspondence)

9 December, 2021

The Secretary,
An Bord Pleanála,
64 Marlborough Street,
Dublin 1

Via email: sids@pleanala.ie

Re: Application to An Bord Pleanála under Sections 175, 177AE and 226 of the Planning and Development Act 2000 (as amended) by Waterford City & County Council for Waterford City Public Infrastructure Project - Flood Defences West

A chara

The Department refers to the correspondence received on the 26th October, 2021 with respect to the above referenced development application.

Outlined below are heritage-related observations/recommendations co-ordinated by the Development Applications Unit under the stated headings.

Nature Conservation

This Department recognises that the works proposed are in the public interest and necessary to prevent flooding of critical infrastructure. The proposed project includes the loss of approximately 800m² of the Annex I habitats intertidal mudflat and estuaries within the Lower River Suir Special Area of Conservation (SAC), and will also involve potential disturbance to qualifying interest species. The Department believes that suitable alternative habitat to compensate for loss of habitat should be provided elsewhere within the range of species affected within or adjoining the Lower River Suir Special Area of Conservation.

While mudflat and estuary are not themselves qualifying interests of the Lower River Suir SAC, these habitats are used in varying degrees by the qualifying interest species Twaite Shad *Alosa fallax*, Sea Lamprey *Petromyzon marinus*, River Lamprey *Lampetra fluviatilis*, Atlantic Salmon *Salmo salar* and Otter *Lutra lutra*. Having considered the Natura Impact Statement, the proposed mitigation and the Site Specific Conservation Objectives for this SAC this Department accepts the conclusion of the Natura Impact Statement that the project would not constitute an adverse impact on the site in terms of the Habitats Directive and



therefore would not be in breach of article 6(3) of the Directive. Nevertheless apart from temporary disturbance the project does entail the undesirable permanent removal of habitat which is used by Annex II qualifying interest species and is also itself listed on Annex I of the Habitats Directive though not a qualifying interest for this site.

The most recent (2019) assessment of the status of EU protected habitats and species in Ireland lists the conservation status of Twaite Shad and Sea Lamprey as bad, River Lamprey as unknown and Atlantic salmon as inadequate. Both of the habitats Tidal mudflats and estuaries are listed as inadequate and deteriorating. Objective 1 of the National Biodiversity Action Plan is to mainstream biodiversity into decision-making across all sectors and Action 1.1.3 is that *“all public authorities and private sector bodies move towards no net loss of biodiversity through strategies, planning, mitigation measures, appropriate offsetting and/or investment in Blue-Green infrastructure”* and public authorities are identified as lead/key partners in achieving this action. In our view in this case appropriate offsetting would be the provision of similar habitat to that to be lost elsewhere within or adjoining this SAC.

The Department welcomes the proposed use of eco-structures in the intertidal zone on the new concrete wall however this is not a substitute for the permanent loss of mudflat habitat, hence the need for provision elsewhere.

The loss of the non-qualifying interest Annex I habitats as part of the proposal should also be considered in the context of the Environmental Impact Assessment being undertaken. Any such losses of habitat should be considered significant and the provision of compensatory habitat considered. Various opportunities for such habitat creation exist within and adjoining this SAC.

The Department does not accept the conclusion of the EIAR that the project, particularly the loss of approximately 800m² of two Annex I habitats can be classified as having no effect on the designated site and feels that the statement that there will be no net loss of biodiversity within the zone of influence while possibly correct in strict terms of species numbers, does not reflect the significance of the conservation value of threatened habitats over more common ones or the importance of available non priority habitat in which a species can range or retreat to, or be buffered from other threats or disturbances. The proposed eco-cladding as stated is welcome and better than the alternative of a flat concrete finish but is not a replacement for the habitats to be lost.

Archaeology

Having reviewed the EIAR, plans and particulars submitted, the National Monuments Service (NMS) of the Department to make the following observations.

The 'Archaeology and Cultural Heritage' chapter comprises a Desk Based Assessment that includes a field inspection (predominantly undertaken by boat). The assessment notes that there are no recorded monuments within the proposed development boundary, no previous excavations have been undertaken therein and 'No direct or indirect impacts will occur on the recorded archaeological resource, either during the construction or operation of the



proposed development'. The assessment identified eight landing stages of post-medieval date, a landing stage abutment and the existing quay wall, which is 'contemporary with the construction of the expanded railway infrastructure during the late 19th century'. The assessment also notes that 'numerous shipwrecks are listed for the coastal water surrounding the Port of Waterford. However, none are listed for the specific area under assessment'. The assessment identifies a number of potential impacts on archaeology/cultural heritage, including the potential for direct, negative impacts on archaeological features or deposits, both in-stream and terrestrial, from ground disturbances associated with the construction of the flood defences and an attendant compound. As mitigation (Section 19.12), the assessment proposes an intertidal and wade/dive and metal detecting survey to be undertaken by a suitably experienced and licensed underwater archaeologist, a photogrammetry survey of the wall it is proposed to be demolished and mapping and recording of the former landing stages (which will be avoided by development works).

The Underwater Archaeology Unit is of the view that the archaeological potential of the intertidal muds and river-bed within the proposed development area has not been adequately assessed in the submitted documentation. The proposed development area's close proximity to the medieval port-city of Waterford, its location on one of the key communication arteries into the hinterland of southern Ireland, and its location in an area of concentrated prehistoric, medieval and post-medieval settlement, provides a high likelihood that it contains previously unknown submerged underwater archaeology. This may include, for example, evidence for structures such as slipways, quays, weirs, fishtraps, industrial structures, reclamation deposits and artefactual material. Similarly, although (as noted in the 'Archaeology and Cultural Heritage') there are no wrecks recorded from the specific proposed development area, there are numerous examples whose precise locations are unknown noted in the Shipwreck Inventory of Ireland Database from the River Suir/Waterford Harbour area and it is thus possible, given the substantial length (c. 1.1km) of river encompassed by the proposed development area, that it contains submerged wrecks. Section 3 of the National Monuments (Amendment) Act 1987 is the primary piece of legislation for the protection of wrecks over 100 years old and archaeological objects underwater irrespective of age. Wrecks that are less than 100 years old and archaeological objects or the potential location of such a wreck or archaeological object can also be protected under Section 3 of the 1987 (Amendment) Act. Similarly, the north-east side of the proposed development area corresponds with the location of part of the former wooden bridge (known as 'Timbertoes') which, in 1793-4, was the first to be built across the River Suir. Its construction is regarded as a significant feat of structural engineering for the time and elements of the 1793-4 bridge (and its 1913 and 1935 successors), as well as the ferry landing stages that provided the river crossing before the first bridge was built, may survive beneath and in the environs of the present Rice Bridge and may also be impacted upon by the proposed development.

The c.545m section of the existing quay wall will be demolished to approximately 800mm below the existing ground level as part of the proposed development. Approximately 28m of this section of the wall will be demolished above and below ground; c.25m will be demolished to facilitate the construction of a pumping station and up to 3m will be demolished to connect landside and riverside sections of the new sheet pile wall. The quay wall is not a recorded



monument or a protected structure. However, the structure should be fully examined and recorded to determine the presence/absence of any possible earlier fabric/structures and to develop a mitigation strategy to ensure the protection of the archaeological heritage. The preliminary examination of the quayside wall as described in the EIAR seems to have been completed from a boat.

It is acknowledged in the EIAR that the demolition of sections of the quay wall, including the landing stage abutment, but not including the wall associated with landing stage 7, will result in a direct, negative, significant, impact on the archaeological resource.

It also remains possible that ground disturbances associated with the proposed development may have a direct, negative, impact on archaeological features or deposits that have the potential to survive behind the quay walls proposed for demolition or during any other associated ground works.

It is recommended in the EIAR that all ground disturbances associated with excavations within the car park associated with the existing train station be monitored by a suitably qualified archaeologist. However, it is the opinion and recommendation of the National Monuments Service that the completion of a programme of pre-development archaeological testing (licensed under the National Monuments Acts 1930-2014) in the areas of proposed groundworks and the preparation of a detailed archaeological impact assessment report (including suggested mitigation) in advance of any demolition and/or construction works is required. This AIA should be completed well in advance of any construction contract to ensure the identification of any surviving archaeological features/deposits within the proposed development area at the earliest possible stage of the project, to review design details as necessary to ensure preservation in-situ where appropriate and to develop an informed archaeological strategy to be implemented in agreement with the National Monuments Service to ensure the protection of the archaeological heritage.

In light of the above it is recommended that An Bord Pleanála request submission of an Archaeological Impact Assessment (AIA) and Underwater Archaeology Impact Assessment (UAIA) as Further Information. The AIA and UAIA shall contain the following:

Underwater Archaeological Impact Assessment

1. A desktop assessment that builds on the previously submitted 'Archaeology and Cultural Heritage' chapter of the EIAR to address the riverine, underwater, archaeological and built (including industrial) heritage of the proposed development area. The assessment shall include a full inventory and mapping of the sites of all identified archaeological/cultural heritage features and structures (including those identified underwater) and shall also include maps/drawings that clearly indicate any proposed impacts on these assets/areas of archaeological potential arising from the FRS project. The UAIA shall also assess Site Investigation impacts and potential secondary or indirect impacts such as access roads or construction works to facilitate access to the river, areas of souring as a result of change in hydrology and areas where barges carry out anchoring activities. No groundworks are to take place in the absence of the archaeologist.



2. The UAIA shall include a licenced wade/dive assessment accompanied by a hand-held metal detection survey undertaken by a suitably licenced and experienced archaeologist with metal detection experience. A wade survey, it is advised, should only be undertaken in benign conditions and in water less than 0.75m in depth. All archaeological diving should comply with the Health and Safety Authority's Safety, Health and Welfare at Work (Diving) Regulations 2018/2019. For larger stretches of riverbed, an underwater geophysical survey may be required and should be carried out licenced under the National Monuments Acts 1930-2014. A Dive Licence (section 3 1987 Act) and Detection Device consent (section 2 1987 Act) will be required for all of these works. Please allow 5-6 weeks to facilitate the processing of an Archaeological Licence.
3. Having completed the above works, the archaeologist shall undertake targeted archaeologist test-trenching within specific areas of the proposed development area, to be agreed with the National Monuments Service, in order to adequately characterise any potential features or structures that are identified and the nature, depth, extent and artefact-bearing potential of the riverine stratigraphy. The archaeological test excavation shall be carried out under licence from the NMS and in accordance with an agreed method statement; note a period of 5-6 weeks should be allowed to facilitate processing and approval of the licence application and method statement. Test trenches shall be excavated at locations chosen by the archaeologist, having consulted the most up to date site engineering drawings. Excavation is to take place to the uppermost archaeological horizons only, where they survive. All excavated soils shall be spread out and metal-detected by an experienced archaeologist with a detection device licence. Where archaeological material is shown to be present, the archaeologist shall stop works in the affected area pending further advice from NMS. Please note that all features/archaeological surfaces within the test trenches are to be hand-cleaned and clearly visible for photographic and surveying purposes.
4. Having completed the work, the archaeologist shall submit a written report to the NMS describing the results of the UAIA, including test excavations. The report shall include a comprehensive Archaeological Impact Statement that comments on the degree to which the extent, location and levels of all proposed works (sheet-piling, ground disturbances, foundations, service trenches and other sub-surface works including Site Investigation works) required for the development will affect the archaeological materials that have been identified and areas of archaeological potential. This should be illustrated with appropriate plans, sections and photographs. Where archaeological material/areas of archaeological potential are shown to be present, the report shall recommend further mitigation measures. Any identified archaeological impacts shall be mitigated in the detailed engineering and architectural design of the proposed FRS. All recommendations will require the agreement of the NMS. These may include recommendation for refusal, redesign to allow for preservation in situ, further wade/dive surveys, excavation and/or monitoring as deemed appropriate. NMS will advise with regard to these matters. No construction works should commence until after the UAIA has been submitted and reviewed.

Archaeological Impact Assessment

5. An archaeologist with industrial archaeology expertise shall be engaged by WCCC to prepare a detailed Archaeological Impact Assessment relating to the terrestrial



archaeology element of the overall project, in consultation with the Underwater Archaeologist engaged by the developer.

6. The existing quay wall proposed for alteration/demolition shall be fully recorded and examined to determine the presence/absence of any possible earlier fabric/structures and to develop an appropriate mitigation strategy to be agreed, in advance of any site preparation and/or construction works, with the National Monuments Service to ensure the protection of the archaeological heritage.
7. The archaeologist shall complete a programme of pre-development archaeological testing (licensed under the National Monuments Acts 1930-2014) in the areas of proposed groundworks and prepare a detailed archaeological impact assessment report (including suggested mitigation) well in advance of any demolition and/or construction works. This AIA shall be completed well in advance of any construction contract to ensure the identification of any surviving archaeological features/deposits at the earliest possible stage of the project, to review design details as necessary to ensure preservation in-situ where appropriate and to develop an informed archaeological strategy to be implemented in agreement with the National Monuments Service to ensure the protection of the archaeological heritage.

Should An Bord Pleanála not request Further Information but instead grant permission for the development we request that the above recommendations shall form Conditions of planning permission. In addition the following archaeological monitoring condition shall be included:

- The services of a suitably qualified and suitably experienced underwater archaeologist shall be engaged to carry out archaeological monitoring for the works programme. The archaeological monitoring shall be licensed by the Department of Housing, Local Government and Heritage and a detailed method statement shall accompany the licence application. The method statement shall lay out the monitoring strategy for each location where works are proposed. A communication strategy is to form part of the monitoring strategy to ensure full communication is in place between the monitoring archaeologist and the plant operators at all times during works. The archaeological personnel undertaking the monitoring will be in a position to monitor directly all elements of the works, to ensure they have unobstructed views of the excavations/other works, and the plant and machinery operators should be prepared to facilitate the archaeological personnel in the undertaking of their monitoring work. As part of the Finds Retrieval Strategy in the methodology, all excavated material removed shall be spread and metal detected (under licence) to assess the artefact-bearing potential of the deposits. If, after an agreed period of time, there is minimal artefactual evidence forthcoming, the archaeological metal detecting of the spoil may be scaled down. Sufficient archaeological personnel shall be in place to cover all aspects of the monitoring works. Should potential archaeology be identified during the works, then the construction works shall be suspended in that location and the National Monuments Service shall be notified. Further archaeological works shall be required. These may include further archaeological assessment, test-excavations, avoidance/preservation in situ or full excavation. Following the completion of works reports detailing the



outcome of the monitoring shall be forwarded to the National Monuments Service, as per conditions of archaeological licences.

To note:

As is recommended by this Department in relation to all Flood Relief Schemes, it is advised that Waterford City and County Council engage the services, if they have not already done so, of a FRS Project Archaeologist to oversee and advise on all aspects of the scheme from design, through inception to completion. Similarly, it is advised that the methodologies and processes outlined in the 'Guidelines for the Archaeological Assessment of Flood Relief Schemes' (DHLGH 2021) are consulted and adhered to in undertaking the archaeological assessments for these projects.

It is also recommended that the archaeologist undertaking the UAIA has extensive experience in the riverine and underwater environment to help ensure that they are fully aware of the types of underwater heritage that are to be recorded in the area, the potential for previously unrecorded cultural heritage to be located in such environments and how to deal with assessing them in the first instance, including specific licensing requirements relating to such environments. This will save time and resources, and ensure progress and retain clarity in archaeological works from the outset.

If there are any elements of the scheme or new elements introduced since the initial scheme was advertised and the EIAR published that have not been previously assessed then they shall require further assessment.

You are requested to send any further communications to the Development Applications Unit (DAU) at manager.dau@housing.gov.ie, or to the following address:

The Manager
Development Applications Unit (DAU)
Department of Housing, Local Government & Heritage
Government Offices
Newtown Road
Wexford Y35 AP90

Is mise le meas,

Michael Murphy,
Administration
Development Applications Unit