## LOUTH COUNTY COUNCIL Comhairle Contae Lú



## Section 177AE Application Report for Coastal Protection Works at Drummullagh, Omeath, Co. Louth

Relating to Construction, Planning & Environment Report (in Accordance with Section 177AE of the Planning and Development Act 2000 (as amended))

### **Revision History**

Prepared	Approved	Status	Issued to	No of	Date
by	by			copies	
JK	CS	Draft			Dec 2023
JK	CS	Final	ABP	3	Jan 2024

### **CONTENTS**

1.	INTF	RODUCTION	Page 1		
2.	PRO	PROJECT PARTICULARS			
	2.1	Client	3 3 3		
	2.2	Project Supervisor (Design Stage)	3		
3.	PLA	PLANNING CONTEXT			
	3.1	8			
		3.1.1 National Planning Framework (NPF)			
		Project Ireland 2040	4		
		3.1.2 Climate Action Plan 2023	4		
		3.1.3 Maritime Area Planning (MAP) Act 2021	4		
		3.1.4 Regional Spatial and Economic Strategy			
		(RSES) 2019-2031	5		
	3.2	Louth County Development Plan 2021 - 2027	5		
		3.2.1 Development Zoning	6		
		3.2.2 Climate Change	6		
		3.2.3 Flooding	7		
4.	DRU	DRUMMULLAGH COASTAL PROTECTION WORKS			
	4.1.	Location	8		
	4.2.	Project Justification	9		
	4.3.	Synopsis of the Works	9		
	4.4.	Timescale for the Completion of the Construction Work	10		
	4.5.	Existing Environment			
	4.6.	Design Drawings	10		
	4.7.	Mitigation Measure	11		
	4.8.	Construction Phase(s)	13		
	4.9.	Emissions/Discharges during Construction	14		
	4.10.	Operational Phases	14		
	4.11.	Flood Risk Assessment	14		
	4.12.	Hydrological/Hydrogeological Impact	14		
	4.13.	Assessment of Landscape Status and Visual Impact	14		
	4.14.	Archaeology, Architecture & Cultural Heritage	15		
	4.15.	Air, Odour and Noise Emissions	15		
5.	CON	CONSULTATION			
	5.1.	Consultation with Landowners and Residents	16		
	5.2.	Consultation with Elected Representatives	16		
	5.3.	Consultation with Maritime Area Regulatory Agency (MARA)			
	5.4.	Consultation with Prescribed Bodies	16		

6.	SITE RULES AND RESTRICTIONS	18
	6.1. Site Rules	18
	6.2. Site Restrictions	18
7.	UNFORESEEN CIRCUMSTANCES	19

#### **APPENDICES**

- Appendix A OPW Funding Approval Letter
- Appendix B Natura Impact Statement
- Appendix C Stakeholder Correspondence
- Appendix D Omeath Settlement Plan
- Appendix E Design Drawing
- Appendix F Photographs
- Appendix G Plates

Appendix H Draft Construction Environmental Management Plan

#### **FIGURES**

- Figure 1 Location Map (Drummullagh, Omeath, Co. Louth)
- Figure 2 Carlingford Shore SAC boundary at works location
- Figure 3 Extract from European Atlas of the Seas (2019)
- Figure 3 Works Area
- Figure 4 Satellite view of works area
- Figure 5 Extract from Drawing No. CE-2023-03-01 Rev. A
- Figure 6 Extract from Drawing No. CE-2023-03-01 Rev. A
- Figure 7 Proposed Compound and Storage Area

#### **1. INTRODUCTION**

The coastline of County Louth is of great amenity and recreational value. Furthermore, the coastline supports a variety of natural habitats and many species of protected flora and fauna. Special areas of conservation (SAC), proposed natural heritage areas (pNHA) and special protection areas (SPA) designations cover most of the coastline.

This report provides information to facilitate a Section 177AE Assessment under the Planning and Development Act, 2000, (as amended) for proposed coastal protection works at Drummullagh, Omeath, Co. Louth. The proposed works are located on the shoreline of Carlingford Lough and lies within the Carlingford Shore Special Area of Conservation 002306. The proposed works location is approximately 8km away from the Carlingford Lough Special Protection Area 004078.

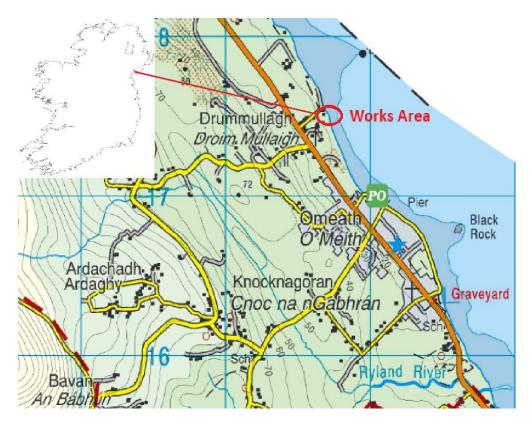


Figure 1 – Location Map (Drummullagh, Omeath, Co. Louth)

The proposed works location is susceptible to high winds, storm surge and coastal erosion to varying degrees. Historical flood defences have been diminished over the recent past and consequently, a private residence adjacent to the works area is at risk of coastal flooding. Office of Public Works (OPW) funding has been approved (see Appendix A) to carry out coastal defence works at this location in order to protect the private residence.



Figure 2 – Carlingford Shore SAC boundary at works location

Given that the proposed work lies within the Carlingford Shore SAC, it was considered that significant effects to the Qualifying Interests (QI) of the SAC were unlikely to be screened out during an Appropriate Assessment Screening process. Therefore, Louth County Council commissioned a Natura Impact Statement (NIS) for the proposed works. This NIS was carried out by Mulroy Environmental during the summer and autumn of 2023 and the report was finalised in November 2023. A copy of the NIS is contained in Appendix B.

#### 2. PROJECT PARTICULARS

#### 2.1. CLIENT

Louth County Council County Hall, Millennium Centre, Dundalk, Co. Louth. A91 KFW6.

#### 2.2. PROJECT SUPERVISOR DESIGN PROCESS (P.S.D.P)

Louth County Council County Hall, Millennium Centre, Dundalk, Co. Louth. A91 KFW6.

#### **3.** PLANNING CONTEXT

The proposed scheme and subsequent Section 177AE Application have taken cognisance of the following National, Regional and Local planning policies:

#### 3.1. NATIONAL & REGIONAL POLICIES

#### 3.1.1. National Planning Framework (NPF) Project Ireland 2040

The NPF recognizes that as a result of climate change, sea levels and patterns of accretion and erosion are key issues for planning and flood risk assessment.

The following national policy objectives are considered relevant in the context of the proposed scheme:

**National Policy Objective 41A:** Ensure that Ireland's coastal resource is managed to sustain its physical character and environmental quality.

**National Policy Objective 41B:** In line with the collective aims of national policy regarding climate adaptation, to address the effects of sea level changes and coastal flooding and erosion and to support the implementation of adaption responses in vulnerable areas.

#### 3.1.2. Climate Action Plan 2023

The Climate Action Plan 2023 (CAP23) states that "climate change is causing fundamental and potentially irreversible changes to our marine environment, with consequences for all of society. Global ocean warming and ocean acidification may result in dire consequences for our marine ecosystems. At the same time, the intensity of storm events has increased, threatening coastal communities and infrastructure." It is these globally occurring actions that give rise to the need for the proposed project.

#### 3.1.3. Maritime Area Planning (MAP) Act 2021

The Maritime Area Planning (MAP) Act 2021 has provided the legal underpinning to an entirely new marine planning system, which will balance harnessing offshore wind potential with protecting our rich and unique marine environment. Enactment of the MAP Act has delivered a new legislative basis. A new agency, the Maritime Area Regulatory Authority (MARA), has been established to manage consenting, licensing, and enforcement activities in Irish marine space.

Louth County Council has engaged with MARA in order to obtain Maritime Area Consent (MAC) for the proposed works (See Appendix C). It is envisaged that MAC will be granted by May 2024 at the latest.

#### 3.1.4. Regional Spatial and Economic Strategy (RSES) 2019-2031

In line with national policy, the RSES 2019 - 2031 recognizes that "coastal erosion and flooding have the potential to seriously affect properties, businesses, transport infrastructure, coastal habitats and cultural heritage sites. Many areas are experiencing 'coastal squeeze' from increasing population and development pressures and the effects of climate change, with the east coast particularly vulnerable to sea level rise due to the large proportion of the population living in close proximity to the coast".

Regional policy objectives as they relate to coastal erosion are set out as follows:

**RPO 7.3:** Eastern and Midland Regional Assembly will support the use of integrated Coastal Zone Management (iCZM) to enable collaborative and stakeholder engagement approaches to the management and protection of coastal resources against coastal erosion, flooding and other threats. (The use of iCZM is also referenced under Section 11.5.2.1 - Integrated Coastal Zone Management in the Louth County Development Plan 2021 - 2027).

**RPO 7.4:** Statutory land use plans shall take account of the risk of coastal erosion, whereby new development should be avoided in areas at risk of coastal erosion to the greatest extent practicable.

#### 3.2. LOUTH COUNTY DEVELOPMENT PLAN 2021 - 2027

Chapter 11 of the Louth County Development Plan (CDP) 2021 - 2027, and in particular Section 11.5 "The Coast", narrates the strategic, environmental and economic importance of the coastline of Louth. It also acknowledges the vulnerability of the coastline through the continuous natural dynamic processes of erosion and deposition.



Figure 2 – Extract from European Atlas of the Seas (2019)

Chapter 11 of the CDP identifies policies to which the proposed project will adhere to insofar as practical. These policies are namely:

- **ENV 53** To explore, where coastal erosion is considered a threat to existing properties, the technical, environmental and economic feasibility of coastal adaptation and coastal retreat management options.
- **ENV 55** To identify, prioritise and implement necessary coastal protection works subject to the availability of resources, whilst ensuring a high level of protection for natural habitats and features, and ensure due regard is paid to visual and other environmental considerations in the design of any such coastal protection works.

#### 3.2.1. DEVELOPMENT ZONING

The Omeath Settlement Plan (See Appendix D) as adopted under the Louth County Development Plan 2021 – 2027, identifies that the site of the proposed works is located within, and at the very northern end of, the boundary settlement of Omeath Village. The site lies within a "L1-Strategic Reserve", the policy objective of which is to "provide a land reserve for the orderly expansion of the settlement into the future". Typically, "strategic reserve" lands are strategically located lands that will generally not be available for development until after the expiration of the current Development Plan.

The Settlement Plan provides the following description of Omeath and the surrounding townlands:

"Omeath is a rural, coastal village located 6km north of Carlingford, 10km south of Newry and 3km from the border with Northern Ireland. It is sited on the Cooley peninsula, on the southern shore of Carlingford Lough. The settlement is surrounded by dramatic landscapes with the Carlingford Lough coastline and expansive views of the Mourne Mountains to the east and the Cooley Mountains and Slieve Foye to the west. The village is set within a designated Area of High Scenic Quality (AHSQ). Omeath is a long linear settlement, which has evolved primarily along the Greenore Newry Regional road (R173). The village comprises a 'commercial centre' at the R178/ Station Road junction and a 'civic centre' towards the southern end of the village. A number of landmark buildings are located within the settlement, which helps to define the village's character; they include Howe's public house, Dublin House, Prospect House and Nucella Lodge."

#### **3.2.2. CLIMATE CHANGE**

The Louth CDP recognises that the coastline is an important resource to protect and is also subject to erosion from sea level rises due to climate change. Policy CA4 seeks to support the work of Louth County Council in:

- Developing a robust comprehension of the key risks and vulnerabilities of the County to the negative impacts of climate change;
- The implementation of adaptation and mitigation actions of the strategy aimed at building climate resilience across local communities; and
- Promoting the integration of effective adaptation and mitigation considerations into decision making processes.

#### 3.2.3. FLOODING

Flood zones are geographical areas within which the likelihood of flooding is in a particular range and they are a key tool in flood risk management within the planning process as well as in flood warning and emergency planning.

Louth County Development Plan 2021 – 2027 states "Like other natural processes flooding cannot be completely eliminated, but its impacts can be minimised, with proactive and environmentally sustainable management of catchments, identifying areas vulnerable to flooding and by taking measures to ensure development does not individually or cumulatively contribute to an increase in flood risk. With climate change, there is a likelihood of increased rainfall and rising sea levels, which coupled with increased urbanisation means that flood risk to property is likely to increase in the future."

It is with this in mind, that Louth County Council wishes to carry out the proposed project in order to minimise the threat of coastal flooding to the private property by defending the existing boundary wall to a higher standard than currently exists.

#### 4. DRUMMULLAGH COASTAL PROTECTION WORKS

#### **4.1. LOCATION**

The proposed works location is along the shoreline of Carlingford Lough on the Cooley Peninsula in the townland of Drummullagh, just north of Omeath village, Co. Louth. Approximate grid co-ordinates for the site are as follows:

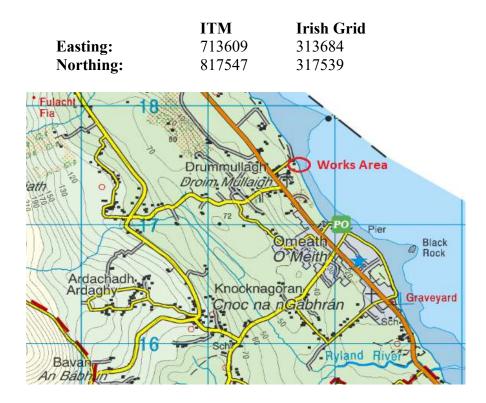


Figure 3 - Works Area

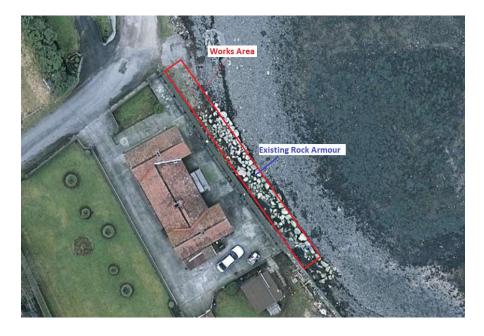


Figure 4 – Satellite view of works area

#### 4.2. PROJECT JUSTIFICATION

A length of coastline (approximately 40m long) at the above location has experienced ongoing coastal erosion and storm damage over the last number of years and, in particular, during the storm events of the recent years.

Existing rock armour at this location has been displaced and depleted. Consequently, this exposes the boundary wall, which protects a private residence from coastal flooding, to wave damage.

The proposed works aims to reinstate the previous rock armour protection to a higher standard of protection, thereby protecting the private property into the future.

In line with OPW criteria and standards, a cost benefit analysis showed that there is financial justification for carrying out these coastal protection works at this location in order to protect the private property.

#### 4.3. SYNOPSIS OF THE WORKS

The proposed works involve the following (refer to Appendix E, Drawing No. CE2023-03-01 Rev. A):

- Removal of any existing rock armour over the works footprint (40m long x 3m wide) and temporary storage of this rock armour at a designated storage area above the High Water Mark,
- Excavation of a trench approximately 3m wide x 1m deep and temporary storage of excavated material within the works area,
- Installation of a concrete footing approximately 1m wide to a depth of 0.45 0.6m along for a length of 40m on the seaward side of the boundary wall. This footing is required to provide increased protection to the existing boundary wall foundations,
- Placement of a layer of geotextile membrane underneath the rock armour to mitigate against any migration of fines from under the rock armour,
- Placement of the first row of 2-3 tonne boulders within the excavation to form a bedding of rock armour, off which further armour will be positioned,
- Placement of further rows of rock armour, with each row stepped back, to form a sloped wall of rock armour towards the boundary wall,
- Placement of previously excavated material within the voids of the rock armour.

# 4.4. TIMESCALE FOR THE COMPLETION OF THE CONSTRUCTION WORK

Anticipated construction time is approximately 4 weeks.

#### 4.5. THE EXISTING ENVIRONMENT

The site location at Drummullagh is in a rural location on the shore of Carlingford Lough, some 800m north of the village of Omeath. The site faces opposite the port at Warrenpoint, County Down, Northern Ireland, some 700m across the lough. The area has limited services and infrastructure. There are some private dwelling houses and a few small commercial properties within the immediate environs of the site.

#### 4.6. DESIGN DRAWINGS

Design Drawing No. CE-2023-03-01 Rev. A (see Appendix E) has been prepared to demonstrate and aid the understanding of the proposed works. Extracts of this drawing are shown below.

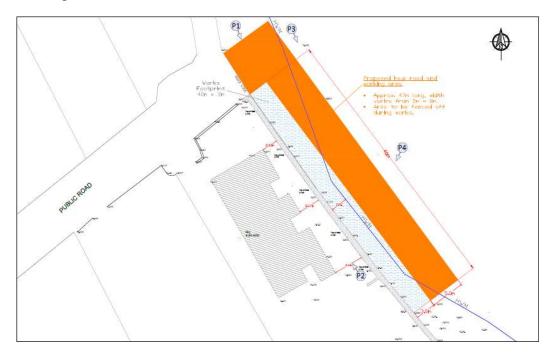


Figure 5 - Extract from Drawing No. CE-2023-03-01 Rev. A

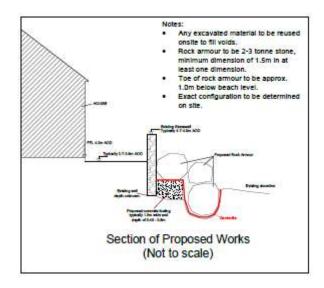


Figure 6 - Extract from Drawing No. CE-2023-03-01 Rev. A

#### 4.7. MITIGATION MEASURES

The following extract from Section 10 of the NIS identifies the proposed mitigation measures:

- A site-specific Construction and Environmental Management Plan (CEMP) will be prepared for the development in advance of the works by the appointed Contractor with a draft CEMP submitted to Louth County Council's representative for approval prior to commencement of the works. (For noting, a Draft CEMP has been prepared by Louth County Council for further development with the appointed contractor – See Appendix H);
- In order to minimise any impact to Natura 2000 sites, in particular Carlingford Shore SAC [002306], it is proposed that daily supervision by an Ecological Clerk of Works (EcOW) is provided before, during and after the completion of the construction works;
- Coastal protection works should only take place outside of the winter migratory bird months of September to March;
- Ecological enhancements can be implemented in coastal protection structure design to boost biodiversity and offset any possible negative impacts on the local ecology. For example, the addition of rough materials (i.e., jagged/porous rocks), artificial texturing on surfaces, or repurposing existing weathered rocks adds structural complexity; and therefore, creates microhabitats which will increase species colonisation. Another example includes incorporating structural gaps to increase water retention at low tide and mimic more valuable rock pool habitats. Ecological enhancements can be incorporated once the structural integrity remains intact with regards to the required specification and the specific purpose of the works;

- During periods of heavy precipitation and run-off, works will be halted or working surfaces/pads will be provided to minimise soil disturbance;
- Any bulk fuel storage tank should be a sufficient distance from the foreshore and properly bunded with a bund capacity of at least 110% of that of the fuel tank. No refuelling or storage of fuel will occur within the works area;
- Limit disturbance when excavating Retain as much of the vegetated areas as possible. By limiting land disturbance, erosion hazards are reduced;
- The pouring of concrete for the project shall be completed in the dry to avoid seepage to the groundwater environment;
- Temporary fills or stockpiles will be covered with polyethylene sheeting to avoid sediment release associated with heavy rainfall;
- All fuels, lubricants and hydraulic fluids for equipment used on the construction site should be stored a sufficient distance from the foreshore in a roofed and bunded hazardous liquids container. These liquids should be carefully handled to avoid spillage, properly secured against unauthorised access or vandalism, and provided with spill containment in accordance with current best practice;
- A wheelie bin type hydrocarbon spill kit will be required and should be positioned close to the works area at the foreshore to deal with any leakage from plant working within the coastal protection works site; and
- Given the risk posed by the leakage of hydrocarbons from the excavator and dumper (e.g.hydraulic fluid from leaking cables, leaking diesel, lube oil, etc), a sufficiently long floating spill boom with a suspended curtain will need to be put in place on the foreshore to prevent the spread of any hydrocarbons in the event that a leakage of hydrocarbons occurs. The floating spill boom will be required to completely encircle the entire works area with the boom being tethered to posts installed upgradient of the high-water mark. The integrity of the boom will require checking twice a day.

In addition to the NIS mitigation measures, the successful contractor will be required to adhere to the following for the contract period:

- The successful contractor will be notified by Louth County Council of his obligations relating to Health and Safety and Environmental Protection.
- The boundary of Carlingford Shore SAC will be identified and the working area will be fenced off at the outset of the site works.
- Storage of fuels and oils and daily refilling shall be undertaken at least 50m away from the SAC in a contained bunded area and the Contractor shall have the required spill kits available.

- All contractors plant shall be checked daily to ensure there are no fuel leaks.
- Tyres and tracks of plant and construction related vehicles will be checked for the presence of plant material (e.g. leaves, roots and rhizomes) from non-native invasive species before initial arrival on site and each return journey to site.
- The donor site for the materials i.e. quarry which is to act as the source of gravel and stone will be subject to screening for non-native invasive species prior to the commencement of works.
- Construction works shall be confined to hours stipulated in Section 6.2.
- Contractor to comply with all measures identified within the adopted Construction Environmental Management Plan (CEMP)
- Pouring, placing and working of concrete shall comply with the following in order to mitigate against calcite runoff:
  - Concrete to be poured when the tide is receding,
  - Concrete will not be permitted to be poured if a high tide level is at risk of reaching the works location,
  - Concrete to be poured during dry weather only,
  - During the curing process, "wet concrete" will be covered and remain so until concrete has sufficiently cured, and
  - Insofar as possible, the water content of the specified concrete will be minimised.
- Storage of materials and plant will only be allowed within the works area and the designated storage area as shown in Figure 7.
- Car parking within the works area or within the SAC will not be permitted during the works.



Figure 7 - Proposed Compound and Storage Area

#### **4.8. CONSTRUCTION PHASE(S)**

Should this project proceed to construction stage and given the small scale nature of the works, it is anticipated that the construction works will be completed in one

single phase. The anticipated actions required for construction of this coastal protection scheme are as follows:

- Inductions and site set up by appointed contractor.
- Carry out mitigation measures as identified in the NIS (see Section 4.10 below),
- Site preparation/clearance of the works area,
- Excavation and preparation of trench for concrete plinth and foundation boulders.
- Formwork and placement of concrete to form the required concrete plinth,
- Placement of geotextile membrane and rock armour,
- Reuse of material excavated from trench within the voids of rock armour protection,
- Tidy of site and removal of all associated construction materials and debris.

#### 4.9. EMISSIONS/DISCHARGES DURING CONSTRUCTION

No discharges or emissions to land or sea will arise from the proposed works. Construction noise and emissions to air from machinery will be no more than standard construction activity and will be very short-term given the proposed works duration. Overall emission and discharges arising during construction are considered to have a negligible impact.

#### 4.10. OPERATIONAL PHASES

There are no operational requirements for the proposed works. Maintenance of the permanent works is expected to be minimal over the lifetime of the defences.

#### 4.11. FLOOD RISK ASSESSMENT

The proposed development will not give rise to any flooding or impact adversely upon adjoining lands.

#### 4.12. HYDROLOGICAL/HYDROGEOLOGICAL IMPACT

There are no watercourses or surface water systems within the vicinity of the works The proposed works will not have any hydrological or hydrogeological impact upon the site location. (Refer to Section 5 of the NIS).

#### 4.13. ASSESSMENT OF LANDSCAPE STATUS AND VISUAL IMPACT

The permanent works will not be visible from any designated scenic routes or indeed the Regional Road, R173. The permanent works will only be visible from the lower end of the adjacent local public road and from the shoreline in proximity of the works. Given the small scale nature of the works (40m in length) and the low lying nature of the permanent works, there will be minimal effect on the overall visual appearance of the coastline.

(See Appendix F for current views of the proposed works area).

#### 4.14. ARCHAEOLOGY, ARCHITECTURE AND CULTURAL HERITAGE

A preliminary overview of the existing environment with regards to archaeology, architecture and cultural heritage was carried out. This desk based review of available data (obtained from MapViewer Database 2020) is collated in Appendix G. The review has determined that the proposed project has negligible impact on known archaeology, architecture or cultural heritage.

#### 4.15. AIR, ODOUR AND NOISE EMISSIONS

The permanent works will not give rise to any ongoing air, odour or noise emissions.

There will be the standard temporary noise emissions arising from construction traffic and works for the duration of the project, however this is expected to be minimal. It is anticipated that an excavator and site dumper will be the main items of plant operating during each working day, with intermittent deliveries of rock armour from tipper lorries.

Restricting the works to outside of the wintering season (October to March inclusive) will avoid disturbance to the wintering birds from any air, odour or noise emissions that may arise.

#### 5. CONSULTATION

Public consultation prior to formal application under Section 177AE of the Planning and Development Act 2000 (as amended) is not a statutory requirement. Given the limited size of the proposed works, the works location and the extremely limited number of affected individuals, Louth County Council has not carried out any formal Public Consultation Days for this project however consultation as per below has taken place.

#### 5.1. CONSULTATION WITH LANDOWNERS AND RESIDENTS

There are no affected landowners – the works area is in public ownership. The owner of the property being protected has been kept informed of the project status by informal conversations with local authority staff.

#### 5.2. CONSULTATION WITH ELECTED REPRESENTATIVES

Louth County Councillors have been briefed about the project status through a series of Louth County Council newsletters and will be continued to be briefed through these newsletters as the planning process and project progresses.

# 5.3. CONSULTATION WITH MARITIME AREA REGULATORY AUTHORITY (MARA)

Prior to this Section 177 Application, Louth County Council has corresponded with Maritime Area Regulatory Authority (MARA) in order to arrange for Marine Area Consent (MAC) for the proposed works (See Appendix C).

#### 5.4. CONSULTATION WITH PRESCRIBED BODIES

The following list of Prescribed Bodies will be formally notified of this Section 177AE Application as set out in Article 121 of the Planning and Development Regulations 2001 (as amended):

- Department of Environment, Climate and Communications,
- Department of Agriculture, Food and Marine,
- Department of Housing, Local Government and Heritage, including National Parks and Wildlife Service,
- An Taisce,
- Heritage Council,
- Inland Fisheries Ireland,
- An Chomhairle Ealaíon (The Arts Council), and
- Fáilte Ireland.

#### 6. SITE RULES & RESTRICTIONS

#### 6.1. SITE RULES

The following is a non-exhaustive list of specific site rules which are to be developed by the successful tenderer:

- Mandatory that all site personnel have a valid Safe Pass.
- All staff to be inducted on the Health and Safety and Environmental issues.
- Control of access to the site and the prevention of unauthorised entry.
- Arrangements for personal protection measures for employees, visitors and other contractors and sub-contractors.
- Arrangements for spillages.
- Arrangements for training of employees in health, safety and welfare at work and how to deal with environmental issues.
- Arrangements to ensure that other contractors and sub-contractors provide evidence of their health and safety and environmental policies to ensure compliance with site rules.
- Arrangements for ensuring that all visitors to site comply with the site rules.
- Emergency procedures to deal with accidents.

#### **6.2. SITE RESTRICTIONS**

The following site restrictions will apply:

• <u>Restrictions on Working Hours</u>

Normal working hours are as follows but cognisance should be given to tidal conditions which will restrict available working hours:

0800 - 1800 hrs Monday-Friday

0800 - 1630 hrs Saturday

<u>Restrictions on Access</u>

The Contractor shall ensure that access to and from all properties adjoining the site shall not be unreasonably restricted during the construction works. The maintenance of access shall be the responsibility of the principal contractor.

#### 7. UNFORSEEN CIRCUMSTANCES

Where any unforeseen circumstances arise, the matter must be submitted to the Project Supervisor Design Process (PSDP) as soon as possible after the event. Thereafter, the PSDP shall determine the most appropriate course of action, bearing in mind any planning conditions, environmental restrictions etc.

All unforeseen circumstances shall be documented and recorded by the PSDP.

### **APPENDICES**



### Appendix A

### **OPW Funding Approval Letter**



### **Appendix B**

### Natura Impact Statement

Volume I Report Volume II Appendices Figures



### Appendix C

### **Stakeholders Correspondence**



### Appendix D

### **Omeath Settlement Plan**



### Appendix E

### **Design Drawing**



### Appendix F

### Photographs



### Appendix G

Plates



### Appendix H

### Draft CEMP