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NARROW WATER BRIDGE PROJECT

Marine Conservation Zone Assessment

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Client:
Louth County Council
Roads Section
County Hall
Millenium Centre
Dundalk
Co. Louth

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1. INTRODUCTION

1.1 Background

Roughan & O'Donovan (ROD) was appointed by Louth County Council, to provide environmental consultancy services in relation to the Narrow Water Bridge project ("the proposed development").

The Environmental Impact Statement (EIS) and Natura Impact Statement (NIS) / Habitats Regulation Assessment (HRA) for the proposed development were submitted to An Bord Pleanála (ABP) and Planning Service Northern Ireland in the Department of Environment (DoE) in 2012. Following which, an Oral Hearing was held in June 2012 before ABP and Planning Service Northern Ireland granted approval for the project in October 2012.

As the project will require construction works within the Newry River, a Marine Licence is required in order to complete the proposed development. ROD, on behalf of Louth County Council, were instructed by the Marine and Fisheries Division of the Department of Agriculture, Environment and Rural Affairs (DAERA) ("the Competent Authority"), to prepare a Marine Conservation Zone Assessment (MCZ) Report in accordance with relevant EU and UK legislation, associated guidelines and standards as part of the licence application. The aim of this MCZ Assessment report is to inform and assist the Competent Authority in carrying out its assessment by recommending whether or not the proposed development, either individually or in-combination with other plans and projects, has the potential to significantly affect one or more Marine Conservation Zones in view of their Conservation Objectives.

It is the considered opinion of ROD, as the author of this MCZ Assessment Report, that the proposed development, either individually or in-combination with other projects, is not likely to give rise to impacts which would constitute significant effects on the Carlingford Lough MCZ or any other MCZ, in view of its Conservation Objectives, and therefore, a Stage 2 MCZ Assessment is not required in respect of the proposed development.

1.2 Competent Experts

This MCZ Assessment was prepared by Rachel Heaphy and checked/reviewed by Patrick O'Shea. Rachel is an Ecologist with two years' experience in ecological assessment. She holds a BSc (Hons) in Zoology from University College Cork and an MRes degree (with distinction) from the University of Roehampton. Rachel is a Qualifying Member of the Chartered Institute of Ecological and Environmental Management (QualCIEEM).

Patrick is a Principal Ecologist with eleven years' experience in ecological assessment. He holds a degree in Botany from Trinity College Dublin and an MSc in Ecological Management and Conservation Biology from Queen's University Belfast. Patrick is a Full member of the Chartered Institute of Ecological and Environmental Management (CIEEM).

1.3 Legislative Context

The Marine Act (Northern Ireland) 2013 makes provisions for:

- Marine plans in relation to the Northern Ireland inshore region;
- Marine conservation zones in that region;
- Marine licensing for certain electricity works in that region; and
- Connected purposes.

Marine Conservation Zones (MCZs) are designated under the Marine Act (Northern Ireland) 2013 to conserve marine species and habitats in the Northern Ireland inshore region.

Current marine licensing legislation applies to the Northern Ireland inshore region and allows sensible and necessary development to go ahead in a manner that minimises adverse impacts on the environment, human health and users of the sea.

1.4 Assessment Methodology

Section 23 of the Marine Act (Northern Ireland) 2013 places duties on the public authority that have the function of determining an application for authorisation of the doing of an act, and the act is capable of affecting (other than insignificantly):

- The priority marine features of an MCZ; and,
- Any ecological or geomorphological process on which the conservation of any protected feature of an MCZ is (wholly or in part) dependent.

According to *Marine Conservation Zones and Marine Licensing* (MMO, 2013), best practice in undertaking MCZ Assessments involves a three-staged approach, as described in sections 1.4.1 – 1.4.3.

1.4.1 Screening

All marine licence applications will be screened to determine whether Section 126 should apply to the application. Section 126 will apply if it is determined, through the screening, that:

- The licensable activity is taking place within or near an area being put forward or already designated as an MCZ; and,
- The activity is capable of affecting (other than insignificantly) either (i) the priority marine features of an MCZ; or (ii) any ecological or geomorphological process on which the conservation of any protected feature of an MCZ is (wholly or in part) dependent.

The Marine Management Organisation (MMO) recommends a risk-based approach when determining the proximity, or 'nearness' of an activity to the MCZ. This includes applying an appropriate buffer zone around the MCZ priority marine features under consideration as well as the consideration of risks for activities at greater distances from the MCZ priority marine features.

In determining 'insignificance', the public authority will consider the likelihood of an activity causing an effect, the magnitude of a potential effect and the potential risk any such effect may cause on either the MCZ priority marine features or any ecological or geomorphological process on which the conservation of any protected feature of an MCZ is (wholly or in part) dependant.

Where it has been determined through screening that Section 126 should apply to the licence application, the public authority will assess the application further to determine which subsections of s.126 should apply to the application. This will be done in two stages; stage 1 assessment and stage 2 assessment.

1.4.2 Stage 1 Assessment

If required, the stage 1 assessment will consider whether the conditions in Section 126(6) of the MCAA can be met. In doing so, the public authority will use the information supplied by the applicant, along with the licence application, advice from Statutory

Nature Conservation Bodies (SNCBs) and any other relevant information to determine whether:

- There is no significant risk of the activity hindering the achievement of the MCZ Conservation Objectives; and
- The public authority can exercise its functions to best further the MCZ conservation objectives, in accordance with Section 125(2)(a) of the MCAA.

If the condition in Section 126(6) cannot be met, the stage 1 assessment will also consider whether the condition in s.127(7)(a) of the MCAA can be met. In doing so, the public authority can determine whether:

- There is no other means of proceeding with the act which would create a substantially lower risk of hindering the achievement of the MCZ conservation objectives. This should include proceeding with it (a) in another manner, or (b) at another location.

In undertaking a stage 1 assessment, the public authority will consult with SNCB for a period of 28 days unless the SNCB notifies the public authority that it need not wait or the public authority determines that there is an urgent need to grant authorisation, in accordance with Section 126(2).

Within stage 1 assessment, 'hinder' will be considered as any act that could, either alone or in-combination:

- In the case of a conservation objective of "maintain", increase the likelihood that the current status of a feature would go downwards (e.g. from favourable to degraded) either immediately or in the future (i.e. they would be placed on a downward trend); or
- In the case of a conservation objective of "recover", decrease the likelihood that the current status of a feature could move upwards (e.g. from degraded to favourable) either immediately or in the future (i.e. they would be placed on a flat or downward trend).

Similarly, 'further' will be considered as any act that could:

- In the case of a conservation objective of "maintain", increase the likelihood that the current status of a feature would be maintained either immediately or in the future; or
- In the case of a conservation objective of "recover", increase the likelihood that the current status of a feature could move upwards (e.g. from degraded to favourable) either immediately or in the future.

When considering whether an activity can further or hinder the conservation objectives of a site, the public authority will consider the direct impact of an activity upon a feature as well as any applicable indirect impacts. Such an indirect impact could include the changing the effectiveness of a management measure put in place to further the conservation objectives.

The applicant should be able to demonstrate that 'other means' reduces the risk such that the act no longer has a significant risk of hindering the conservation objectives of the site.

1.4.3 Stage 2 Assessment

The stage 2 assessment will consider whether the conditions in Section 126(7)(b) and (c) of the MCAA can be met. In doing so, the public authority will use information supplied by the applicant with the licence application, advice from the SNCBs and any other relevant information to determine whether:

- The benefit to the public of proceeding with the act clearly outweigh the risk of damage to the environment that will be created by proceeding with it; and, if so, then whether;
- The applicant can satisfy the public authority that they will undertake or make arrangements for the undertaking of measures of equivalent environmental benefit to the damage which the act will or is likely to have in or on the MCZ.

The above determinations will be addressed in sequence, that is, if the public benefit test is not 'passed' then a consideration of measures of equivalent benefit would not be made as the application would be rejected.

As well as consulting with the SNCBs a wider consultation with other advisors may also be undertaken at this stage, in particular to provide additional and specific advice on socio-economic matters. For example, consultees could include Local Authorities, Local Enterprise Partnerships and central Government departments (such as the Department for Business Innovation and Skills, Department for Communities and Local Government, Department for Energy and Climate Change or Department for Transport) that may have relevant expertise to offer. All advice received by the public authority will be considered in the decision-making process in the normal manner.

In determining 'public benefit' the public authority will consider benefits at a national, regional or local level. Applications for activities that are of solely private benefit would not be considered to deliver a benefit to the public.

In determining 'measures of equivalent environmental benefit', the types of compensatory measures that might be considered under the Habitats Directive would also be appropriate to put forward here, although consideration will not be confined to those.

The Department for Environment, Food and Rural Affairs (DEFRA) MCZ consultation document states that:

> "*There is a strong scientific case for an assessment of a marine protected area network to be based on biogeographic regions, rather than administrative regions. Defra considers that this should provide the basis for future designation of MCZs. As the network continues to develop, effective management will also remain a key factor in assessing an ecologically coherent marine protected area network, and further links to international commitments under OSPAR*."

Given this policy position, and recognising that MCZs will be designated in tranches, the public authority will consider 'measures of equivalent environmental benefit' that are of relevance to any of the commitments the UK has made on MPAs at a national and international level. The reasons why an affected MCZ was designated (in addition to the features it was designated for) is relevant in this context as this may offer a broader ecosystems context for the consideration of measures.

The public authority will work closely with applicants and the SNCBs in determining suitable measures. They may also seek additional policy advice from DEFRA during this stage in the process. The public authority will require commitment from an applicant 'measure of equivalent environmental benefit' can be secured and functioning before they can be 'satisfied', in accordance with Section 126(9) of the MCAA.

The following guidance documents informed the assessment methodology:

- Marine Management Organisation (MMO) (2013) *Marine Conservation Zones and Marine Licensing*. Department for Environment, Food and Rural Affairs, United Kingdom.
- Natural England and Joint Nature Conservation Committee (JNCC) (2010) *Marine Conservation Zone Project: Ecological Network Guidance.* Natural England, Department for Environment, Food and Rural Affairs, United Kingdom.
- Natural England and Joint Nature Conservation Committee (JNCC) (2012a) *The Marine Conservation Zone Impact Assessment.* Natural England, Department for Environment, Food and Rural Affairs, United Kingdom.
- Natural England and Joint Nature Conservation Committee (JNCC) (2012b) *The Marine Conservation Zone Project.* Natural England, Department for Environment, Food and Rural Affairs, United Kingdom.
- Natural England and Joint Nature Conservation Committee (JNCC) (2012c) *Marine Conservation Zones Time Line / Process.* Natural England, Department for Environment, Food and Rural Affairs, United Kingdom.
- Natural England and Joint Nature Conservation Committee (JNCC) (2012d) *Marine Conservation Zones – Conservation Objectives.* Natural England, Department for Environment, Food and Rural Affairs, United Kingdom.
- Natural England and Joint Nature Conservation Committee (JNCC) (2012e) *A Stakeholder-led Process – How were sea users and other interest groups involved in recommending Marine Conservation Zones?* Natural England, Department for Environment, Food and Rural Affairs, United Kingdom.
- Natural England and Joint Nature Conservation Committee (JNCC) (2012f) *Marine Protected Areas (MPAs) in the UK.* Natural England, Department for Environment, Food and Rural Affairs, United Kingdom.
- Natural England and Joint Nature Conservation Committee (JNCC) (2012) *The Differences between Natura 2000 and Marine Conservation Zones.* Natural England, Department for Environment, Food and Rural Affairs, United Kingdom.

Figure 1.1 below presents a summary of the MCZ assessment process.

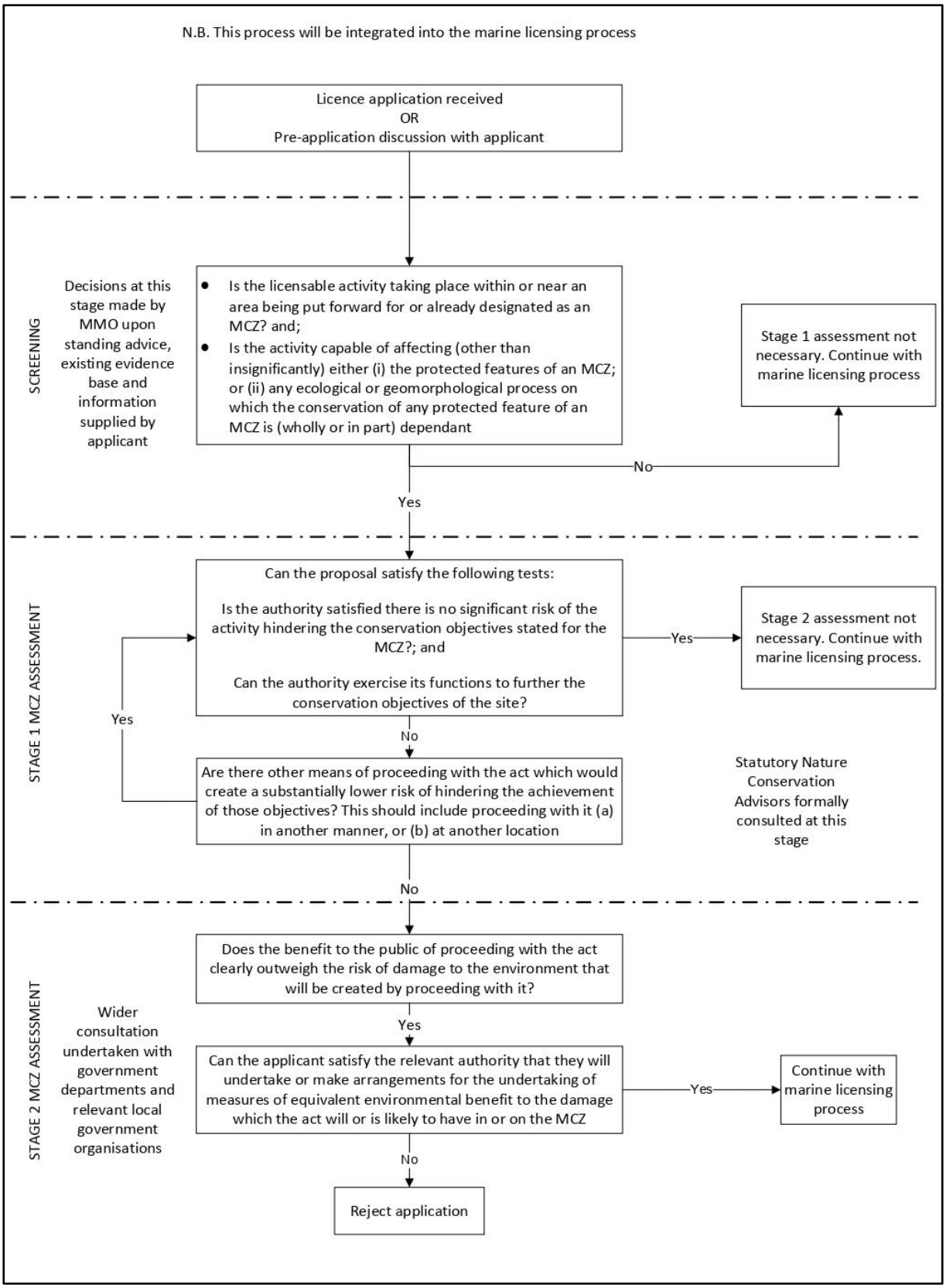

Figure 1.1 Summary of the MCZ assessment process used by the public authority in marine licence determination (MMO, 2013).

2. DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Overview

Carlingford Lough and the upper reaches of the Newry River estuary are bounded by Counties Louth, Armagh and Down. In times past, up to the 19th Century, ferry services were provided between Greenore in County Louth and Greencastle in County Down. Similarly, ferry services existed across the Newry River Estuary at Narrow Water Keep and continue during summer months.

2.2 Site Location

The proposed Narrow Water Bridge will cross the Newry River approximately 400 m south of the Narrow Water Keep. The bridge, which will connect the R173 Omeath Road south of Ferry Hill and the A2 dual carriageway at the existing roundabout, is situated approximately 1 km northwest of Warrenpoint and 2 km northwest of Omeath. The bridge will pass close to the stone tower navigational beacon near the southern shoreline. The site is situated between the steep Cooley Mountains to the south and the drumlins of Down to the north. The Newry River flows through this valley before widening to form Carlingford Lough.

2.3 Link Road

The proposed Narrow Water Bridge will provide a new single carriageway link road, which will connect Omeath and Warrenpoint in counties Louth and Down, respectively. It is intended that the proposed link would intersect the existing R173 south of Ferry Hill in the townland of Cornamucklagh. The total length of the scheme is approximately 660 m.

A new roundabout will be required, where the link road connects to the R173 Omeath Road. The route, which commences at the proposed Cornamucklagh Roundabout, heads towards the Newry River following the existing field boundaries. The vertical alignment generally reflects the existing terrain, which descends from 19 m OD along the R173 Omeath Road to sea level, on the southside, however, some “cut and fill” will be necessary to ensure a smooth flowing alignment.

The route straightens and gently rises as it approaches the river avoiding the stone tower to the north. Upon reaching the river’s navigational channel, the alignment descends to tie into the A2 dual carriageway at the existing roundabout, which is situated directly adjacent the Newry River at 3.5 m OD above sea level (Malin and Belfast). The existing A2 roundabout will be modified to accommodate this additional link.

The project also includes for the provision of pedestrian and cyclist facilities between the proposed Cornamucklagh Roundabout on the R173 and the A2 roundabout.

2.4 Proposed Structure

The chosen bridge design is a Cable-Stayed Bridge with a Rolling Bascule Opening Span.

The structure is a two-span cable stayed bridge with an asymmetric arrangement. The south span is 138.35 m and the north span is 56.8 m giving a total length of 195 m. All towers are located at the edge of the bridge over the abutment foundation and are leaning back 56 degrees towards the outside of the main crossing. Neither tower has back stays. The asymmetry of the span is reflected in the tower heights, while the south

tower is approximately 86 m high, and the north tower is only 32 m high. Additionally, the south tower is located transversally on the centre line of the bridge while the north tower consists of twin cantilever towers located on each side of the structure. The deck has a linear variable depth along the south span from 2.0 m at the south abutment to 1.5 m over the central pier, keeping a constant depth of 1.5 m along the north span. The bridge shows no skew at any of its three supports. The south abutment will be integral, connecting monolithically the abutment, the south tower and the deck. The bridge will have a movement joint at the intermediate pier and at the end of the north abutment, as required to allow the opening of the north (rolling bascule) span.

The deck will be an orthotropic steel deck supported by the towers.

A detailed description of the proposed development is available in Chapter 3 of the Environmental Impact Statement / Environmental Statement (EIS/ES), which was submitted to An Bord Pleanála (ABP) and Planning Service Northern Ireland in the Department of Environment (DoE) in 2012 as part of the planning application.

3. DESCRIPTION OF RECEIVING ENVIRONMENT

3.1 Introduction

The proposed development, as described in Section 2, has the potential for negative effects on water quality due to the presence of equipment and machinery on site. These elements present on site increase the potential for sediment mobilisation and/or the spillage of pollutants entering watercourses through surface water runoff.

There are potential pathways for impacts from the proposed development to the following MCZ:

- Carlingford Lough MCZ

The Carlingford Lough MCZ is approximately 2.3 km downstream of the proposed development location in Carlingford Lough via the Newry Estuary. Due to the hydrological connection between the proposed development and this site, the Carlingford Lough MCZ has been considered within this MCZ Screening. The location of the Carlingford Lough MCZ in relation to the proposed development is presented in Figure 3.1.

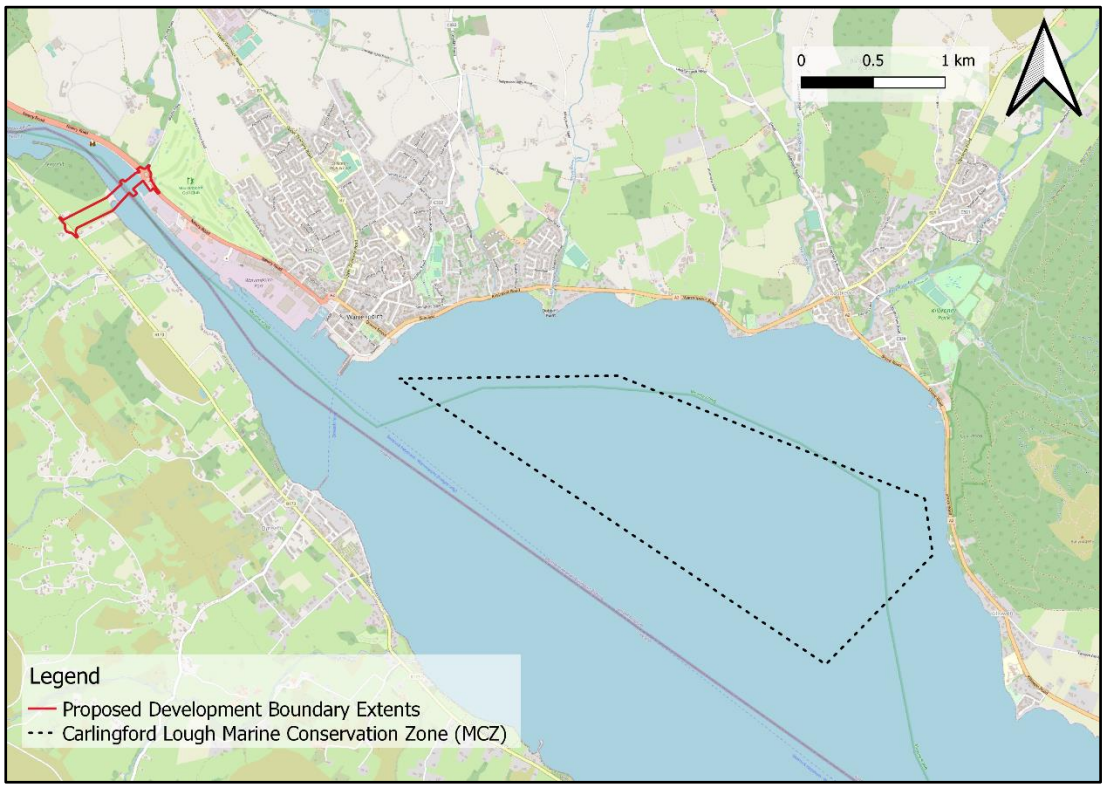

Figure 3.1 Location of the Carlingford Lough MCZ in relation to the proposed development

3.2 Site Description

Carlingford Lough MCZ

The description of the Carlingford Lough MCZ provided here is based on the Conservation Objectives and Potential Management Options (DAERA, 2016a) and Site Summary (DAERA, 2016b) for the site.

Priority Marine Features

- '*Philine aperta* and *Virgularia mirabilis* in soft stable infralittoral mud'

Site Overview

Carlingford Lough is a narrow and shallow sea lough that lies on the east coast of Ireland, located at the border of Northern Ireland and the Republic of Ireland. The MCZ is located off the northern shore and lies north of the navigation channel in the inner part of the Lough. Carlingford Lough has an extensive intertidal area of sand and mudflats that provide key feeding grounds for overwintering birds.

The MCZ consists of a shallow subtidal area of fine mud encompassing 3.23 km^2. The MCZ has been designated as it supports the habitat *Philine aperta* (White lobe shell) and *Virgularia mirabilis* (Sea-pen) in soft stable infralittoral mud. This habitat is only present in Carlingford Lough; individual records of *P. aperta* and *V. mirabilis* occur throughout Northern Ireland. Both *P. aperta* and *V. mirabilis* occur in high densities within the MCZ and this habitat is thought to be a temporal variant of other sublittoral cohesive mud and sandy mud communities.

Subtidal (sublittoral) mud habitats generally occur in water depths greater than 20-30m but may occur in shallower sea lough waters such as Carlingford Lough. As this site is sheltered from wave action, these soft mud communities are present in shallow depths (<15 m).

High densities of the White lobe shell (*P. aperta*) usually characterise this feature; however, in Carlingford Lough the MCZ also contains one of the densest beds of Sea-pens (*V. mirabilis*) recorded in Northern Ireland.

The biotope '*Philine aperta* and *Virgularia mirabilis* in soft stable infralittoral mud' is characterised on the basis of its epifauna. The habitat created by the Sea-pens offer shelter, food and oxygen to a diverse range of small benthic infaunal organisms such as the very rare sea cucumber, *Ocnus planci*, which has regularly been observed in the MCZ. Apart from occasional Norway lobster (*Nephrops norvegicus*), burrowing crustacean megafauna are mainly absent from this habitat in Carlingford Lough.

The boundary was drawn following the extent of *P. aperta* and *V. mirabilis* records. This enables the site integrity of the MCZ to be conserved while representing the range in diversity of Subtidal (sublittoral) mud habitats within the area. A buffer zone of 100 m from aquaculture sites (north to south-east borders) was incorporated into the MCZ boundary following pre-consultation discussion and advice with industry representatives. This will enable shellfish operations to continue without impacting the conservation objectives or the integrity and diversity of the site. For the southern extent of the boundary an administrative mid-line was used.

At present, the '*Philine aperta* and *Virgularia mirabilis* in soft stable infralittoral mud' habitat is not on any conservation list. However, it is rare due to the shortened height

of the individual *Virgularia* and overall density of the population in MCZ. *V. mirabilis* is a Northern Ireland Priority Species. Historical records of the biotope are reported from 1968. This has been supplemented with additional surveys conducted as part of the site designation process.

3.3 Summary of Potential Impacts

Carlingford Lough MCZ

During the construction and operation phases, the Newry Estuary provides a pathway for sediment mobilisation and pollutants to be discharged to this MCZ, with the potential to affect the Priority Marine Features for which this MCZ is designated.

With respect to sediment mobilisation, heavy sediment loading during construction could locally impact the Priority Marine Features. However, the construction methodology (refer to EIS Chapter 11) includes for the installation of temporary cofferdams around the sites of the abutments on both shores. This ensures that the sediment release during construction is minimal and temporary and as such it is not considered significant. Hydrodynamic modelling was undertaken as part of the EIS (refer to Chapter 7) which found that sediment release will be minimal and temporary. The existing environment at Narrow Water comprises an estuary where high levels of suspended sediments occur due to tidal cycles and other ongoing activities including Mussel Dredging and ferry vessels, and therefore existing species are well adapted to existing in areas with variable sediment loadings. Based on this it is considered highly unlikely that a negative impact on the Priority Marine Features within Carlingford Marine Conservation Zone will arise as a consequence of sediment mobilisation.

With respect to pollutant discharge, standard construction best practices will be adhered to, including CIRIA Document C532 Control of Water Pollution from Construction Sites and Guidelines for the Crossing of Watercourses during the Construction of National Road Schemes (NRA, 2008). A programme of Water Quality Monitoring will also be put in place to monitor turbidity levels within the waterbody during construction works occurring in the foreshore. Thresholds will be agreed with Loughs Agency based on baseline conditions within the river, and the contractor will be required to maintain turbidity levels to an acceptable level during construction.

The Contractor is required to consult with Loughs Agency, Northern Ireland Environment Agency (NIEA): Natural Heritage, NIEA: Water Management Unit and National Parks and Wildlife Service (NPWS) on the approval of all relevant construction method statements; timing of works; and management plans prior to construction, to ensure sufficient measures are in place to manage construction related run off or pollution.

With regards to the operation stage, the hydrodynamic modelling (refer to EIS Chapters 4 and 7.2) undertaken has shown that during the operational phase there will only be an initial limited, local and very temporary mobilisation of sediment which it is considered to have a negligible impact on water quality.

Given that standard construction best practices will be adhered to, the hydrological connection is at least 2.3 km from the construction site and the dilution capacity of Carlingford Lough which will allow for the immediate dissipation of any potentially discharged pollutants, there is no risk of pollutants including hydrocarbons, cement or suspended solids reaching this MCZ at levels that could affect the Priority Marine Features for which it's designated.

3.4 Screening for MCZ Assessment Conclusion

As all marine licence applications are required to be screened to determine whether Section 126 of the MCAA (2009) should apply, ROD, on behalf of Louth County Council, have prepared an MCZ Assessment as part of the Marine Licence application process. In accordance with '*Marine conservation zones and marine licensing*' (MMO, 2013), the proposed development has screened in for Stage 1 MCZ Assessment, and is presented in Section 4 of this report.

4. STAGE 1 ASSESSMENT

4.1 Introduction

The methodology for Stage 1 Assessment is presented in Section 1.4.2 of this report.

Table 4.1 below presents the two tests relevant in a Stage 1 assessment. As explained in Section 1.4, an MCZ Assessment is carried out in view of the Conservation Objectives of relevant Marine Conservation Zones, which are in turn defined by detailed Attributes and corresponding Targets. Therefore, the evaluation of whether or not an activity has a significant affect (in view of the Conservation Objectives in question) is made with regard to these Attributes and Targets.

Table 4.1 Stage 1 MCZ Assessment

Priority Marine Features	Conservation Objective as per DAERA (2016a)	Attributes	**(i) Is the authority satisfied there is no significant risk of the activity hindering the conservation objectives stated for the MCZ?; and,** **(ii) Can the authority exercise its functions to further the conservation objectives of the site?**
***Philine aperta* and *Virgularia mirabilis* in soft stable infralittoral mud**	"*To maintain the favourable conservation condition of* Philine aperta *and* Virgularia mirabilis *communities in Carlingford Lough MCZ*"	The Attributes of this Conservation Objective focus on maintaining the: • *"Extent"* and *"Sediment character"* of the Subtidal (sublittoral) mud; • *"Distribution of* Philine aperta *and* Virgularia mirabilis *communities habitat"* and *"Extent and percentage cover of Sea-pen and white sea slug communities habitat"* of *Philine aperta* and *Virgularia mirabilis* communities; and, • *"Characteristic biotopes at sites chosen so as to provide some indication of the distribution and extent of the sub-feature"* and *"Species composition of characteristic biotopes at monitoring sites"* of Subtidal (sublittoral) mud communities.	(i) Considering nature of the proposed development, the tidal conditions and existing sediment load in the area due to natural and anthropogenic sources, there is no significant risk of the construction or operation of the proposed development hindering the conservation objectives stated for the MCZ. (ii) Considering there is no significant risk of the proposed development hindering the conservation objectives stated for the MCZ, the authority can exercise its functions to further the conservation objectives of the site. **Therefore, Stage 2 Assessment is not necessary.**

5. IN-COMBINATION ASSESSMENT

5.1 Introduction

The MCAA does not provide any legislative requirement for explicit consideration of in-combination or cumulative impact assessment to be undertaken when assessing the impacts of licensable activities upon an MCZ. However, the MMO considers that in order to fully discharge its duties under Section 69(1) of the MCAA, in-combination and cumulative effects must be considered.

5.2 Methodology

Plans and projects that have been granted planning permission within the last 10 years with potential for interactions with the proposed development were selected for assessment. For the purposes of the assessment, small scale and domestic developments were not considered given the nature of the proposed development and the fact that these developments would be subject to stringent planning controls.

The ePlanning websites for Louth County Council, Newry, Mourne and Down District Council, Northern Ireland Planning Portal and the EIA Portal were used to search for planning applications.

The following projects in the area have been considered as part of this in-combination assessment:

Newry Southern Relief Road

The Department for Infrastructure (DfI) Southern Division is advancing the design and development of a new strategic road link to the south of Newry City, between the A1 Dublin Road dual carriageway and A2 Warrenpoint Road dual carriageway. This would provide an alternative route for strategic traffic that avoids Newry City centre.

The scheme would link to the Eastern Seaboard (A1/N1 Belfast-Dublin) Key Transport Corridor (KTC), which includes road and rail links between Larne (via the Belfast Metropolitan Area) and the border at Newry, facilitating onward travel to Dublin and improving access to other regional gateways. The scheme is part of DfI's Strategic Road Improvement (SRI) Programme and has also been identified within the Banbridge, Newry and Mourne Area Plan 2015.

It is anticipated that the bridge over the Newry River will be a single-span bridge, thus not directly impacting on the river. The *Stage 1 Scheme Assessment Report* (AECOM, June 2017) provides that mitigation and enhancement will be developed to avoid or minimise adverse impacts of the project on the receiving environment, and that a HRA is being undertaken alongside this Stage 1 Assessment which will establish if any specific mitigation measures are necessary to protect these Natura 2000 (SAC and SPA) sites from adverse impacts associated with the scheme. Considering the above provisions will be implemented as part of the Newry Southern Relief Road project, there will be no adverse effects on Carlingford Shore SAC or Carlingford Lough SPA in view of their Conservation Objectives, arising from the combination of this project with the proposed development.

Carlingford Lough Greenway

Sections 1 and 2 extend from Carlingford to Carlingford Marina and from Omeath Pier to the County Bridge at the Northern Ireland/Republic of Ireland border, respectively.

These sections are located entirely within the Republic of Ireland and within the boundary of Louth County Council.

Section 3, which extends from the County Bridge at the Northern Ireland/Republic of Ireland border to Victoria Lock in Northern Ireland. This section is located entirely within Northern Ireland and within the boundary of Newry, Mourne and Down District Council (NMDDC).

The greenway will consist of a shared walking and cycling greenway incorporating a 5 m wide greenway corridor to include: a 2–3 m shared pedestrian and cyclist path with associated site works.

Considering the nature, scale and location of the Carlingford Lough Greenway, there will be no likely significant effects to the Carlingford Lough MCZ arising from the combination of this project with the proposed development.

Warrenpoint Port

Planning Reference Number	Project Description	In-combination effect
Newry, Mourne and Down County Council: LA07/2019/1019/DC; LA07/2015/0056/F **Address:** 25 metres northwest of 62 Newry Road Warrenpoint	**Planning Application Lodged:** 23 Mar 2015 **Decision Date:** 30 Oct 2015 Construction of pipelines (2no) and 7 horizontal storage tanks for the supply by ship of liquid Carbon Dioxide, with a total storage capacity of 3,200 tonnes and venting by silencer at jetty. The storage tanks will have plant access steelwork and a new hard standing area, and new access road. A loading bay with weighbridge to include containerised weighbridge station for 2 road tankers. A containerised Motor Control Centre will supply power and a containerised refrigeration centre of 20 sq m to keep Carbon dioxide at normal operating temperature. A containerized Quality Assurance lab of 20sq m. (amended information received).	This project is located approximately 90 m southeast of the proposed development in Warrenpoint Port. Owing to the nature, location and scale of this project and provided the schedule of conditions laid out in the planning permission are implemented in full, no significant in-combination effects are predicted to arise from the proposed development and this Project on the Carlingford Lough MCZ.

Greenore Port

A number of individual projects within the Greenore Port area have been assessed for in-combination effects with the proposed development and are presented in Table 5.1 below.

Table 5.1: Projects within the Greenore Port assessed for in-combination effects with the proposed development.

Planning Reference Number	Project Description	In-combination effect
Louth County Council: 20268	**Planning Application Lodged:** 09/04/2020 **Decision Date:** 13/07/2020 Extension and modifications to the existing former OpenHydro warehouse including: a. An overall 4,499 sqm extension comprising: - a 747 sqm extension to the north east (proposed extension no. 1) with a ridge height of 17.03m, to form proposed store 1 with a total floor area of 1,816sqm – A 752sqm extension to the south west (proposed extension no. 2) with a ridge height of 15.67m consistent with the existing building, to form proposed store 2 with a total floor area of 1,369sqm b. Removal of window openings on existing south east elevation and installation of 1 no. pedestrian access door (1m x 2.1m); c. Removal of window opening on existing north west elevation and installation of 3 no. roller shutter doors (each 9.85m x 5.8m) and 2 no. pedestrian access doors (each 1m c 2.1m); and d. Removal of all openings on existing north east elevation. ii. Modifications to the existing warehouse ('Store 0') including: a. Increase height from the existing 8.15m to 10.55m; b. Installation of roller shutter door (16.8m x 7.5m) on north east elevation; c. Installation of roller shutter door (7.4m x 7.5m) on north west elevation; d. Removal of openings on existing north west elevation; e. Installation of 1 no. pedestrian access door on south east elevation (1m x 2.1m). iii. All ancillary site works including drainage and landscaping treatment to southern boundary wall.	This project is located approximately 12.5 km southeast of the proposed development as the crow flies. Owing to the nature, location and scale of this project, the conditions of the planning permission and conclusion of the AA Screening Report, no significant in-combination effects are predicted to arise from the proposed development and this Project on the Carlingford Lough MCZ.
Louth County Council: 20543 **(ABP Appeal Ref.:** ABP-310184-21)	**Planning Application Lodged:** 23/07/2020 **Decision Date:** 13/04/2021 Permission for development that will consist I. Demolition works to include the following a. demolition of remnant former railway wall, 59.7m in length with a height ranging from 2.6m to 7.1m and concrete tower (3.9m x 4.5m) and 11.8m in height; b. Demolition of wall (43.5m x 4m) located inside the southern boundary of the application area; c. Demolition of existing EBS substation and associated switch room. 2. Construction of proposed 'New Store 1' comprising : a. 1,812 sq.m. gross floor area, max. height 15.25m;	This project is located approximately 12.5 km southeast of the proposed development as the crow flies. Owing to the nature, location and scale of this project and conclusion of the Inspector's Report following appeal, no significant in-combination effects are predicted to arise from the proposed development and this

Planning Reference Number	Project Description	In-combination effect
	b. Installation of 2 no. roller shutter doors (each 7.5m x 7.2m) and 1 no. pedestrian access door (1m x 2.2m) on north west elevation; and c. Installation of 1 no. pedestrian access door (1m x 2.2m) on the south east elevation. 3. Construction of Proposed 'New Store 2' comprising: a. 1,184sq.m. gross floor area, max. height 15.25m; b. Installation of 2 no. roller shutter doors (7.5m x 7.2m and 7.5m x 7.19m) and 2no. pedestrian access doors)1m x 2.2m) on the north west elevation; c. Installation of 1 no. pedestrian access door (1m x 2.2m) on the south east elevation . 4. Construction of an ESB substation with a floor area of 6.24m2 and 2m in height and associated switch room with floor area of 12.25m2 and 2.5m in height. 5. All Ancillary site works including drainage and landscaping treatment to the southern boundary wall.	Project on the Carlingford Lough MCZ.
Louth County Council: 19807	**Planning Application Lodged:** 02/10/2019 **Decision Date:** 18/11/2019 Permission for development on a site of c. 0.176 hectares, to consist of (1) The change of use of the former 'OpenHydro' building (1,607sqm) from light engineering and office to storage for port commodities (agricultural feed, fertilizer, rock and salt); and (2) The removal and closing up of an existing vehicular access door on the northeast elevation and reinstatement and rendering of façade to match the existing.	This project is located approximately 12.5 km southeast of the proposed development as the crow flies. Owing to the nature, location and scale of this project, the schedule of conditions laid out in the planning permission and conclusion of the AA Screening Report, no significant in-combination effects are predicted to arise from the proposed development and this Project on the Carlingford Lough MCZ.
Louth County Council: 17413	**Planning Application Lodged:** 01/06/2017 **Decision Date:** 19/07/2017 Permission for development to consist of 1. Dredging of harbour sediments to -7.5m Chart Datum to provide navigable water depths; 2. Rehabilitation works to the quay wall at Berth No.2 by constructing a steel combi wall system of c.139m in length and extending c.5m out from the existing quay wall and will tie into existing wall; 3. Placement of approximately 4,670m3 of uncontaminated dredged material into the void	This project is located approximately 12.5 km southeast of the proposed development as the crow flies. Owing to the nature, location and scale of this project, the conditions of the planning permission, the tidal nature, the existing activities in the area and the conclusion of the AA

Planning Reference Number	Project Description	In-combination effect
	between the existing and new quay wall; 4. Improvement works to the quay deck at Berth No.2 including the excavation of the existing concrete deck c.139m in length and c.37m width and surface water management system incorporating silt traps and a hydrocarbon interceptor; and, v. Provision of berth infrastructure including bollards, fenders, ladders, lifesaving equipment, power outlets and fire hydrants and all associated site works.	Screening Report, no significant in-combination effects are predicted to arise from the proposed development and this Project on the Carlingford Lough MCZ.
Louth County Council: 16842	**Planning Application Lodged:** 24/11/2016 **Decision Date:** 12/04/2017 Permission for development on a 0.271-hectare site will consist of: (i) 2No. grain silos and all associated conveyor systems and associated works; (ii) 1No. bulk reception unit and all associated conveyor systems and associated works; (iii) 1No. grain removal building and all associated conveyor systems and associated works; and (iv) Ancillary site development works including extension to existing surface water management system.	This project is located approximately 12.5 km southeast of the proposed development as the crow flies. Owing to the nature, location and scale of this project, the conditions of the planning permission and conclusion of the AA Screening Report, no significant in-combination effects are predicted to arise from the proposed development and this Project on the Carlingford Lough MCZ.
Louth County Council: 15105	**Planning Application Lodged:** 24/02/2015 **Decision Date:** 02/04/2015 Permission under Section 19A of the Foreshore Act 1933 (as amended) that Frazer Ferries Ltd has applied for consent under the Foreshore Act to occupy an area of foreshore for a reinforced concrete slipway & associated works. An Environmental Impact Statement (EIS) has been prepared in respect of this proposal. The Foreshore Application, EIS, Associated documents, all relevant maps, site plans and drawings may be inspected at the following locations: Dundalk Garda Station, Dundalk, County Louth, Carlingford Library, Newry Street, Carlingford and Louth County Council, Couty Hall, Millennium Centre, Dundalk	This project is located approximately 12.5 km southeast of the proposed development as the crow flies. Owing to the nature, location and scale of this project, the conclusions of the EIS, and provided the mitigation measures in the NIS/HRA are adhered to, (EIS and NIS/HRA are accessible on the DHLGH - Foreshore Unit webpage), no significant in-combination effects are predicted to arise from the proposed development

Planning Reference Number	Project Description	In-combination effect
		and this Project on the Carlingford Lough MCZ.
Louth County Council: 1339	**Planning Application Lodged:** 06/02/2013 **Decision Date:** 26/03/2013 Permission for the decommissioning & demolition of the existing oil tank farm including steel tanks, tank bases, pipework, loading gantry etc. all as constructed under PL ref 82/745 & the construction of a 1026.20m² extension to the existing light engineering & assembly building approved under PL Ref 11/371 together with site development works including concrete paving, 3.20m high palisade fencing (partially to replace existing fencing) to the southeast (part) & southwest boundaries & along the northwest (part) shoreline, minor alterations to single storey ancillary building to provide additional WC & tea room facilities, installation of pump sump in place of existing septic tank & connection of the pumped domestic effluent to the adjacent public foul sewerage system, surface water drainage with oil interceptor trap incl. outfalls to sea, alterations to internal fencing to provide additional 10 car parking spaces & all other site development works.	This project is located approximately 12.5 km southeast of the proposed development as the crow flies. Owing to the nature, location and scale of this project, the conditions of the planning permission and conclusion of the AA Screening Report, no significant in-combination effects are predicted to arise from the proposed development and this Project on the Carlingford Lough MCZ.
Louth County Council: 13241	**Planning Application Lodged:** 14/06/2013 **Decision Date:** 25/02/2014 Permission for the proposed construction of ferry terminal facilities adjacent to Greenore Port and adjacent to 80 Greencastle Pier Road Greencastle County Down to allow operation of a vehicular ferry across the mouth of Carlingford Lough. The proposed works include: • At Greenore construction of a reinforced concrete slipway (60m long) with 7vertical tubular berthing & fender piles on the southern side to facilitate ferry berthing; relocation of existing Port entrance gates & weighbridge; realignment of existing boundary fence to northern side of Port; modification of entrance road layout, part demolition of gable walls of existing shed to allow through access for vehicles, use of existing hard stand area for parking & queuing, new lighting columns, new pedestrian	This project is located approximately 12.5 km southeast of the proposed development as the crow flies. Owing to the nature, location and scale of this project, the conditions of the planning permission and conclusion of the EIS, no significant in-combination effects are predicted to arise from the proposed development and this Project on the Carlingford Lough MCZ.

Planning Reference Number	Project Description	In-combination effect
	footpath along the existing rock armour & replacement of existing fence on SE boundary with pedestrian bollards. • At Greencastle the construction of a reinforced concrete suspended pier (58m long), supported by vertical tubular piles & a reinforced concrete slipway (70m long) to allow vehicular access to the Ferry & 12 berthing piles with fenders & steel gangway to facilitate berthing & tying up of vessels overnight, new access & hardstanding for parking & queuing, kiosk for office & ancillary staff facilities, drainage & landscape proposals. Upgrade & widening to part of the Greencastle Pier Road & provision of passing bays. • Floating navigational marks anchored to the bed of the Lough & laid at the edges of the navigable channel to delineate appropriate channel boundaries or to mark shallow rock outcrops & provide for safety of navigation. An Environmental Impact Statement & a Natura Impact Statement have been prepared in support of the planning application. This application may have transboundary environmental effects. *The Transboundary Consultation process was completed, and no submissions were received as per letter received from DOE NI 30/12/13.	

5.3 Outcome

This assessment was undertaken in view of the Conservation Objectives of the relevant MCZs and found that the proposed development does not have the potential to significantly affect any MCZ in-combination with other projects.

6. CONCLUSION

In accordance with Section 23 of the Marine Act (Northern Ireland) 2013, established best practice and the Precautionary Principle; this MCZ Assessment Report has examined the details of the proposed development and the relevant Marine Conservation Zone and has concluded, on the basis of objective information, that the proposed development, either individually or in-combination with other projects, is not likely to give rise to impacts that would constitute significant effects in view of the Conservation Objectives of the MCZ.

In light of this conclusion, it is the considered opinion of ROD, on behalf of Louth County Council, as the author of this MCZ Assessment Report, that the Competent Authority, DAERA, may find in completing its MCZ Assessment in respect of the proposed Narrow Water Bridge Project, that the activity, either individually or in-combination with other projects, is not capable of affecting (other than insignificantly) the priority marine features of the Carlingford Lough MCZ, or any other MCZ; nor any ecological or geomorphological process on which the conservation of any protected feature of the Carlingford Lough MCZ, or any other MCZ is (wholly or in part) dependent. This is considered in view of best scientific knowledge and the Conservation Objectives of the MCZ concerned. Therefore, it is the recommendation of the author of this Marine Conservation Zone assessment that the public authority may determine that Stage 2 Assessment is not required in respect of the proposed development and the process for marine license application can continue.

7. REFERENCES

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