Inspector's Report ABP-303274-18

Development	Construction of the River Suir Sustainable Transport Bridge to accommodate pedestrians, cyclists and an electric shuttle bus approximately in line with Barronstrand Street and in front of the Clock Tower (PS) on the south quays and a former industrial brownfield site (which will be developed as a SDZ) on the north quays.
Location	Waterford City, Co. Waterford.
Planning Authority	Waterford City & County Council.
Applicant(s)	Waterford City & County Council.
Type of Application	Planning Permission for a development under Section 51(3)(a) of the Roads Act, 1993-2015 (as amended by Section 9(1)(e) of the Roads Act 2007.
Observer(s)	Mr. Peter Sweetman and Wild Ireland
Date of Site Inspection	05/03/2019.
Inspector	A. Considine

Contents

1.0 Introduction

1.1. An application has been made by Waterford City & County Council for the construction of a sustainable transport bridge over the River Suir in Waterford City. The application is made under the provisions of Section 51 of the Roads Act, 1993-2007 and in accordance with the plans and particulars, including an Environmental Impact Assessment Report and Appropriate Assessment Natura Impact Statement, submitted to the Board on the 20th day of December, 2018.

1.2. There is no Compulsory Purchase Order associated with this application as the CPO has already been approved by the Board in October 2018, PL24.CH3344 refers.

2.0 Site Location and Description

2.1. The proposed development comprises construction of a sustainable transport bridge over the River Suir in Waterford City. The location of the proposed bridge will have landing points on the south side of the river in direct proximity to the Clock Tower on Meagher's Quay. The northern landing will be located within existing disused lands which are to be developed as part of the Strategic Development Zone.

2.2. The proposed bridge is referred to as a 'sustainable transport bridge' on the basis that it will provide for sustainable forms of transport including pedestrians, cyclists and an electric shuttle bus service. The bridge will be 8m in width with a length of approximately 207m from each bank of the river. It is envisaged that the bridge will support the extension of the retail spine of Waterford City from Barronstrand Street across to the North Quays and the designated SDZ.

3.0 Proposed Development

3.1. Permission is being sought, as per the public notices, as follows**:**

> Waterford City & County Council has applied under Section 51(2) of the Roads Acts, 1993-2015 to An Bord Pleanala for approval in relation to a proposed development consisting of:
>
> A 5-span 8m wide bridge which accommodates pedestrians, cyclists and an electric shuttle bus service approximately in line with Barronstrand Street and

in front of the existing Clock Tower and associated bollards, which are protected structures (RPS WA730392 and WA730594 respectively) on the south quays and a former industrial brownfield site which shall be developed as a Strategic Development Zone (SDZ) on the north quays. The 207m long opening bridge provides a 25m wide navigation channel with associated vessel collision protection systems. The proposed development will also comprise a plaza at the South Quay landing point. This plaza will be a paved and landscaped space for the streetscape around the Clock Tower. There will also be lighting, flagpoles, street furniture, planting and all associated ancillary works. The proposed development is illustrated on attached maps.

The planning application was accompanied by the following:

- Environmental Impact Assessment Report & Non-Technical Summary
- Natura Impact Statement
- Accompanying documents, plans, particulars, completed planning application form, public notices and relevant fee

4.0 Submissions by Prescribed Bodies

Wexford County Council: No comments

Geological Survey Ireland: The GSI notes that their records show that there are no County Geological Sites located within the vicinity of the site. In the event of a planning permission, it is requested that a copy of reports detailing any site investigations carried out be provided to GSI. Any significant bedrock cuttings should be designed to remain visible as rock exposures rather than covered with soil and vegetated. This will permit on-going improvement of the geological knowledge of the subsurface and the inclusion of the site, if appropriate, as an additional site on the geo-heritage dataset.

Transport Infrastructure Ireland: The Authority notes that the proposed development does not relate to a national road scheme. The submission notes proposals to provide additional River Suir crossings in the context of the N25 PPP Contract and potential financial implications to the exchequer. The submission includes a number of enclosures.

Southern Regional Assembly: The SDZ Planning Scheme provides for the regeneration of the North Quays, and an extension of the city centre north of the River Suir. The proposed sustainable transport bridge will link the north quays to the city centre and would be consistent with the vision and objectives for the regeneration of the north quays. It is also noted that the proposed River Suir Sustainable Road Bridge received funding in late 2018 under the Governments Urban Regeneration and Development Fund. It is noted that an EIAR and NIS have been submitted in support of the proposed development. The submission concludes that the proposed bridge would be consistent with long held objectives for regeneration of the north quays, the sustainable transport objectives of the Development Plan, South East RPGs 2010-2022 and the Draft Regional Spatial Planning Strategy for the Southern Region.

Development Applications Unit of the Department of Culture, Heritage and the Gaeltacht: The proposed bridge piers and fender poles are within the Suir Estuary part of the Lower River Suir cSAC. A key conservation concern in the cSAC is the impact on migrating and juvenile Twaite Shad, a fish species for which the cSAC was designated under the EU Habitats Directive. The primary responsibility for the conservation of the species rests with Inland Fisheries Ireland.

A number of observations are raised in relation to in-stream river works, including the proposed two pairs of cofferdams, support piling and abutment piling, pill-driving and underwater archaeology. Further information is required in relation to pile-driving restrictions as well as the potential for salination of the estuary waters and the impact of any changes in turbulence and mixing, due to increased flows between the bridge piers, which may affect juvenile Twaite shad feeding habitat.

Mitigation measures proposed should be conditioned as part of any permission. The submission also raised issues in relation to the suggestion of derogation and compliance with case law.

Inland Fisheries Ireland: The submission identifies a number of issues from a fisheries perspective as follows:

- That the inland fisheries resource is not adversely impacted as a consequence of the proposed works

- That the works are carried out in a manner so as to ensure compliance with Irelands' obligations under the WFD
- That the works are carried out in a manner so as to ensure compliance with the requirements of the EC (Natural Habitats) Regulations 1997 and the EC (Birds and Natural Habitats) Regulations 2011 to 2015

It is requested that to ensure enough free channel of suitable velocity is available for fish migration the recommendation of the EIAR against 4 cofferdams being in place simultaneously should be implemented. IFI should be consulted in relation to the CEMP and EOP and that full mitigation measures as described should be implemented in full and conditioned.

4.1. Third Party Observations

Mr. Peter Sweetman: Requests that any grant of planning permission for the development comply with a number of judgements of the CJEU.

4.2. Other Submissions

Following a determination by the Board that an Oral Hearing will not be held in relation to the proposed development, Waterford City & County Council submitted comments on the submissions / observations submitted to the Board. The submission is summarised as follows:

- Department of Culture, Heritage & The Gaeltacht:
    - The proposed construction sequence requires that the construction of the two halves of the bridge commence in separate periods, but does not require the first half to be completed prior to the construction of the second half commencing. Refer to Section 4.2.3 of the NIS
    - In relation to pile driving, it is requested that bullet point 6 of Section 4.6 of Chapter 18 of the EIAR and bullet point 6 of Section 5.2.2 of the NIS be deleted.
    - Additional measure relating to the Ecological Clerk of Works to be included in Section 4.20 of Chapter 18 of the EIAR and Section 5.3.2 of the NIS.

    - All mitigation measures in relation to pile driving for the main bridge piers will also apply for the piers for the vessel collision prevention system and restraint system for the replacement marina.
    - The EIAR and NIS assumed the presence of a salt wedge for a worst case scenario assessment. No impact is predicted.
- Inland Fisheries Ireland:
    - In addition to issues already addressed above, the IFI will be consulted in relation to the development of the CEMP and EOP.
    - Full mitigation measures prescribed in the EIAR and NIS will be implemented
- Transport Infrastructure Ireland:
    - The proposed bridge is to accommodate pedestrians and cyclists as well as an electric shuttlebus. It is not considered that the provisions of the N25 PPP Contract or the Exchequer will be affected by the proposed bridge.
    - The proposed development includes an electric shuttle bus connecting the north and south quays only. Any future proposal to modify this bus route would be subject to a separate planning process.
- Mr. Sweetman & Others:
    - The EIAR and NIS have been prepared in compliance with all relevant legislation and caselaw.
    - It is a function of the Board as the Competent Authority to assess the adequacy of the EIAR and NIS as part of its decision making.
- Geological Survey of Ireland:
    - The proposed bridge development will not include exposed cuttings in soil or bedrock
- Other points of clarification:

- In terms of lighting, it is requested that mitigation in Section 4.8 and 4.9 of Chapter 18 of the EIAR and Section 7.7.2 of Chapter 7 of EIAR for bats and otter, be replaced with text contained in Section 7.7.2.
- In relation to the phasing of cofferdam, it is submitted that the recommendation in the Hydrodynamic modelling report was made in relation to scour and contraction around the cofferdams during the construction phase. The scenario of all 4 piers being in place simultaneously was assessed in both the EIAR and NIS from an ecological perspective. The potential effects on fish passage using critical low velocity information was carried out at the request of the IFI and the findings presented in the EIAR and NIS. The conclusion is that there would be no adverse effects on fish passage and therefore, no impact on the qualifying interests of the European Site.
- In relation to points raised regarding post consent consultation with the NPWS and IFI, it is requested that the words 'unless otherwise agreed with IFI and the NPWS' be deleted from mitigation measures contained in Section 5 and 6 of the NIS.

5.0 Planning History

The relevant planning history pertaining to the area relates to the Compulsory Purchase Order for the acquisition of lands to deliver the North Quays Strategic Development Zone regeneration project in Waterford City, PL24.CH3344 refers, includes elements that facilitate a bridge.

North Quays SDZ Planning Scheme 2018

On the 20th of January 2016 the Government designated the North Quays, Waterford City as a SDZ. A Draft Planning Scheme was prepared for the 8.23 hectare site which was on public display from the 18th October 2017 to the 30th November 2017. This was adopted by Waterford City and County Council on the 8th of February 2018. Two appeals to An Bord Pleanála were subsequently withdrawn. The Planning

Authority Scheme is, therefore, deemed to have been made under Section 169 of the Planning and Development Act as amended.

The Board will note that a sustainable transport bridge, capable of accommodating pedestrians, cyclists and a City Bus services was referenced in the planning scheme and the provision of a bridge over the River Suir is noted in the Boards Decision on the CPO as part of the overall SDZ regeneration project for the North Quays.

6.0 Policy Context

6.1. National Policy

6.1.1. National Planning Framework Project Ireland 2040

The National Planning Framework identifies a number of key future growth enablers for Waterford including delivering the North Quays SDZ regeneration project for integrated, sustainable infrastructure, including a new pedestrian bridge or a pedestrian public transport bridge over the River Suir.

National Policy Objective 7 provides for the application of a tailored approach to urban development, that will be linked to the Rural and Urban Regeneration and Development Fund, with a particular focus on Dublin and the four cities of Cork, Limerick, Galway and Waterford.

In addition to the above, National Policy Objective 28 seeks to ensure the integration of safe and convenient alternatives to the car into the design of communities by integrating physical activity for all ages and in particular, seeks to prioritise walking and cycling.

6.1.2. Smarter Travel – A Sustainable Transport Future 2009-2020.

'Smarter Travel' (Department of Transport 2009) sets out national policy goals which seek to reduce overall travel demand, to maximise the efficiency of the transport network, to reduce reliance on fossil fuels, to reduce transport emissions and to improve accessibility to transport infrastructure. In order to achieve these goals 'Smarter Travel' sets a number of key targets. One key target is to promote cycling

and walking which are recognised as the modes of transport with the lowest environmental impact. ‘Smarter Travel’ states that pedestrian and cycle facilities will be most successful where they form a coherent network, place an emphasis on safety, directly serve the main areas where people wish to travel, provide priority over vehicular traffic at junctions, are free from obstructions and have adequate public lighting. The overall goal is to have around 450,000 people walking and cycling to work/education each day in 2020, up from 240,000 in 2006.

6.1.3. National Cycle Policy Framework, 2009-2020

The vision of this document is to create a strong cycling culture across Ireland with the aim that 10% of all trips will be taken by bike. The Framework proposes both hard and soft interventions and measures including engineering, planning and infrastructural measures as well as education and communication around cycling.

6.2. Regional Policy

The South-East Regional Planning Guidelines 2010-2022 identify the redevelopment of the North Quays as a specific priority while the provision of a new rail passenger platform and public transport interchange will also be achieved on the North Quays. The RPGs also includes policies relating to sustainable infrastructure.

6.3. Local Policy

6.3.1. Waterford City Development Plan 2013-2019

Chapter 5 of the City Development Plan deals with the City Centre and states that it is the aim of the Council to ‘protect the role of the city centre and support its expansion as an economic force and capital of the region.’ In order to achieve this aim, the plan identifies the need for improved cross-river linkages and the creative re-development of the Quays, and Section 5.3.4 deals with both the North and South Quays.

Chapter 6 of the Plan deals with Transportation and includes a number of objectives relating to the provision of a pedestrian crossing over the River Suir as well as promoting sustainable transport modes, including cycling.

Section 10.4.2 of the Plan deals with Natural Heritage which is relevant given that the bridge spans the Lower River Suir Special Area of Conservation (Site Code 002137).

6.3.2. Waterford Planning Land Use and Transportation Strategy (PLUTS) 2004-2020

Principal features of PLUTS include more balanced growth between north and south sides of the River Suir, a new city bridge exclusively for pedestrians and cyclists linking the redeveloped North Quays with the existing City Centre, the provision of a rail passenger platform on the North Quays as part of the new public transport hub and the provision of a high-quality bus-based public transport system in the city.

6.4. Natural Heritage Designations

The proposed bridge crosses the River Suir which is identified as the Lower River Suir Special Area of Conservation (Site Code 002137). Other designated sites include The River Barrow and River Nore SAC (Site Code 002162) approximately 6km to the east.

6.5. Architectural Heritage Protection, Guidelines for Planning Authorities:

Having regard to the proximity of a number of protected structures to the subject site, the *'Architectural Heritage Protection, Guidelines for Planning Authorities'* are considered relevant. The guidelines provide detailed guidance in respect of the criteria and other considerations to be taken into account in the assessment of proposals affecting protected structures.

6.6. Other Policies

6.6.1. European Union Cycling Strategy, 2017

This EU strategy seeks to consolidate a systematic review of all EU policies related to cycling, reviewing the current state of cycling in the EU and providing an implementation plan, including recommendations at European, national, regional and local levels. The principle aim of the Strategy is to achieve a shift in mobility culture and to encourage decision makers to support cycling, encourage people to cycle

more and to facilitate the cooperation of road users to support safer cycling. The Strategy seeks to achieve a number of objectives within the lifetime of the document.

6.6.2. **EuroVeol**

EuroVelo is the European Cycle Route Network which has been developed by the European Cyclists Federation and is due for completion in 2020. The network comprises 14 routes consisting of over 70,000km of cycle routes connecting the whole continent of Europe. The EuroVelo Route 1 – the Atlantic Coast Route, is one of 14 proposed routes which runs from Norway in the north, to Portugal and will comprise 9,100km.

7.0 **Planning Assessment**

I consider it appropriate to assess the proposed development application under the following headings:

1. Compliance with Policy
2. The need for the development
3. Design and Visual Amenity Issues
4. Roads & Traffic
5. Environmental Impacts

The Board will note that Environmental Impact Assessment and Appropriate Assessment are presented in separated sections.

7.1. **Compliance with policy:**

The submitted application makes reference to a number of documents which set out the policy context of the proposed sustainable transport bridge development. The need for the River Suir Sustainable Transport Bridge has been identified in, and/or is consistent with the following European, national, regional and local planning policy documents:

<u>European:</u>

7.1.1. The European Union Cycling Strategy, 2017 together with EuroVelo network, seeks to promote cycling at a policy and decision making level across the EU. The proposed bridge will connect to the Rosslare Greenway and will support and contribute towards achieving the cited EU objectives. In addition, the proposed development would support the EU objectives of the EuroVelo network, in that it would provide a link between the Waterford Greenway and developed cycle routes with EuroVelo signs through the south coast of Wexford from Roslare Harbour to Kilmore, Fethard and Ballyhack.

7.1.2. In this regard, I am satisfied that the development as proposed adequately accords with European policy.

National:

7.1.3. The National Planning Framework identifies a number of key future growth enablers for Waterford including delivering the North Quays SDZ regeneration project for integrated, sustainable infrastructure, including a new pedestrian bridge or a pedestrian public transport bridge over the River Suir. Of particular note is National Policy Objective 28 which seeks to promote and integrate safe and convenient alternatives to the car.

7.1.4. 'Smarter Travel' (Department of Transport 2009) sets out national policy goals which seek to reduce overall travel demand, to maximise the efficiency of the transport network, to reduce reliance on fossil fuels, to reduce transport emissions and to improve accessibility to transport infrastructure. In order to achieve these goals 'Smarter Travel' sets a number of key targets. One key target is to promote cycling and walking which are recognised as the modes of transport with the lowest environmental impact. 'Smarter Travel' states that pedestrian and cycle facilities will be most successful where they form a coherent network, place an emphasis on safety, directly serve the main areas where people wish to travel, provide priority over vehicular traffic at junctions, are free from obstructions and have adequate public lighting. The overall goal is to have around 450,000 people walking and cycling to work/education each day in 2020, up from 240,000 in 2006.

7.1.5. The National Cycling Policy Framework seeks to create a strong cycling culture across Ireland with the aim that 10% of all trips will be taken by bike. The Framework proposes both hard and soft interventions and measures including engineering, planning and infrastructural measures as well as education and communication around cycling.

7.1.6. In terms of national policy, I am satisfied that the proposed development is acceptable.

Regional:

7.1.7. The South-East Regional Planning Guidelines 2010-2022 identify the redevelopment of the North Quays as a specific priority while the provision of a new rail passenger platform and public transport interchange will also be achieved on the North Quays. The RPGs also includes policies relating to sustainable infrastructure. The proposed development will provide for segregated cycling and walking facilities accessing the

redeveloped brownfield site to the north of the River Suir as part of the SDZ scheme in Waterford City. The proposed development fully accords with regional policy.

Local Policy:

7.1.8. Chapter 5 of the City Development Plan 2013-2019 deals with the City Centre and states that it is the aim of the Council to 'protect the role of the city centre and support its expansion as an economic force and capital of the region.' In order to achieve this aim, the plan identifies the need for improved cross-river linkages and the creative re-development of the Quays, and Section 5.3.4 deals with both the North and South Quays.

7.1.9. Chapter 6 of the Plan deals with Transportation and includes a number of objectives relating to the provision of a pedestrian crossing over the River Suir as well as promoting sustainable transport modes, including cycling.

7.1.10. On the 20th of January 2016 the Government designated the North Quays, Waterford City as a SDZ. The North Quays SDZ Planning Scheme 2018 was adopted by Waterford City and County Council on the 8th of February 2018, and was made under Section 169 of the Planning and Development Act as amended. The Board will note that a sustainable transport bridge, capable of accommodating pedestrians, cyclists and a City Bus services was included, as critical enabling infrastructure for the planning scheme and the provision of a bridge over the River Suir is noted in the Boards Decision on the CPO as part of the overall SDZ regeneration project for the North Quays.

7.1.11. Principal features of the Waterford Planning Land Use and Transportation Strategy (PLUTS) 2004-2020 seeks to provide a more balanced growth between north and south sides of the River Suir. In order to achieve this balance, the SDZ Scheme was developed. The sustainable transport bridge will provide for pedestrians, cyclists and a high quality electric bus based public transport system to link the redeveloped North Quays with the existing City Centre.

7.1.12. Having regard to all of the policies considered in the assessment of this proposed development, I am wholly satisfied that the development is fully supported and acceptable and would, if permitted advance specific objectives as set out in the relevant policy framework outlined above.

7.2. **The need and justification for the development:**

7.2.1. The Board will note that the development will include the provision of a paved and landscaped plaza at the landing point on the South Quay, directly adjacent to the existing Clock Tower on Meagher's Quay. The existing area comprises a public car parking area and a walkway along the river. The area also includes an access to the adjacent marina.

7.2.2. To the north of the River Suir, the northern landing point comprises a number of wharves and disused open spaces following the demolition of industrial buildings in the past number of years. The Rosslare to Waterford rail line terminates to the east of the North Quay landing point. The existing Rice Bridge, located approximately 550m to the west of the proposed site of the sustainable transport bridge, is currently the only river crossing in Waterford City.

7.2.3. The submitted EIAR sets out the background and the associated need for the bridge in Chapter 2. Indeed, the Board will note the recent Compulsory Purchase Order, PL24.CH3344 refers, which was approved by the Board for the acquisition of lands to deliver the North Quays Strategic Development Zone regeneration project in Waterford City. In the context of the CPO and the SDZ Scheme, the Sustainable Transport Bridge was identified and referred to.

7.2.4. Having regard to the policy context set out above, it is clear that the need to improve access to sustainable transport options, together with encouraging both cycling and walking, is promoted and encouraged through all levels of European, national, regional and local policy. It is also considered that the success of the approved Strategic Development Zone Scheme for the northern quay area of Waterford City, will be supported by the proposed sustainable transport bridge.

7.2.5. The submitted EIAR notes that a number of alternatives were considered for the provision of the bridge, however, the location of the bridge is identified in the Development Plan, Planning Scheme SDZ and the Waterford Planning, Landuse and Transport Strategy, 2004. In this regard, the location of the bridge is established and acceptable. I have no objections to the proposed bridge development in this regard.

7.3. **Design & Visual Amenity Issues:**

7.3.1. The Board will note that the EIAR considered 5 no bridge options, which took into consideration a number of criteria including environmental impact, durability and future maintenance needs, buildability, construction and whole life costs as well as disruption and impacts during the construction phase. Chapter 3 of the EIAR provides an analysis and an evaluation of each option in relation to the multi-criteria identified. The final decision of Waterford City & County Council was to select Option 2 as the preferred bridge option as it was the preferred option on all grounds, with the exception of navigation.

7.3.2. Bridge Option 2 is described as an Aesthetic Opening Bridge which has been designed to enhance the user experience of the crossing, as well as the long views from both adjacent quays in Waterford City. The bridge will be 217m in length across the River Suir and will be 8m in width and will comprise a 5 span bridge deck with a central opening section to facilitate ongoing navigation of the river.

7.3.3. The bridge design overall is simple in its form and has been designed to provide 2 no feature set-out / viewing points at approximately 1/3 points across the bridge, and at either side of the proposed central opening span on the bridge. At these viewing points, a pedestrian parapet with glass panels will provide unobstructed views up and down the river and will shield pedestrians from the weather. Integrated handrail LED deck lighting and feature lighting of the arches is also proposed, as well as seating in the vicinity of the arches. The proposed bridge will segregate a pedestrian corridor from cyclists and buses, with the pedestrian corridor having a minimum width of 3m. The shared bus and cycle lane will have a width of 4.5m with a 0.5m buffer area which will be designed to include planters.

7.3.4. The landing areas of the bridge to the north and south of the river will be designed to provide a plaza area, which will include a plant room structure on the south quay, with the northern tie in to be designed in accordance with the requirements of the SDZ Scheme. As such, the tie in at the South Quay will be +4.425mOD and +8.00mOD at the North Quay.

7.3.5. Overall, I am satisfied that the proposed development is acceptable and will have a significant and positive impact on the existing visual amenity of the urban streetscape along the River Suir in Waterford City.

7.4. **Roads & Traffic:**

7.4.1. The proposed development will result in the permanent removal of 150 car parking spaces, with an additional 50 spaces removed for the duration of the construction phase of the development. It is accepted that the development has the potential to impact on existing road users during the construction phase.

7.4.2. The issues surrounding Roads and Traffic have been presented in Chapter 5 of the submitted EIAR, together with the Traffic Impact Assessment submitted in support of the proposed development. While I acknowledge the impact the proposed development will have on the local road network and traffic levels during the construction phase, these impacts will be temporary in their nature, albeit for a period of up to two years. In terms of the loss of car parking facilities at the car park at South Quays, I am satisfied that there is adequate alternative parking available in other car parks in the vicinity. As such, I am satisfied, following implementation of the mitigation measures proposed, that the development will be acceptable and will promote a modal shift from the car to cycling and walking.

7.5. **Environmental Impacts**

7.5.1. Having regard to the nature of the proposed development, it is considered that the most significant potential for environment impacts arising relate to impacts on the water quality of the River Suir and the flora and fauna supported by the river. The Board will note that the River Suir comprises part of the Lower River Suir SAC, Site Code 002137. Matters relating to Environmental Impact Assessment and Appropriate Assessment are discussed further below in sections 8 and 9 of this report respectively.

7.5.2. The proposed development will require works to be carried out within the waters of the River Suir and the potential impacts arising in this regard are addressed in Section 9.2.4 of this report. In addition, accidental spillages or the introduction of alien species may also have an impact.

7.5.3. As part of the application, the applicant submitted a suite of environmental documents which included construction management plans, and EIAR and a NIS, which set out a comprehensive schedule of ecological mitigation measures to address any potential for impacts to water quality. The documents also make

reference to a number of guidelines which will be adhered to in terms of the work to be carried out. In principle, I am satisfied that, subject to best practice and implementation of the proposed control and mitigation measures as described in the various reports, the likelihood of pollutants entering the water is low. As such, it is not expected that the works proposed will give rise to significant impacts on habitats.

7.5.4. In terms of impacts on biodiversity, the Board will note that the NIS identified a number of species which have the potential to be impacted upon by reason of the proposed bridge development. Of particular note are the potential impacts on the migrating fish species, for which the River Suir SAC is designated. The EIAR submits that the bridge has been designed to minimise direct or indirect impacts on habitats or species, and mitigation measures address water quality issues as well as noise and vibration and the use of lighting of the bridge during both construction and operational phases.

7.5.5. Having regard to the short-term nature of the proposed construction works, it is considered that subject to good environmental practice and subject to the implementation of the mitigation measures as presented, it is not expected that the proposed development will have a significant negative impact on the local ecology. In light of the above, I am satisfied that the proposed development can be considered acceptable.

7.6. Conclusion

7.6.1. Having regard to the above assessment, I am generally satisfied that:

- the development is fully supported by National, Regional and local policy and is acceptable. I further consider that the bridge would, if permitted advance specific objectives as set out in the relevant policy framework outlined in this assessment.
- the need for the sustainable transport bridge has been justified and the location for it has been established following the approval of the North Quays Strategic Development Zone Planning Scheme 2018.
- the proposed development will have a significant and positive impact on the existing visual amenity of the urban streetscape along the River Suir in Waterford City

- following implementation of the mitigation measures proposed, the development will be acceptable in terms of roads, traffic and parking and will promote a modal shift from the car to cycling and walking
- subject to the implementation of the mitigation measures as presented, it is not expected that the proposed development will have a significant negative impact on the local ecology.

As such, I am satisfied that the proposed development is in accordance with the proper planning and sustainable development of the area.

8.0 Environmental Impact Assessment

8.1. Introduction

8.1.1. The application was submitted after the 16th day of May 2017, the date for transposition of Directive 2014/52/EU amending the 2011 EIA Directive. The application is therefore supported by an Environmental Impact Assessment Report. The Directive was transposed into Irish legislation on the 1st day of September, 2018 under the European Union (Planning and Development) (Environmental Impact Assessment) Regulations, 2018.

8.1.2. I have read the EIAR in its entirety and I note that the EIAR is advertised in the public notices. The EIAR chapters seek to provide information and describe the potential direct and indirect effects of the development on a number of environmental aspects, and to address the interaction of the environmental aspects in accordance with the requirements of Schedule 6 of the Planning & Development Regulations, 2001 as amended. The EIAR also provides a Non-Technical Summary (NTS), associated with the main EIAR document, in a separate document. The information presented is in clear and non-technical language and I am satisfied that the NTS is acceptable.

8.1.3. The EIAR includes a section on the alternatives examined, chapter 3. I refer the Board to my Planning Assessment above whereby I note that the location of the bridge has been established in terms of policy and the SDZ Scheme. Therefore, the alternatives considered relate to the bridge design. I am satisfied that Waterford City & County Council have adequately considered reasonable alternatives and am,

therefore, satisfied that the requirements of the EIA Directive have been appropriately met and overall, the assessment of the potential environmental impacts arising from the alternatives considered is acceptable, in my opinion.

8.1.4. Chapter 17 considers major accidents as well as the interactions by means of cross referencing each environmental aspect against all other aspects considered. With regard to the effects of the project on the environment arising from its vulnerability to risks of major accidents and/or disasters, Section 17.3 of the EIAR refers. It is concluded that the likelihood of the proposed development causing major accidents and / or disasters is negligible and that there are no significant risks from Seveso Sites, weather events, risk of slope failure or vessel collisions.

8.1.5. Chapter 18 of the Report sets out the mitigation measures proposed in order to avoid, reduce or, where possible, remedy the significant adverse environmental effects of the proposed bridge. It is noted that mitigation has been incorporated into the design of the bridge and it is noted that chapter 18 deals only with mitigation measures to be applied and does not address the avoidance or reduction mitigation which has been applied through the design process. The Board will also note the comments in the submission by Waterford City & County Council on the 17th of May, 2019 in relation to the text associated with a number of mitigation measures.

8.1.6. A summary of the results of the submissions made by observers and prescribed bodies has been set out at Section 4 of this report. The main issues raised specific to EIA relate specifically to the potential impact of the construction and operational phases of the bridge on water. This issue is addressed below, and as appropriate in the reasoned conclusion and recommendation, including conditions.

8.1.7. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR is up to date, adequately identifies and describes the direct and indirect effects of the proposed development on the environment, and complies with article 94 of the Planning and Development Regulations 2000, as amended.

8.1.8. Having reviewed the Environmental Impact Assessment Report, Natura Impact Statement and all the supporting documentation to the application, submissions from prescribed bodies and third parties, as well as the applicant's response, I am satisfied that the information is sufficiently detailed and comprehensive to allow the

Board to carry out a robust and accurate assessment of the development for the purposes of environmental impact assessment.

8.2. Environmental Impact Assessment

8.2.1. In accordance with the requirements of Article 3 of the EIA Directive and Section 171A of the Planning and Development Act, 2000 (as amended), the environmental assessment is carried out under the following headings:

- Population and human health,
- Biodiversity, with particular attention to the species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC,
- Land, soil, water, air and climate,
- Material assets, cultural heritage and the landscape,
- The interaction between the factors above.

8.2.2. This assessment has had regard to the application documentation, including the Environmental Impact Assessment Report, and all other supporting reports submitted, as well as all written submissions.

8.2.3. **Population and Human Health**

The EIAR, Chapter 6, seeks to address impacts associated with the development on population & human health. The EIAR presents information with regard to impacts on human beings under a number of headings throughout the EIAR. In terms of the construction phase, it is anticipated that there will be some temporary disruption to the existing land use on and in the vicinity of the site, including to mariners and berth holders in the marina, including marina tourism, as well as the loss of car parking facilities at the Clock Tower Car Park. The impacts are anticipated to be moderate and negative on land use characteristics as well as sensitive businesses along the quays including for example hotels.

The construction traffic will also increase which may impact journey times during specific times during the construction phase both on roads and on the water. The construction phase will also give rise to noise which may cause a temporary nuisance to marina users while local traffic will be impacted close to the construction

compound on Meagher's Quay. These impacts are considered to be moderate negative and short-term.

The proposed development will also see the removal of a public toilet, public seating, bicycle parking stands and tourist information signage along the south quays. A Traffic Management Plan will be developed to manage traffic movements and will include signage to direct to alternative car parks during the construction phase.

The proposed development will generate approximately 20-25 construction jobs, which will support indirect employment and economic activity in the city. Overall, the development is expected to increase overall economic activity in Waterford City, providing long term economic benefits.

In terms of impacts on human health, it is considered that noise is likely to be the most significant impact during the construction phase. The impact is considered to be temporary. The EIAR notes the potential for interruption to journeys during the operation phase when the bridge is required to be lifted for passing boats on the river. In addition, it is noted that the development will see the removal of 70.4m of the existing berthing facility as well as the permanent loss of 150 car parking spaces which is considered a potential negative impact. Significant and profound negative impacts potentially arise in terms of potential anti-social behaviour and possible suicide events on the bridge. In terms of mitigation in this regard the EIAR indicates that 24/7 CCTV will be installed with appropriate lighting as well as the installation and maintenance of ring bouys as part of the design of the bridge.

Overall the EIAR concludes that the operational phase of the development will result in moderate to significant positive long-term impacts due to the sustainable transport nature of the development. It is further concluded that the development will improve connectivity, journey characteristics and will reduce journey times for pedestrians and cyclists travelling north and south of the City.

Conclusion – Population and Human Health

Having considered all of the information presented in support of the proposed development, together with the nature of the development, I am generally satisfied that the proposed sustainable transport bridge across the River Suir in Waterford City will have a positive impact on the citys population. I am satisfied that the potential short terms negative impacts arising during the construction phase are

acceptable. It is anticipated that the development of the bridge will have a positive long-term impact on the population and human health.

8.2.4. **Biodiversity**

The Board will note that the application for the bridge is accompanied by a Natura Impact Statement. I have also carried out an Appropriate Assessment below in Section 9 of this report. The proposed bridge will cross the River Suir and elements of the bridge will permanently affect the Lower River Suir Special Area of Conservation (Site Code: 002137). The river is of ecological importance as it contains examples of Annex I habitats and supports populations of Annex II species. Habitats present on the site, recorded during the field survey, include the following:

- Tidal rivers
- Lower salt marsh
- Sea walls, piers & jetties
- Buildings and artificial surfaces

The river at the location of the proposed bridge corresponds to the Annex I habitat Estuaries and is considered to be a receptor of International Importance on the basis of its designation as a SAC. The River Suir is internationally important for a number of fish species including Twaite Shad, Atlantic Salmon, all three Lamprey species, European Eel and European Smelt. All of these fish species are sensitive to water quality and lighting impacts.

In terms of fauna, surveys did not identify badger setts within the study area. The surveys identified Otter activity, but no holts or couches within 150m of the proposed works. Bat activity in the area was low during the survey, with two species identified, and no potential roosts were identified within the study area. The EIAR concludes that the development is unlikely to impact on marine mammals or other mammal species or reptiles or amphibians. No habitats which would support important significant populations of breeding or wintering birds were identified. The EIAR includes an appendix to chapter 7 which considers the Marine Mammal Risk Assessment associated with the proposed development. This report was prepared by Dr. Simon Berrow, The Irish Whale and Dolphin Group.

No flora listed on the Flora Protection Order 2015 were recorded within the study area, but a number of invasive alien species were, including Common Cordgrass.

In relation to the likely impacts associated with the proposed development, the EIAR identifies the Key Ecological Receptors (KERs) as follows:

1. River Suir
2. Migratory Fish
3. Otter
4. Bats
5. Invasive Alien Species.

While I propose to address the impacts on the Lower River Suir SAC in the Appropriate Assessment Section of this report, in terms of the potential impacts of the proposed development, it is submitted that:

- Given the proximity of Twaite Shad habitat in relation to the proposed development, the species could potentially be impacted by the proposed development.
- While the River Suir at the location of the proposed bridge crossing and immediately downstream does not provide suitable spawning gravels for Salmonid species, salmon and trout, Atlantic Salmon could be impacted by reduced water quality as a result of accidental pollution.
- The use of the estuary as a nursery habitat by juvenile lampreys is currently unknown, however, the salinity levels measured during site investigations are not considered suitable for juvenile lampreys.
- Large numbers of juvenile eels (elvers) and European Smelt are expected to be present at the proposed location of the bridge during early spring.

In terms of potential impacts associated with the proposed development, the EIAR notes the following:

- The development will result in the complete loss of some aquatic habitat within the River Suir.

- The construction and operation of the piers and cofferdams within the River Suir represents a partial obstruction of the channel which could inhibit the migration of fish upstream and downstream.
- The proposed works to the north quay wall has the potential to increase barriers for otters commuting within the SAC.
- The proposed development could inhibit the movement of bats as the bridge may block commuting routes between areas of foraging habitat and roosts.

Construction Phase Impacts:

- Impacts on water quality by reason of:
    - Sedimentation
    - Scouring by reason of the presence of cofferdams and piles
    - Surface water run-off from construction areas which may contain high levels of suspended sediments and contaminants.
    - Suspended sediments
- Spillage of cementitious materials, particularly when pouring concrete for the support piles and abutments.
- Spillage of hydrocarbons
- Painting
- Cutting of cofferdams
- Resuspension of contaminants bound in the sediment
- Faecal contamination
- Noise and vibration impacts which could cause disturbance to both aquatic and terrestrial species.
- Barges or other vessels used during the construction of the bridge have the potential to spread aquatic invasive species, particularly Chinese Mitten Crab, within the Suir Estuary

Operational Impacts:

- Surface water drainage

- Permanent presence of the bridge abutments and support piles provide for hydraulic effects such as increased flow velocities leading to scour of the riverbed which will cause suspension of fine sediments.
- Repainting of the bridge
- Use of hydraulic fluid in the opening mechanism for the bridge.
- Lighting during construction and operation has the potential to impact on both aquatic and terrestrial species.

In terms of mitigation, the EIAR notes that it is impossible to avoid crossing the Lower River Suir SAC and that there will be habitat loss associated with the development. The EIAR also notes that the development has been designed to minimise direct or indirect impacts on habitats or species, or other ecological features that were classified as being of Local Importance (Higher Value) or above. The bridge has been designed having regard to the relevant European and national legislation and guidelines and to minimise the potential for both short and long term negative ecological impacts on all watercourses. Such design elements extend to lighting and to provide a high level of attenuation and water quality controls.

A number of mitigation measures have been identified, Section 7.7.2 of the EIAR, to reduce the effects of the development in terms of water quality during both the construction and operational phase, noise and vibration and the use of lighting and the potential impacts on migratory fish and nocturnal species including bats, the protection of safe access for Otter upstream and downstream of the development and the prevention of the import or spread of invasive alien species through the preparation of a Biosecurity Protocol. Other mitigation measures include fish rescue during the construction phase and monitoring of the mitigation measures identified.

In terms of residual impacts, the EIAR identifies the following:

- Loss of estuarine habitat cannot be mitigated and is deemed to be a permanent slight negative impact;
- The EIAR concludes that subject to the implementation of the mitigation measures, the probability of impacts on water quality is low and the significant of any such impact, if it were to occur, would be slight to imperceptible.

Conclusion – Biodiversity:

Following the implementation of mitigation as described in the EIAR, I am generally satisfied that the effects of the development on four of the five identified KERs would be reduced such that no significant residual effects remain. I do note that the impacts on the River Suir include the permanent loss of aquatic habitat and does not involve habitat that is a qualifying interest for the SAC. However, I am generally satisfied that the area affected is very small in the context of the wider SAC and that the development has been so designed to minimise such loss or fragmentation of habitat. Mitigation measures are also proposed to reduce the likelihood of impacts to the species the SAC supports. Overall, I am satisfied that the matter of biodiversity has been adequately addressed in the Environmental Impact Assessment Report and, in terms of potential impacts on flora and fauna, it is not anticipated that there will be any significant impacts, or cumulative impacts arising.

8.2.5. **Land & Soil**

In terms of likely significant impacts arising with regard to soils, I refer the Board to Chapter 8 of the submitted the EIAR, which deals with Soils & Geology. Direct impacts are likely to arise during construction of the proposed development, notably in terms of the bridge foundations and the combi-wall at the south abutment location to the front of the existing quay wall. The existing levels at the South Quay are also to be raised in order that the bridge can tie in approximately 1.8m above the existing quay ground surface level.

The construction of the cofferdams will use vibratory driven sheet piles and construction within the river has the potential to give rise to water contamination due to sediments and run-off or fuel spills entering the water.

In terms of impacts on geology, no significant adverse impacts are identified.

Mitigation measures are proposed in the form of best practice control measures as the temporary and permanent impacts on soils and geology are considered minimal.

It is anticipated that there will be no significant residual impacts on the soils, geology environment arising due the proposed development.

The Board will note that the GSI submitted an observation in relation to the proposed development noting that their records show that there are no County Geological

Sites located within the vicinity of the proposed development site. I note the request that a copy of reports detailing any site investigations carried out be provided to GSI and that any significant bedrock cuttings should be designed to remain visible as rock exposures rather than covered with soil and vegetated to permit on-going improved geological knowledge of the subsurface and inclusion, if appropriate, as additional sites on the geo-heritage dataset. In response to this, Waterford City & County Council advised that there will be no exposed cuttings in soil or bedrock.

Conclusion – Land & Soil:

I am satisfied that the matter of land and soil has been adequately addressed in the EIAR and that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on land and soil.

8.2.6. **Water**

Chapter 9 of the EIAR deals with Hydrogeology while chapter 10 deals with Hydrology.

Ground Waters:

In terms of the proposed development is it noted that the development will include the excavation of localised areas of contaminated ground which will be removed from the site, therefore resulting in a permanent positive impact on the soils environment and subsequently, the underlying aquifer.

There is potential for direct impacts on groundwater during the construction phase of the development by reason of excavation, construction of steel driven piles, storage of stockpiles and minor pumping during excavation works and the potential for accidental spillages and leakages. The impact is considered to be negligible and the significance imperceptible. Mitigation measures during the construction phase include the preparation of a project-specific Environmental Operating Plan and Outline Construction Environmental Management Plan – both of which have been submitted as part of the EIAR (appendix 4.1 and 4.1B refer). No likely significant impacts on the hydrogeological environment associated with the operation of the proposed development arise and any residual impacts are considered to be negligible.

Surface Waters:

The proposed bridge will cross the River Suir in Waterford City and the potential for impacts on the waters of the river have been identified in Section 9.2.4 of this report, and notably relate to the potential for the contamination of the river through sedimentation and the spillage of concrete or hydrocarbons as well as construction activities within and beside surface waters. Construction activity has the potential to result in indirect effects including localised erosion and deposition of the river bed. The impacts in this regard will be local to the bridge structure and volumes displaced by the bridge structures during construction will be imperceptible. Having regard to the short term and localised nature of the impacts, and the mitigation measures proposed, it is considered that no significant impacts on water will arise. The potential for residual impacts will be slight during the construction phase with erosion and sediment being small and highly localised.

Flooding:

The Flood Risk Assessment (FRA) notes that Waterford City & County Council have implemented a significant flood alleviation scheme in the city to address the historical recurring flooding in the Waterford City and the South Quays area. The Flood Alleviation Scheme focused on containment of the watercourses within their channels, achieved through the construction of a series of flood defences in the form of reinforced concrete walls, glass walls, sheet piled walls, embankments, stormwater pumps etc. In terms of the North Quays, the SDZ planning scheme included a floor risk assessment which resulted in the minimum finished floor level of 4.42mOD being adopted as part of the final scheme.

In terms of impacts associated with the proposed development, the existing flood defences on the south quays will have to be removed to allow for the integration of the bridge abutment. There is potential for inundation at this location during the construction phase without mitigation. Two sections of the flood wall to the east and west of the bridge will be removed to provide access to the new jetties and these will be replaced with flood gates. As such, the impacts are considered to be moderate to significant. In order to address potential impacts during the construction phase, mitigation measures include the provision of temporary flood defences to a level of

3.7mOD and monitoring of tide level and weather forecasts. No negative residual impacts are anticipated subject to the implementation of said mitigation measures.

Conclusion – Water:

Having regard to the information presented in the Environmental Impact Assessment Report, and subject to the implementation of mitigation measures, no long term significant impacts or cumulative impacts, on the natural groundwater regime or surface waters arise. In addition, it is considered that the development is acceptable in terms of flooding.

8.2.7. **Air & Climate**

Air:

There is potential for a number of emissions during the construction phase of the development including dust arising from construction activities as well as exhaust emissions from construction machinery and traffic. In terms of mitigation, a dust minimisation plan will be formulated as part of the Construction Management Plan and monitoring will ensure that any dust nuisance events occurring outside the site boundary will be curtailed and rectified. These impacts are considered to be local and temporary. In terms of the operational phase, there are no impacts anticipated.

Climate:

In terms of the impact of the development on climate, the construction phase of the development has the potential to impact due a number of emissions from construction vehicles, generators etc. however, due to the nature of the construction, it is considered that the emissions will have a negligible impact on climate. There are no predicted impacts arising during the operational phase of the development.

Conclusion – Air & Climate:

I am satisfied that the matter of air and climate has been adequately addressed in the EIAR and that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on air and climate.

Noise & Vibration:

The construction phase of the development has the potential to generated noise emissions and in particular, it is predicted that daytime construction thresholds are likely to be exceeded at three of the four noise sensitive locations assessed. The

exceedances are expected particularly during concrete breaking and piling activities which will last for approximately 2-3 months. Vibration is expected to be limited to the same period as indicated above. The impacts arising during the construction phase will be short term and temporary and, subject to appropriate mitigation, acceptable.

In terms of operational noise, the EIAR identifies 4 potential sources including plant servicing the bridge, traffic on the bridge, bridge opening and the plant room on the South Plaza. However, given the context of the site and the existing noise levels within the city environment, it is not expected that the development will give rise to any perceptible noise or vibration. No residual impacts are anticipated.

8.2.8. **Material assets**

The description of Material Assets in the EPA Guidelines, 2002, include architectural, archaeological and cultural heritage, designed landscapes, natural resources of economic value, buildings and structures and infrastructure. Having regard to the format of the EIAR submitted, these aspects of the environment are covered under a number of chapters as follows:

Chapter 5: Traffic & Transportation

Chapter 6: Population and Human Health

Chapter 8: Soils & Geology

Chapter 9: Hydrogeology

Chapter 10: Hydrology

Chapter 11: Landscape & Visual

Chapter 12: Noise and Vibration

Chapter 13: Air Quality & Climate

Chapter 14: Archaeological and Cultural Heritage

Chapter 15: Architectural Heritage

Chapter 5 of the submitted EIAR deals with traffic and transport, and in the context of the proposed bridge development, it is noted that the nature of the proposed bridge will exclude general vehicular traffic. The bridge will provide for cycle and pedestrian facilities along with an electric shuttle bus service. The lands at the north quay are

currently undeveloped and access to this area is off the Dock Road, the R711. While there is a public footpath along the R711, there are no cycle facilities. These lands comprise the SDZ lands and the planning scheme for this area has been approved. As part of the planning scheme, the Waterford Plunkett Train Station is to be relocated within the SDZ site.

To the south, the landing point borders the R680 at Meagher's Quay. This road includes both footpaths and cycle lanes along part of the road. The South Quays Car Parks are also located between the R680 and the River Suir. Waterford City Bus station is also located to the south of the river and along the R680. The primary vehicular route into and out of Waterford City is via Rice Bridge.

In terms of predicted impacts, the EIAR notes that the land the subject of the proposed development is owned by the Local Authority, albeit that the car park area is leased to a third party. The construction phase of the bridge will have little impact on the demography, employment, tourism or cultural assets of the area other than to provide temporary employment and minor negative impacts. The construction phase will also result in a loss of amenity, disruption and inconvenience to residents and visitors to city in terms of loss of community facilities, traffic and access to the marina. However, given the temporary nature of the construction works, it is considered that the impacts arising can be dealt with through mitigation measures.

In terms of the operation of the bridge, it is expected that the impacts will be positive, encouraging a modal shift from cars and will encourage tourism to the city, will provide alternative sustainable transport options and a new amenity for residents and tourists alike thereby providing indirect health benefits as well as promoting the development of the north quays SDZ. The development will result in the permanent loss of 150 car parking spaces at the South Quays adjacent to the Clock Tower. The loss of these spaces will require the redistribution of parking demands to other areas of the city. Surveys undertaken indicate that there is adequate capacity to accommodate this redistribution demands. The provision of the bridge will reduce the overall travel distance for pedestrians and cyclists from the north of the city by up to 1km, potentially reducing the number of car trips at peak times by up to 1,000 vehicles.

Conclusion – Material Assets:

I am satisfied that the matter of material assets has been adequately addressed in the EIAR and that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on material assets.

8.2.9. **Archaeological & Cultural Heritage and Architectural Heritage**

Chapter 14 of the EIAR deals with archaeological and cultural heritage issues associated with the proposed development, noting that Waterford City dates back to the Viking Age and the proposed bridge is to be located to the north west of the city's Viking Triangle. An Underwater Archaeological Impact Assessment was carried out as part of the EIAR preparation and no direct or indirect impacts to any recorded features of terrestrial or underwater archaeology of historic significance are anticipated. The assessment confirmed that sections of the original historic quay remain in situ beneath the concrete quay at the northern side of the river. The construction phase of the development, and in particular the groundworks, has the potential to have a direct negative impact on previously unrecorded archaeological features.

Mitigation measures are proposed including monitoring during the removal of any quayside masonry and additional archaeological inspections of the riverbed within the footprint of the cofferdam. Residual impacts in terms of archaeology are not anticipated.

In terms of Architectural Heritage, the EIAR, at Chapter 15, identifies a number of protected structures in the vicinity of the proposed bridge site. The site of the proposed development on the south quays lies within the Architectural Conservation Area and the Clock Tower, a prominent landmark in Waterford City, lies in proximity to the proposed landing point of the proposed bridge on the south quay. Coal Quay lies to the east of the junction of Barronstrand Street and the South Quay, and to the east of the proposed south landing point, while Meagher's Quay lies to the west.

The development will give rise to a direct impact on the rubble stone wall of the access ramp to North Wharf which is near the bridge over the railway line. This ramp is a protected structure and the proposed development will require a breach in the wall.

In terms of impacts, the EIAR concludes that the proposed bridge will have a positive impact on the architectural heritage of Waterford City on the grounds that it will offer additional vantage points for views to the protected structures.

Mitigation measures are proposed, and it is expected that the impact on the character of Meagher's Quay will be slight. The Clock Tower is excluded from the working area and is to be safeguarded during the construction works. Residual impacts on architectural heritage is considered to be slight.

8.2.10. **Landscape**

Direct, indirect and cumulative impacts will arise as a consequence of the proposed development in the city landscape. Open views of the proposed bridge will be available from a number of locations in and around the site, and in particular from the east, south and west. Views from the north will be somewhat restricted due to the road elevation and roadside boundaries. The visual assessment includes a series of photomontages which seek to represent the proposed development from a number of points in and around the site and includes an assessment from the nearby roads and protected structures.

In terms of the visual impacts, the EIAR considers that the design of the bridge and landing areas, as well as lighting, are of a high standard and therefore, no proposed ameliorative, remedial or reductive measures are proposed. It is considered that given the urban context of the site, the residual and cumulative visual impacts associated with the proposed development are acceptable.

8.2.11. **Interaction of the Foregoing**

Chapter 17 of the EIAR seeks to deal with the interactions of the environmental aspects considered and the means of reducing the impacts of the development during the construction phase and when it is in operation. I have considered the interrelationships and whether these may, as a whole, affect the environment, even though the effects may be acceptable when considered on an individual basis. Table 17.1 of the EIAR provides a matrix of the impact interactions.

Cumulative impacts are also assessed in the context of other plans and projects within the vicinity of the proposed bridge, including a number of public and private developments. No cumulative impacts are likely to arise and therefore, there is no potential for in-combination effects on the environmental parameters arising.

Residual impacts are unlikely and there are no SEVESO sites in close proximity to the site of the proposed bridge.

I am satisfied that effects as a result of interactions, indirect and cumulative effects can be avoided, managed and / or mitigated by the measures which form part of the proposed development, the proposed mitigations measures detailed in the EIAR, and with suitable conditions. There is, therefore, nothing to prevent the approval for the development on the grounds of significant effects as a result of interactions between the environmental factors and as a result of cumulative impacts.

8.2.12. **Reasoned Conclusion on the Significant Effects**

Having regard to the examination of environmental information contained above, and in particular to the EIAR and the submission from prescribed bodies and observers in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows.

- Traffic & Transport:
    - Residual negative impact relates to the loss of 150 car parking spaces along the South Quays which will be mitigated through the preparation of a Construction Environmental Management Plan and associated Traffic Management Plan.
    - Modal shift from car use potentially reducing car numbers during peak times. This will be a positive impact.
- Population & Human Health;
    - Negative impacts during the construction stage will be mitigated through the CEMP and TMP. The contractor will also develop and implement a Stakeholder management and Communication Plan for the construction phase. Impacts on population and human health will be mitigated by measures set out in chapters 6, 12, 13 and 16 and tables 18.3, 18.9, 18.10 and 18.13 of the submitted EIAR.
    - The proposed development would have potentially significant positive effects on Population and Human Health in terms of the increased benefits in terms of shorter journey times and reduction in traffic hazard along with better facilities for cycling and walking.

- Biodiversity & Water:
    - Negative impacts during the construction stage will be mitigated through design and avoidance as well as the CEMP. Impacts to each identified Key Ecological Receptor will be mitigated by measures set out in chapter 7 and table 18.4 of the submitted EIAR and impacts to water will be mitigated by measures set out in chapters 8 and 9 and tables 18.6 and 18.7. The development will not result in the loss of any habitat for which the SAC is designated and is considered insignificant.
    - In terms of positive impacts, the development will result in the removal of contaminated land.
- Archaeological & Cultural Heritage and Architectural Heritage:
    - The construction phase of the development, and in particular the groundworks, has the potential to have a direct negative impact on previously unrecorded archaeological features. The potential impacts however are considered insignificant on the basis that the works will monitored by a suitably qualified and experienced archaeologist. No residual impacts are predicted.
    - The development will give rise to a direct impact on the rubble stone wall of the access ramp to North Wharf which is near the bridge over the railway line. This ramp is a protected structure and the proposed development will require a breach in the wall. The impact of the works is considered to be moderate but in terms of the setting of the structure, the impact is considered to be slight. It is proposed to use the material from the creation of the breach at the side of the new wall edges created and a lime-based mortar to match the existing stone work of the original wall will be used. I consider the residual impact in this regard to be slight.

  Impacts to archaeology and cultural heritage, as well as architectural heritage will be mitigated by measures set out in chapters 14 and 15, and tables 18.11 and 18.12, and include monitoring during the removal of any quayside masonry and additional archaeological inspections of the riverbed within the footprint of the cofferdam.

Notwithstanding the conclusion reached in respect of the inability of the proposed measures to fully mitigate the impact of the breaching of the rubble wall, protected structure at the North Wharf, it is considered that the environmental effects would not justify a refusal of planning permission having regard to overall benefits of the proposed development.

9.0 Appropriate Assessment

9.1. Introduction:

9.1.1. This section of the report considers the likely significant effects of the proposed sustainable transport bridge on the relevant European sites in view of their conservation objectives. The Board will note that the River Suir, which the bridge proposes to cross, is the habitat most likely affected by the proposed development and is designated as part of the Lower River Suir Special Area of Conservation (Site Code: 002137). The EU Habitats Directive 92/43/EEC provides legal protection for habitats and species of European importance through the establishment of a network of designated conservation areas collectively referred to as Natura 2000 (or 'European') sites.

9.1.2. Under Article 6(3) of the Habitats Directive, an Appropriate Assessment must be undertaken for any plan or programme not directly connected with or necessary to the management of a European site but likely to have a significant effect on the site in view of its conservation objectives. The proposed development is not directly connected with or necessary to the management of a European site. A Natura Impact Statement (NIS) was submitted in support of the proposed development to address the likely or possible significant effects, if any, arising from the proposed development on any European site.

9.2. Screening for Appropriate Assessment:

9.2.1. The purpose of AA screening, is to determine whether appropriate assessment is necessary by examining:

a) whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of the site, and

b) the potential effects of a project or plan, either alone or in combination with other projects or plans, on a Natura 2000 site in view of its conservation objectives and considering whether these effects will be significant.

The NIS identified the likely zone of impact for the consideration of Natura 2000 sites as the entire area within 2km of the subject site, and waterbodies up to 10km downstream of the project. The Stage 1 Screening identified two European sites, on which there is the possibility of a significant effect arising from the proposed development. These sites include:

- Lower River Suir SAC, Site Code 002137
- River Barrow & River Nore SAC, Site Code 002162.

9.2.2. Tables 3.2 and 3.3 of the Natura Impact Statement presents an evaluation of the likely screening effects of the project in view of the Conservation Objectives of the Natura sites, with Table 3.4 providing a summary of the European Sites, and the Qualifying Interests likely to be affected in each site. Section 3.3 of the NIS establishes that in the absence of appropriate mitigation, interruptions or delays in achieving certain Conservation Objectives for the above sites, as a result of the project, cannot be ruled out on the following qualifying interests:

European Site	**Qualifying Interest**
Lower River Suir SAC	Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Lampetra fluviatilis (River Lamprey) [1099] Alosa fallax fallax (Twaite Shad) [1103] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]

River Barrow and River Nore SAC	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Reefs [1170] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430] Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Lampetra fluviatilis (River Lamprey) [1099] Alosa fallax fallax (Twaite Shad) [1103] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]

9.3. **Conclusion on Stage 1 Screening:**

9.3.1. It is reasonable to conclude, on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, due to its location within the River Suir, has the potential to impact on the above two European sites in terms of the inclusion of permanent structures in the water body, hydrological impacts, changes to surface water quality, including sedimentation and disturbance to species during construction and operation, it is considered that a stage 2 AA should be carried out. The potential impacts (direct /indirect and in-combination effects) of the development on the site are examined in light of the site's conservation objectives.

9.4. **Stage 2 Appropriate Assessment**

Potential Impacts on The Lower River Suir Special Area of Conservation (Site Code 002137)

9.4.1. The Lower River Suir SAC consists of the freshwater stretches of the River Suir immediately south of Thurles, the tidal stretches as far as the confluence with the Barrow/Nore immediately east of Cheekpoint in Co. Waterford, and many tributaries including the Clodiagh in Co. Waterford, the Lingaun, Anner, Nier, Tar, Aherlow, Multeen and Clodiagh in Co. Tipperary. The Suir and its tributaries flow through the counties of Tipperary, Kilkenny and Waterford. The site is selected for the habitats and species listed in Annex I and Annex II of the EU Habitats Directive and identified above in Section 9.2.2 of this report. Detailed Conservation Objectives for The Lower River Suir Special Area of Conservation (Site Code 002137) are available with the overall objective being to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been designated.

9.4.2. The proposed development of the bridge will require the construction within the River which will directly impact the river bed habitat through the construction of abutments and support and support piles. In this regard, the Board will not the concerns of the Department of Culture, Heritage & the Gaeltacht in relation to pile driving. The habitats, for which the SAC is so designated include both Atlantic and Mediterranean Salt Meadows, as well as Hydrophilous tall herb fringe communities. The NIS notes that there are no examples of any of the Annex I Habitats within the development area, or within approximately 1km of the site, and therefore, the development will not result in the reduction in the area of the habitats or a change in the distribution of the habitats.

9.4.3. The potential risk to habitats arise in relation to hydrological impacts in terms of water quality, sedimentation and pollutants entering the water during the construction phase. It is concluded that notwithstanding the fact that the magnitude of risk is low, as the effects cannot be quantified, they are assumed to be significant in the absence of mitigation. In terms of potential impacts arising during the operational phase, the NIS notes that the bridge will require painting and maintenance during its life and the opening mechanism for the bridge may require the use of hydraulic fluid

which may enter the River Suir in the event of a leak. The risk, however, is considered low. I note that there are no suitable spawning habitats of fish species identified within the project area.

9.4.4. In terms of impacts on species, the NIS provides a detailed assessment of the potential impacts on each of the Annex II Species for which the SAC is so designated. In terms of impacts on migratory fish, including all three species of lamprey, Twaite Shad and Salmon, the NIS identifies the presence of physical structures in the river, which will increase velocities in the river, has the potential to form a barrier to migratory fish species. Other identified effective barriers to fish migration may arise from acoustic or lighting impacts.

9.4.5. As part of the assessment, the NIS presents a Hydraulic Modelling Report, which includes a modelled 'depth-averaged flow velocities during the mid-ebb of an average spring tide' to depict the worst case scenario in relation to the presence of the bridge supports and the impacts they will have on the velocities in the river. The NIS concludes that increase will be below the critical velocity for both juveniles and adults of all fish species. I also note the concerns of the DoCHG in terms of the potential for a salt wedge to become a regular occurrence at the site of the bridge. Any changes to the salinity of the waters has potential to change turbulence and mixing which may in turn, affect juvenile Twait shad feeding habitat. In response to this issue, the applicant noted that a salt wedge already exists in the estuary and considers that given the small scale of the bridge supports, there will be no measurable impacts with very small and localised impacts on turbulence in the water column arising. There will be no predicted impacts to the feeding habitat of the juvenile Twait shad.

9.4.6. Impacts associated with noise and vibration are addressed in terms of the construction phase, as well as the operational phase, and it is noted that the impact of the construction phase has the potential to have significant impacts on fish species, at all of their life stages. It is noted that the Lamprey species and Salmon migrate at night while the Twaite Shad migrates during daylight hours. The Twaite Shad is also considered to have a much greater auditory range than other fish species, and therefore, it is considered that the Twaite Shad, particularly the juvenile Twaite Shad, is highly vulnerable to the noise and vibration associated with the construction phase of the development. It is considered that the construction phase

of the development is not likely to lead to a significant barrier to the spawning migration of the lamprey species or salmon as it occurs outside working hours.

9.4.7. In terms of the impact of lighting on fish species, it is noted that light spill onto water during hours of darkness can cause disturbance to nocturnal species. This disturbance can arise due to inappropriate lighting during both the construction and operational phases and may cause the fish to avoid the area thereby preventing migration up and downstream.

9.4.8. The proposed development also has the potential to impact on the Otter, an Annex II species associated with the River Suir SAC. The surveys identified Otter activity, but no holts or couches within 150m of the proposed works. The potential impact on the otter arises in relation to the potential for impacts on fish and therefore the feeding habits of the otter. In addition, it is noted that the Otter may use the intertidal habitats in the vicinity of the project for foraging, resting or as a commuting link and therefore, the proposed development has the potential to create a barrier in terms of physical obstruction and disturbance through light and noise emissions.

9.4.9. The NIS notes that there is currently no exposed river bed on the northern or southern banks of the River Suir at the project site for a water level+2.4mOD. At a water level of +0.0mOD there is a 2.4m wide exposed mud corridor along the southern bank while at a water level of -2.2mOD there is a 7m wide mud corridor along the northern bank and an 11m wide corridor along the southern bank. These mud corridors may be impacted during the construction phase, potentially impacting Otter movements although it is submitted that due to the swimming speed of the Otter, they will continue to move unimpeded with the bridge in place.

9.4.10. In terms of impacts associated with noise and vibration, it is considered that there is potential for disturbance to be caused, particularly during the construction phase of the bridge development. The introduction of artificial and inappropriate lighting of the bridge may also deter Otters from moving past the bridge. However, the NIS also notes that the occurrence of otters in towns and cities suggests that the species is able to habituate to human activities.

Potential Impacts on The River Barrow and River Nore Special Area of Conservation (Site Code 002162)

9.4.11. The River Barrow and River Nore SAC consists of the freshwater stretches of the Barrow and Nore River catchments as far upstream as the Slieve Bloom Mountains, and it also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford. The site passes through eight counties – Offaly, Kildare, Laois, Carlow, Kilkenny, Tipperary, Wexford and Waterford. Both rivers rise in the Old Red Sandstone of the Slieve Bloom Mountains before passing through a band of Carboniferous shales and sandstones, discharging to the sea at Waterford Harbour. The site is selected for the habitats and species listed in Annex I and Annex II of the EU Habitats Directive and identified above in Section 9.2.2 of this report. Detailed Conservation Objectives for The River Barrow and River Nore SAC (Site Code 002162) are available for the SAC with the overall objective being to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been designated.

9.4.12. The proposed development of the bridge will be located approximately 6.5km to the west of the SAC site, and it is submitted that the only potential impacts arising from the development relate to hydrological, sedimentation and water quality impacts. There is also considered potential arising in relation to invasive alien species. The habitats, for which the SAC is so designated include Estuaries, mudflats and sandflats, reefs, Salicornia, both Atlantic and Mediterranean Salt Meadows, as well as Hydrophilous tall herb fringe communities. The NIS submits that the development will not result in the reduction in the area of the habitats or a change in the distribution of the habitats.

9.4.13. In terms of potential hydrological impacts, the NIS concluded that any significant scouring and redeposition of sediment from the riverbed during construction will be limited to within150m upstream and 300m downstream of the project site. In terms of water quality, the NIS considers that the impacts are the same as those determined as arising in the River Suir SAC, and concludes, that given the separation distance, the significance of any effects is limited. In the absence of mitigation, the NIS identifies a potential risk that aquatic invasive species could be spread within the estuary by barges and other vessels during the construction phase of the project.

9.4.14. In terms of impacts on species, the NIS provides a detailed assessment of the potential impacts on each of the Annex II Species for which the SAC is so designated. In terms of impacts on migratory fish, including all three species of lamprey, Twaite Shad and Salmon, the NIS concludes that due to the distance between the SAC and the subject site, any water quality impacts will be significantly lower than in the immediate vicinity of the site.

9.4.15. The terms of the potential to impact on the Otter, an Annex II species associated with the River Barrow and River Nore SAC, it is concluded that there will be no barrier to connectivity and no direct impacts on Otters in the SAC.

9.4.16. The Desmoulin's Whorl Snail is also an Annex II species associated with the River Barrow and River Nore SAC. The NIS notes the lack of information in relation to the presence of the species in the vicinity of the proposed development but notes that notwithstanding a lack of suitable habitat for the species in either the River Suir SAC or the River Barrow and River Nore SAC, its presence cannot be ruled out. Potential impacts on water quality may reduce suitable habitats occupied by the species.

Conclusion on Potential Impacts on SACs

9.4.17. In light of the above assessment, and in accordance with the precautionary principle, it is concluded that there is potential that the proposed development, either on its own or in combination with other developments proposed in the vicinity, may have a significant effect on the River Suir SAC or the River Barrow and River Nore SAC, and in particular, on water quality. The works would have the potential, in the absence of mitigation, to increase siltation load /pollution events, noise and lighting which could result in temporary effects on the species/habitats for which the site is designated.

9.5. Mitigation

9.5.1. Mitigation measures are proposed to address the potential adverse effects of the development and to ensure the protection of the integrity of The River Suir SAC (Site Code 002137) and The River Barrow and River Nore Special Area of Conservation (Site Code 002162) and the conservation status of protected habitats and species they support. Measures are presented in Chapter 5 of the Natura Impact Statement and are included to address matters relating to:

- Water Quality
- Noise and vibration
- Lighting and shade
- Biosecurity protocol
- Fish rescue during dewatering
- Monitoring

9.5.2. In terms of Water Quality, the following mitigation measures are proposed:

- a temporary attenuation facility will be provided to allow sediment to settle out,
- sheet piling for the new quay wall at the southern abutment will be installed prior to excavation on the south quays
- cofferdams will be removed at high water
- any stockpiling of material, which will be minimal, will take place at a removed from the riverbank
- method statements for weather and tide/storm surge forecasting will be provided and water levels in the river will be continually monitored
- a Construction Environmental Management Plan shall be submitted to the NPWS and IFI for approval
- measures to prevent cementitious materials, hydrocarbons and other chemicals entering the water are proposed
- painting of the bridge will occur over land prior to being lifted into position and paints containing organotin compounds shall not be used.
- the use and regular maintenance is not considered to pose a risk to water quality
- any future painting of the bridge will be restricted to paints as described above and a platform shall be provided to form an effective barrier between any repair / painting works and the River Suir to capture any spills.

9.5.3. In terms of Noise and Vibration, the following mitigation measures are proposed:

- There will be a seasonal restriction of pile driving to mitigate adverse effects on migratory fish species. Table 5.1 of the NIS, page 74, illustrates the sensitive periods for fish migration.
- Pile driving will be restricted to two 3 month periods, June to August and November to January.
- There will be restrictions on pile driving hours and breaks between pile drives.
- An Ecological Clerk of Works will be appointed to supervise all pile driving activities.
- The Twaite Shad is the only species for which direct effects are likely to be significant. In order to minimise the risk, a 'soft start' is proposed in relation to pile driving, as is common practice and which will afford time for the species to move away from the source of the impact.
- It is considered that the mitigation measures proposed are adequate to eliminate any risk of significant noise and vibration impacts on otters during the construction phase.

9.5.4. In terms of Lighting and Shade, the following mitigation measures are proposed:

- Artificial lighting has the potential to impact migratory fish species.
- Construction lights will be turned off over the river outside of working hours
- During operation of the bridge, the lighting will be limited to the minimum area and will be designed to ensure no light spill onto the river.

9.5.5. The NIS identified the potential risk arising in relation to invasive species, such as Chinese Mitten Crab, being spread within the Suir-Barrow-Nore Estuary, which has the potential to adversely affect Annex I habitats, in particular 'Estuaries'. A Biosecurity Protocol will be prepared and approved by the Ecological Clerk of Works prior to acceptance and implementation.

9.5.6. During the erection of the cofferdams, and in order to prevent the death of any potentially trapped fish, they will be removed during dewatering using nets.

9.5.7. Monitoring in relation to water quality will be undertaken weekly for the duration of the construction phase and monthly for 24 months post completion. Hydroacoustic monitoring, which will include establishing the ambient underwater noise levels in the

estuary and the rate of sound attenuation, will be undertaken on a continuous basis for the duration of the construction period and any changes in the intertidal habitats will be recorded and monitored every 2 months, beginning 6 months prior to the commencement of development and finishing 12 months post completion.

9.5.8. In terms of implementation, the NIS recommends that any grant of permission should include a condition which gives effect to the mitigation, including monitoring and enforcement, prescribed in the Natura Impact Statement. The NIS also identifies a number of Environmental Management Plans relating to the proposed development which will be prepared prior to the commencement of the development including:

- Construction Environmental Management Plan
- Environmental Operating Plan
- Construction and Demolition Waste Management Plan

The NIS includes outline plans and a Site Environmental Manager and Ecological Clerk of Works will ultimately approve and accept the final plans prepared by the contractor. It is noted that the Site Environmental Manager and the Ecological Clerk of Works will be appointed as independent experts to ensure the successful development, implementation and maintenance of the Environmental Operating Plan and to ensure that mitigation prescribed in all of the environmental documents are fully implemented and monitored.

9.5.9. In terms of residual effects, the NIS concludes that following the inclusion of the mitigation measures identified above, the probability of impacts on water quality arising from the construction of the bridge are very low and the significance of such impacts, if they were to occur, would be slight to imperceptible. It is concluded that there will be no residual effects arising in relation to Annex I habitats, the Desmoulin's Whorl Snail, migratory fish species or the otter.

9.5.10. Conclusion on Mitigation:

Subject to the implementation of the measures described, the construction, operation and maintenance of the bridge is unlikely to give rise to any significant impacts on the qualifying interests for which the Lower River Suir SAC or the River Barrow and River Nore SAC are selected, and hence, on the integrity of the sites, and residual impacts are unlikely.

9.6. **In Combination Effects**

9.6.1. Plans/projects in the area which may result in potential in-combination effects are considered in chapter 6.0 of the NIS and includes an assessment of all previous plans and projects, plans and projects currently in planning and proposed future plans and projects within 15km of the subject site location, dating from 2008 to the present. This assessment considered 58 plans and projects and concludes that the proposed development does not have the potential to significantly affect any European Site in combination with other plans and projects, except for developments which will form part of the North Quays Strategic Development Zone.

9.6.2. The proposed bridge development will support the future development of the North Quays SDZ, which will include the creation of a new urban quarter with commercial, residential and tourism infrastructure, as well as a transportation hub in Waterford City. The bridge will connect the SDZ to the existing urban core of the city. The likely in-combination effects arising from both developments relates primarily to noise and vibration impacts and the potential overlap in the development programmes for both projects.

9.6.3. In terms of mitigation in this case, it is submitted that the co-ordination of pile driving between the proposed bridge project and the SDZ development will be sufficient to effectively mitigate any cumulative impacts and prevent any adverse in-combination effects on the Natura 2000 sites.

9.7. **Conclusion**

9.7.1. I have read the submitted Natura Impact Statement in its entirety, together with all other environmental reports submitted with the planning application in support of the proposed development, and I am satisfied that it assesses the likely significant impacts arising from the proposed development on the integrity of the European site the River Suir SAC (Site Code 002137) and The River Barrow and River Nore Special Area of Conservation (Site Code 002162). I have had full regard to the Stage 2 Appropriate Assessment as set out in the NIS. I am satisfied that it has adequately identified and assessed the key characteristics of the potential impacts arising as a result of the proposed development, both alone and in combination with other projects, which could undermine the stated conservation objectives of the Natura 2000 site.

9.8. In the interests of protecting the conservation objectives of the European Site, mitigation measures are proposed in section 5 of the submitted NIS. Mitigation measures are proposed for both the construction and operational phases and on implementation, it is submitted that there are no likely residual negative impacts on the River Suir SAC (Site Code 002137) and The River Barrow and River Nore Special Area of Conservation (Site Code 002162. It is concluded that the proposed development will not have a significant adverse effect on the integrity of the Natura 2000 Network.

9.9. Having regard to the information presented with the application, including the Natura Impact Statement, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, the Environmental Impact Assessment Report, submissions received and my assessment as set out above, I consider it reasonable to conclude that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European sites The River Suir SAC (Site Code 002137) and The River Barrow and River Nore Special Area of Conservation (Site Code 002162) or any other European site, in view of the site's Conservation Objectives.

10.0 **Recommendation**

10.1. I recommend that permission be granted for the proposed development, for the following reasons and considerations and subject to the stated conditions:

Reasons and Considerations

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

- The provisions of the European Communities (Environmental Impact Assessment) Regulations 1989–1999 (as amended),
- The European Communities (Birds and Natural Habitats) Regulations, 2011,
- The national, regional and local strategic road policies and objectives, including those set out in the National Planning Framework, the Regional Planning Guidelines for the South-East Region 2010-2022 and the Waterford City Development Plan 2013-2019,
- Smarter Travel – A Sustainable Transport Future 2009-2020,
- The National Cycle Policy Framework 2009-2020,
- The Waterford North Quays SDZ Planning Scheme 2018,
- Waterford Planning Land Use and Transportation Strategy (PLUTS) 2004-2020
- The provisions of the Roads Acts 1993 to 2015,
- The design and layout of the proposed sustainable transport bridge development,
- The range of proposed mitigation measures set out in the submitted Environmental Impact Statement and the Natura Impact Statement,
- The report and recommendation of the Inspector.

Proper Planning and Sustainable Development:

It is considered that, subject to compliance with the conditions set out below, the proposed sustainable transport bridge would support the development of the North Quays Strategic Development Zone Planning Scheme 2018 and would not:

a) have significant negative effects on the environment or the community in the vicinity,

b) give rise to a risk of pollution,

c) be detrimental to the visual or landscape amenities of the area,

d) seriously injure the amenities of property in the vicinity,

e) adversely impact on the cultural, archaeological and built heritage of the area and

f) would not interfere with the existing land uses in the area.

The proposed road development, which will constitute an improvement in terms of cyclist and pedestrian safety and convenience within Waterford City in accordance with the objectives of the Waterford City & County Development Plan 2013-2019, would advance the creation of a network of designated cycle network in support of the Smarter Travel – A Sustainable Transport Future 2009-2020 and the National Cycle Policy Framework and would, therefore, be in accordance with the proper planning and sustainable development of the area.

Environmental Impact Assessment:

The Board completed in compliance with s.172 of the Planning and Development Act 2000 an environmental impact assessment of the proposed development, taking into account:

- the nature, scale, location, and extent of the proposed development;
- the Environmental Impact Assessment Report and associated documentation submitted with the application;
- the submissions from the applicant, the observers and the prescribed bodies;
- the Planning Inspector's report;

The Board considered that the Environmental Impact Assessment Report, supported by the information submitted by the applicant identifies and describes adequately the direct, indirect and cumulative effects of the proposed development on the environment. The Board is satisfied that the information contained in the EIAR

complies with the provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU.

The Board agreed with the summary and examination, set out in the Inspector's report, of the information contained in the Environmental Impact Assessment Report and associated documentation submitted by the applicant and submissions made in the course of the application. The Board is satisfied that the Inspector's report sets out how these were addressed in the assessment and recommendation (including environmental conditions) and are incorporated into the Board's decision

Reasoned Conclusion

The Board completed an environmental impact assessment and agreed with the Inspector's assessment of the likely significant effects of the proposed bridge development, and generally agreed with the Inspector's conclusions on the acceptability of the mitigation measures proposed and residual effects and concluded that the proposed bridge development would not be likely to have significant adverse effects on the environment.

Notwithstanding the conclusion reached in respect of the inability of the proposed measures to fully mitigate the impact to the wharf wall at Ferrybank, a protected structure, where the parapet wall that encloses the ramp which runs over the railway line and down to the wharf is to be breached to provide for pedestrian access to the proposed sustainable transport bridge, it is considered that the environmental effects would not justify a refusal of planning permission having regard to the overall benefits of the proposed development. The Board generally adopted the report of the Inspector and considered that the effects of the proposed development on the environment would be acceptable.

Appropriate Assessment:

The Board agreed with the screening assessment and conclusion carried out in the Inspector's report that the Lower River Suir Special Area of Conservation (Site Code: 002137) and River Barrow & River Nore Special Area of Conservation (Site Code

002162) are the only European Sites in respect of which the proposed bridge development has the potential to have a significant effect.

The Board considered the Natura Impact Statement and associated documentation submitted with the application for approval, the mitigation measures contained therein, the submissions and observations on file, and the Inspector's assessment.

The Board completed an appropriate assessment of the implications of the proposed bridge development for the affected European Sites, namely River Suir SAC (Site Code 002137) and The River Barrow and River Nore SCA (Site Code 002162), in view of the sites' conservation objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment.

In completing the appropriate assessment, the Board considered, in particular, the following:

(i) the likely direct and indirect impacts arising from the proposed bridge development both individually or in combination with other plans or projects,

(ii) the mitigation measures which are included as part of the current proposal, and

(iii) the conservation objectives for the European Sites.

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

In overall conclusion, the Board was satisfied that the proposed bridge development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the sites' conservation objectives.

CONDITIONS

1. The proposed bridge development shall be carried out and completed in accordance with the plans and particulars, including the Environmental Impact Statement and the Natura Impact Statement, lodged with the application and by the further particulars received by An Bord Pleanála from Waterford City & County Council on the 17th day of May, 2019, except as may otherwise be required in order to comply with the following condition.
   Reason: In the interest of clarity.

2. The proposals, mitigation measures and commitments set out in the Environmental Impact Statement Report and the Natura impact statement shall be implemented in full as part of the proposed bridge development.
   Reason: In the interest of clarity, to mitigate the environmental effects of the proposed bridge development and to protect the amenities of the area and of property in the vicinity.

3. The local authority, or any agent acting on its behalf, shall ensure that all plant and machinery used during the works should be thoroughly cleaned and washed before delivery to the site to prevent the spread of hazardous invasive species and pathogens.
   Reason: In the interest of the proper planning and sustainable development of the area and to ensure the protection of the European Site.

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A. Considine
Inspectorate
4th June, 2019