

LOUTH COUNTY COUNCIL

Comhairle Contae Lú



An Bord Pleanála Section 177AE Application

for the

Boyne Greenway – North Bank - Drogheda

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Boyne Greenway – North Bank - Drogheda

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**AN BORD PLEANALA SECTION 177AE APPLICATION FOR THE
BOYNE GREENWAY - NORTH BANK - DROGHEDA**

NOVEMBER 2022

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1 INTRODUCTION

This report provides information to facilitate An Bord Pleanála Section 177AE Assessment under the Planning and Development Act, 2000, (as amended) for proposed Boyne Greenway – North Bank - Drogheda, Co. Louth.

The proposed works are comprised of the construction stages of the Boyne Greenway – North Bank in Drogheda, County Louth, an Outdoor Recreation and Infrastructure Scheme (ORIS) Project 2022. Works to be undertaken include provision of a path with a total length of c. 1.6km long. Of this c. 650m is a completely new path which will run through mainly scrub habitat.

The remainder of the proposed works consists of the enhancement of an existing 950m pathway including widening of the existing tarmacadam path from 2m to 3m with a bitmac surface, resurfacing of poor-quality surfaces, and provision of lighting. The proposed works go from Boyne Hall estate connecting to an existing footpath perpendicular to the Lower Mell street, running through the footpath up to the Horse lane, connecting back to Lower Mell street.

There are sections of the existing footpath which have become deteriorated. These sections are isolated, and they will be milled out and replaced. Benches, bins and bicycle racks will be installed at several locations along the path. In addition, these areas will be resurfaced.

Detail for the existing path upgrade and the new path have been provided in the drawings. They will comprise of 50mm flexible surfacing to CC-SPW-01100 followed by 150mm granular subbase material type B CC-SPW-00800 underlain by acceptable material to Appendix 6/1.

There are weeds and grass encroaching onto the existing path which will be removed / trimmed / scuffed back. There will be access control gates installed. Areas of fencing has also become damaged and will be replaced or removed. For longevity joints in the surfacing will be overbanded. Road signs and markings will be put in place. There will be public lighting installed along the path also.

The existing path is located immediately within the boundary River Boyne and River Blackwater Special Area of Conservation (SAC) for c. 550m of the overall 950m at a distance of 2m from the River Boyne itself at its closest point. The proposed greenway is 1.2 km from the River Boyne and River Blackwater Special Protection Area (SPA) and 2.75 km away from the Boyne Estuary SPA.

Planning policies as set out in Section 3 of this report have been adhered to as part of the project lifecycle.

This application follows Louth County Council's legal obligation to carry out an Appropriate Assessment for the proposed scheme. As mitigation measures are required for the proposed walkway works in order to prevent adverse impacts on the Natura 2000 network, an Article 6 Appropriate Assessment is required under the Habitats Directive (92/43/EEC). OCSC were commissioned to complete a Natura Impact Statement (NIS) for the proposed works in September 2022. This report assesses the effects that the proposed development would have on the Natura 2000 site network and the mitigation required and is contained in Appendix A.

2 PROJECT PARTICULARS

2.1 Client

Louth County Council
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2.2 Design Team/ Engineer

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2.3 Project supervisor design process (PSDP)

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3 PLANNING CONTEXT

3.1 National Policy

3.1.1 National Planning Framework

The National Planning Framework (NPF) is the Government's high-level strategic plan for shaping the future growth and development of Ireland to 2040, this was released in tandem with the National Development Plan (NDP), which sets out the budget for national infrastructure investment for the next 10 years.

The NPF is considered a new approach, that aims to improve the different areas of our lives, while bringing the various government departments, agencies, State owned enterprises and local authorities together behind a shared set of strategic objectives for rural, regional and urban development.

Of relevance to the proposed Boyne greenway, the NPF states;

"The development of greenways, blueways and peatways offer a unique alternative means for tourists and visitors to access and enjoy rural Ireland. The development of a strategic national network of these trails is a priority and will support the development of rural communities and job creation in the rural economy, as well as the protection and promotion of natural assets and biodiversity."

Furthermore, the NPF refers to key planning and development and place-making policy priorities for the Eastern and Midland Region and specifically,

"Building on the progress made in developing an integrated network of greenways, blueways and peatways, that will support the diversification of rural and regional economies and promote more sustainable forms of travel and activity based recreation utilising canal and former rail and other routes."

The NPF has identified 10 National Strategic Outcomes. These NSOs represent the overarching priorities which the NPF is designed to achieve. The most applicable of these NSOs, within the context of the Proposed Development, are the following;

National Strategic Outcome 3: Strengthened Rural Economies and Communities

"A strong start has also been made in the development of a national long-distance Greenway/ Blueway Network. Such a network, including rural walking, cycling and water-

based recreation routes, as well as 'peatways', has demonstrated major potential to bring new life to regional and rural locations through the "win-win" scenario of increased tourism activity and healthier travel. Developing this network further will diversify our rural economy by embracing the potential for a major expansion in the demand for activity based tourism."

National Strategic Outcome 7: Enhanced Amenities and Heritage

"Attractive places include a combination of factors, including vitality and diversity of uses, ease of access to amenities and services supported by integrated transport systems and green modes of movement such as pedestrian and cycling facilities. Appealing places are also defined by their character, heritage and sense of community. This includes attractive buildings and street layouts, civic spaces and parks and regeneration of older areas and making places feel safe through active use and design."

The following National Policy Objectives which set the context for regional/ local planning policy and are supportive of the proposed Boyne Greenway.

NPO 22 Facilitate tourism development and in particular a National Greenways, Blueways and Peatways Strategy, which prioritises projects on the basis of achieving maximum impact and connectivity at national and regional level.

NPO 26 Support the objectives of public health policy including Healthy Ireland and the National Physical Activity Plan, though integrating such policies, where appropriate and at the applicable scale, with planning policy.

NPO 27 Ensure the integration of safe and convenient alternatives to the car into the design of our communities, by prioritising walking and cycling accessibility to both existing and proposed developments and integrating physical activity facilities for all ages.

NPO 54 Reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions.

NPO 62 Identify and strengthen the value of greenbelts and green spaces at a regional and city scale, to enable enhanced connectivity to wider strategic networks, prevent coalescence of settlements and to allow for the long-term strategic expansion of urban areas.

NPO 64 Improve air quality and help prevent people being exposed to unacceptable levels of pollution in our urban and rural areas through integrated land use and spatial planning that supports public transport, walking and cycling as more favourable modes of transport to the private car, the promotion of energy efficient buildings and homes, heating systems with zero local emissions, green infrastructure planning and innovative design solutions.

The proposal in compliance with the above National Policy Objectives and will significantly enhance the existing amenities of the area and provide high quality designed facilities to boost physical activity as well as social interaction and associated wellbeing benefits for all users. The proposal will help to provide a segregated off- road experience improving accessibility and connectivity, linking neighbourhoods, recreation areas and the town centre along a beautiful urban riverine landscape. These are the building blocks required to boost a culture of cycling and walking as an alternative transport mode to achieve the target of Drogheda becoming less car dependent while contributing to lower emissions and a reduced carbon footprint.

3.1.2 National Development Plan 2018 – 2027

The National Development Plan 2018-2027 (NDP) came into effect in February 2018, in tandem with the National Planning Framework (NPF). The purpose of the NDP aims to drive Ireland's economic, environmental and social progress over the next decade. The key role of the NDP is to set out the updated configuration for public capital investment over the next 10 years in order to achieve the National Strategic Outcomes as set out within the NPF.

The NDP outlines initiatives that aim to enhance the economic growth for rural areas (NSO 3), of specific relevance;

The Outdoor Recreation Infrastructure Scheme will continue to support the further development of the outdoor recreation sector with funding for new infrastructure (walking routes, blueways etc.) and the enhancement of existing facilities.

This proposal supports the development and enhancement of a greenway along the northern bank of the River Boyne. It will result in an amenity asset that encourages active outdoor recreation for local residents in addition to being a tourism asset that can attract visitors. The proposal amenity will promote a culture of cycling and walking as a sustainable transport mode for everyday life directly connecting the Drogheda neighbourhoods of Mell with the town centre.

3.1.3 Smarter Travel: A New Transport policy for Ireland 2009-2020

This Policy sets out a vision of sustainable travel and transport in Ireland by 2020. It recognises cycling and walking as the transport modes with the least environmental impacts and a realistic alternative to the private car. The policy envisages cycling and walking facilities that form a coherent network. In addition, the policy considers cycling and walking as pivotal to achieving the goals in national health policies that seek to promote physical activity.

The Policy states that *“actions aimed at ensuring that alternatives to the car are more widely available, mainly through a radically improved public transport service and through investment in cycling and walking”*.

Furthermore, under Action 17, states.

“Many State properties are used for recreation and leisure. We will ensure that, where feasible, areas of State-owned lands such as canal towpaths, former rail lines, Coillte estates, etc. are made available for the development of walking and cycling trails.”

The Smarter Travel: A New Transport policy for Ireland 2009-2020 represents a commitment to promote cycling and walking in Ireland and strengthen its culture. The proposal has the potential to directly assist in achieving these targets supporting the overall vision of the Policy.

3.1.4 National Cycle Policy Framework 2009 – 2020

The National Cycling Policy Framework (NCPF) is Ireland’s first cycling framework. With influence taking from international experiences, the NCPF sets out an integrated basis for the long-term development and implementation of cycling policies among various sectors and levels of government. The NCPF is a direct contribution to a sustainable travel vision for Ireland.

The NCPF sets out 19 objectives developed to enhance a cycling culture. The proposed greenway supports the following objectives.

Objective 1 - Support the planning, development and design of towns and cities in a cycling and pedestrian friendly way.

Objective 2 Ensure that the urban road infrastructure (with the exception of motorways) is designed / retrofitted so as to be cyclist-friendly and that traffic management measures are also cyclist friendly.

Objective 4 - Provide cycling-friendly routes to all schools, adequate cycling parking facilities within schools, and cycling training to all school pupils.

***Objective 5** - Ensure that all of the surfaces used by cyclists are maintained to a high standard and are well lit.*

***Objective 6** - Ensure that all cycling networks - both urban and rural - are signposted to an agreed standard.*

3.1.5 The Climate Action Plan (CAP) 2021

The Climate Action Plan (CAP) 2021 sets out proposals for reducing greenhouse gas emissions over all sectors in Ireland. The aim of this plan is to set Ireland on a path to become one of the leading countries tackling climate change. The CAP outlines the importance of sustainable development and planning when tackling climate breakdown.

The CAP specifically highlights the need to provide good public transport, cycling and walking infrastructure, and to become less reliant on their cars, as one approach to tackle congested area. The CAP also addresses that policies need to be aligned better to achieve the ambitious targets for a modal shift.

The CAP in relation to transport states that,

“The goal is to successfully reduce emissions from the transport sector while maximising the benefits of the transition, without negatively damaging economic wellbeing, and without adversely impacting different social groups. The pandemic has also shown us that large scale behaviour change is achievable and that new patterns of mobility and working can play a part in the transition to a cleaner, safer and more sustainable transport system for all.”

The CAP lists a number of actions that are supportive of the proposal.

Action Number – Action

231 - Continue the improvement and expansion of the Active Travel and Greenway Network

232 - Development of a coherent and connected National Cycle Network Strategy

233 - Construct an additional 1,000km of cycling and walking infrastructure

234 - Encourage an increased level of modal shift towards Active Travel (walking and cycling) and away from private car use

235 - Accelerate sustainable mobility plans for schools

236 - Legislate to improve the Active Travel environment in urban centres

It should be recognised that the proposed greenway is an essential segment of public infrastructure that will support and assist in reaching the CAP key target of 500,000 extra walking, cycling and public transport journeys per day by 2030.

3.2 Regional Policy

3.2.1 Regional Spatial Economic Strategy 2019 - 2031 (EMRA)

There are three regional assemblies in Ireland, with a main function to identify regional policies and coordinate initiatives that support the delivery of national planning policy. The primary driver for this is the implementation of the Regional Spatial and Economic Strategies (RSES). The RSES provides regional level strategic planning and economic policy in support of the implementation of the National Planning Framework and provides a greater level of focus around the National Policy Objectives (NPO) and National Strategic Outcomes (NSO) of the NPF.

The RSES identifies the Eastern and Midland region's challenges as the need to sustain economic growth whilst transitioning to a low carbon society and the requirement to align population growth with the location of homes and jobs whilst creating healthy attractive places and an enhanced quality of life. In response, the RSES is underpinned by three key principles: placemaking, climate action and sustainable economic opportunity and growth.

The strategic vision is

"To create a sustainable and competitive Region that supports the health and wellbeing of our people and places, from urban to rural, with access to quality housing, travel and employment opportunities for all."

The RSES aims to enable Drogheda to realise its potential to grow to city scale, with a population of 50,000 by 2031 through the regeneration of the town centre, the compact and planned growth of its hinterland and through enhancement of its role as a self-sustaining strategic employment centre on the Dublin-Belfast Economic Corridor. It is anticipated Drogheda will accommodate significant new investment in housing, transport and employment generating activity.

The River Boyne is considered an important tourism asset and natural amenity which the RSES stating *"The River Boyne is the most important natural amenity of Drogheda and should be central to any future strategy for the town and its regeneration. Enhancing and developing the existing parklands*

and open space to the west of the town will provide an important new link to Brú na Boinne and beyond and allow the recreational value and leisure uses of this area to be maximised”.

The RSES, has referred to significant opportunities to develop greenways in the region, and has specifically referenced the proposal.

“The RSES supports the improvement and protection of walking and cycling routes such as the Boyne Greenway”.

Regional Policy Objective 4.15 seeks specifically to

Promote Drogheda as an urban tourism destination while protecting its natural and built heritage resources with a particular focus on capitalising on the following assets:

- *The town’s role as a gateway to the Boyne Valley heritage sites and World Heritage site at Brú Na Bóinne*
- *Amenity potential of the River Boyne including the Boyne Greenway*

In addition to the above objective, the following Regional Policy Objectives are considered relevant to the proposal. The principle of the proposed Boyne Greenway accords with these objectives.

RPO 7.24 Promote the development of a sustainable Strategic Greenway Network of national and regional routes, with a number of high-capacity flagship routes that can be extended and /or linked with local greenways and other cycling and walking infrastructure, notwithstanding that capacity of a greenway is limited to what is ecologically sustainable.

RPO 7.25 Support local authorities and state agencies in the delivery of sustainable strategic greenways, blueways, and peatways projects in the Region under the Strategy for the Future Development of National and Regional Greenways.

RPO 8.7 To promote the use of mobility management and travel plans to bring about behaviour change and more sustainable transport use.

RPO 9.10 In planning for the creation of healthy and attractive places, there is a need to provide alternatives to the car and to prioritise and promote cycling and walking in the design of streets and public spaces.

RPO 9.17: To support local authorities in the development of regional scale Open Space and

Recreational facilities particularly those close to large or growing population centres in the Region.

3.3 Local Policy

3.3.1 Louth County Development Plan 2021-2027

Louth County Development Plan (CDP) 2021-2027 is the operative statutory plan for the area and has superseded the Drogheda Borough Council Development Plan 2011-2017.

Table 2.4 of the County Development Plan sets out the settlement hierarchy for County Louth. Drogheda is designated as Regional Growth Centres. The Plan set out the following guidance for these centres:

“Regional Growth Centres are large towns with a high level of self-sustaining employment and services that act as regional economic drivers and play a significant role for a wide catchment area”.

The following core strategy policies are of relevance,

CS 3 To support and manage the self-sufficient sustainable development of all settlements in a planned manner, with population growth occurring in tandem with the provision of economic, physical and social infrastructure.

CS 5 - To support the progression and delivery of projects that would facilitate the creation of vibrant, sustainable communities and the rejuvenation of towns and villages, including any project to be funded by the Urban or Rural Regeneration and Development Fund.

CS 11 - Support the Regional Growth Centres of Drogheda and Dundalk as regional economic drivers targeted to grow to city scale with a population of 50,000 by 2031 and capitalise on their strategic location on the Dublin-Belfast Economic Corridor.

SS 1 - To support the role of Drogheda as a Regional Growth Centre and a driver of growth along the Dublin-Belfast Economic Corridor and to facilitate the continued expansion and growth of the town based on the principles of balanced, sustainable development that enables the creation of employment, supports economic investment, and creates an attractive living and working environment.

SS 13 - To support investment in public and sustainable transport infrastructure and services in Drogheda including the progression of the DART Expansion Programme which includes the electrification of the rail line and the extension of DART services to Drogheda.

SS 17 - To work with the NTA, local landowners, and developers to implement an integrated pedestrian and cycle path network throughout Drogheda, recognising the highest priority to be given to cycling and walking over other modes of transport.

SS 18 - To develop a network of green areas throughout the town including the delivery of a greenway along the north and southern banks of the River Boyne stretching from Townley Hall to Baltray and Oldbridge to Mornington in County Meath while maintaining the integrity of the Boyne Natura 2000 sites.

The importance of the River Boyne is acknowledged in the CDP as being central to any future strategy for the town and its regeneration. In conjunction with the adjoining parks and open spaces it provides a link to the Brú na Bóinne and beyond, as a recreational use.

The proposal is shown in the CDP as traversing lands that are zoned predominately within land zoning category “H1 Open Space”. The policy objective is “to preserve, provide and improve recreational amenity and open space”.

The land zoning guidance states that “Development that will improve the facilities or quality of the open space, amenity or recreational facilities, or contributes to the enjoyment of the space will be considered”. Cycleway/Walkway trails are considered a permitted land use.

A small section (ca. 0.13km) of the proposed greenway is located within lands zoned as “A2 – New Residential – Phase 1”. This section of greenway will establish a link to the residential neighbourhoods of Oldbridge, Boyne Lodge and Boyne Hall in addition to helping improve the general connectivity of the other residential areas along the Slane Road to the town centre and the amenity of the River Boyne. The proposal will bring positive permeability and accessibility benefits to the general locality and local community. The proposal will support the creation of any future new residential developments on these zoned lands by providing a sustainable transport link to the town centre and surrounding area. The proposal is considered to accord with the proper planning and sustainable development of the area.

3.3.2 Movement

The CDP has the following policy objectives in relation to more sustainable forms of transport including,

MOV 7 - To support a modal shift away from the private car to more sustainable forms of transport, such as public transport, cycling and walking and the attainment of any national targets relating to modal change published during the life of this Plan.

MOV 9 - To support investment in sustainable transport infrastructure that will make walking, cycling or public transport more attractive and appealing, and facilitates accessibility for all, regardless of age, physical mobility, or social disadvantage.

The CDP supports and will facilitate the provision of cycling/walking infrastructure and greenways that will provide a more comfortable and attractive environment for pedestrians and cyclists. The CDP acknowledges the individual and community benefits of active travel which encourages an active lifestyle, improve fitness levels and facilitate greater social interaction between people.

The principle of the proposed Boyne Greenway fully aligns with the following Cycling and Walking policy objectives.

MOV 25 - To support the retrospective provision of walking and cycling infrastructure in existing settlements, where feasible, to achieve growth in sustainable mobility and strengthen and improve the walking and cycling network.

MOV 28 - To promote walking and cycling as a safe, convenient, healthy, efficient, and environmentally friendly mode of transport for all age groups.

MOV 30 - To provide, where possible traffic free pedestrian and cyclist routes particularly where such routes would provide a more direct, safer, and more attractive alternative to the car.

MOV 33 - To continue the development of a network of Greenways in the County in accordance with the Strategy for the Future Development of National and Regional Greenways.

3.3.3 Tourism

The CDP highlights the need for the future development of the tourism sector in County Louth to capitalise on County's unique location in relation to the Boyne Valley and the Mourne/Cooley/Gullion Regions. It seeks to promote Drogheda as an urban tourism destination capitalising on its role as gateway to the Boyne Valley, Brú na Bóinne, Boyne River and Irelands Ancient East designation.

Greenways are deemed as entry points to a more active lifestyle and are also greatly enhancing the tourism attractiveness of these areas. Last year, 46% of all overseas holidaymakers to Ireland engaged in walking and cycling as part of their holiday experience. Harnessing the potential of this tourism

sector can have significant economic benefits. The proposal is supported by the following policy objectives.

TOU 8 To promote and facilitate the development of walkways and cycleways at appropriate locations throughout the County utilising disused transport links where feasible.

TOU 9 To protect the integrity and scenic quality of existing and future walking and cycling routes and their setting.

TOU 11 To continue the development of a network of greenways in County Louth in accordance with the 'Strategy for Future Development of National and Regional Greenways'.

TOU 17 To facilitate the sustainable development of the tourism sector and provide for the delivery of a unique combination of tourism opportunities drawing on the network of attractions in County Louth and potential future attractions.

3.4 Built Heritage

The built heritage of Louth refers to all man-made features, buildings or structures in the environment. This includes a rich and varied archaeological and architectural heritage to be found throughout the countryside and within the historic towns and villages of the county. The CDP seeks to protect the County's built and archaeological heritage from the direct and indirect impacts from climate change.

Below lists the relevant Built Heritage policies and objectives from the CDP. There are a number of Recorded Monuments within proximity of the proposal.

BHC 1 To protect and enhance archaeological sites and monuments, underwater archaeology, and archaeological objects listed in the Record of Monuments and Places (RMP), and/or the Register of Historic Monuments and seek their preservation (i.e. presumption in favour of preservation in situ or in exceptional cases, at a minimum, preservation by record) through the planning process and having regard to the advice and recommendations of the National Monuments

Service of the Department of Housing, Local Government and Heritage and the principles as set out in the 'Framework and Principles for the Protection of the Archaeological Heritage' (Department of Arts, Heritage, Gaeltacht and the Islands 1999).

BHC 2 To protect the built heritage assets of the county and ensure they are managed and preserved in a manner that does not adversely impact on the intrinsic value of these assets whilst supporting economic renewal and sustainable development.

BHC 3 To protect known and unknown archaeological areas, sites, monuments, structures and objects, having regard to the advice of the National Monuments Services of the Department of Housing, Local Government and Heritage.

BHC 5 To protect all sites and features of archaeological interest discovered subsequent to the publication of the Record of Monuments and Places (i.e. preservation in situ or in exceptional circumstances, at a minimum preservation by record) having regard to the advice and recommendations of the National Monuments Section of the Department of Housing, Local Government and Heritage.

BHC 7 To require applicants seeking permission for development within Zones of Archaeological Potential and other sites as listed in the Record of Monuments and Places to include an assessment of the likely archaeological potential as part of the planning application and the Council may require that an on-site archaeological assessment is carried out by trial work, prior to a decision on a planning application being taken.

BHC 10 To require, as part of the development management process, archaeological impact assessments, geophysical surveys, test excavations and monitoring, as appropriate, where development proposals involve ground clearance of more than half a hectare or for linear developments over one kilometre in length or for developments in proximity to areas with a density of known archaeological monuments and history of discovery, as identified by a licensed archaeologist.

The proposal does not conflict with the CDP policies as listed above. An Archaeological Impact Assessment (AIA) has been prepared to support this application. The archaeological impact assessment of the site at the proposed Drogheda Greenway, North Bank, Drogheda, Co. Louth was carried out by the Archaeological Consultancy Services Unit. There are four monuments located within or in the immediate vicinity of the proposed greenway along Toberboice Lane – Souterrains LH024-012001-012002, Enclosure LH024-12004 and Burial Ground LH024-012003. There are no Protected Structures listed in the Louth County Development Plan 2021-2027 or structures listed within the National Inventory of Architectural Heritage for County Louth or Meath directly present within the proposed greenway. As the area presently occupied by the existing footpath along the riverbank was previously monitored by Donald Murphy under works associated with the Drogheda Main Drainage project in the late 1990s, it is not expected that any archaeological features or deposits would be present within the proposed greenway along this route. However, the potential does exist that previously unknown archaeological feature or deposits may be exposed or identified, especially in the area adjacent to the known archaeological monuments (LH024-012001-012005) at Toberboice Lane,

where the potential is particularly high, within the greenfield adjacent to the proposed greenway. Therefore, it is recommended that archaeological monitoring of all ground works within the greenfield areas should be conducted and conditioned within any grant of permission for the site. This should be carried out by a licence eligible archaeologist working under licence from the Department of Housing, Local Government and Heritage in consultation with the National Museum of Ireland. It is also recommended that the ruinous stone structure, which will be partially impacted upon, should be subject to a detailed measured and photographic architectural survey.

3.5 Natural Heritage

County Louth boasts a rich natural heritage, which contributes substantially to the County's character, identity and sense of place, in addition to the well-being and the quality of life of those living in and visiting the County. Natural heritage comprises the biological and geological underpinnings of our existence, our biodiversity and geodiversity, expressed through various mediums including farming, wildlife and landscapes.

Below lists the relevant Natural Heritage policies and objectives from the CDP. There are a number of protected areas within proximity of the proposal.

NBG 3 To protect and conserve Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated under the EU Habitats and Birds Directives.

NBG 4 To ensure that all proposed developments comply with the requirements set out in the DECLG 'Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities 2010'.

NBG 5 To ensure that no plan, programme, or project giving rise to significant cumulative, direct, indirect or secondary impacts on European sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan, either individually or in combination with other plans, programmes or projects.

NBG 6 To ensure a screening for Appropriate Assessment (AA) on all plans and/or projects and/or Stage 2 Appropriate Assessment (Natura Impact Report/ Natura Impact Assessment) where appropriate, is undertaken to make a determination. European Sites located outside of the County but within 15km of the proposed development site shall be included in such screenings as should those to which there are pathways, for example, hydrological links for potential effects.

Policy CH 3 of the Drogheda Development Plan states the following in relation to the protection of Natura 2000 sites:

“Protect the designated Boyne Estuary SAC and SPA and the River Boyne and Blackwater SAC from any adverse impacts of development and to require appropriate assessment of any development likely to have an impact on such sites.”

In total 6 sites designated as SAC or SPA were recorded within 15km of the proposal. Given the type of project, the sites being given further consideration are the River Boyne and River Blackwater SAC, the River Boyne and River Blackwater SPA, and the Boyne Estuary SPA. A section of the proposed greenway is located within the River Boyne and River Blackwater SAC. Consequently, a full AA is required. A Natura Impact Statement (NIS) has been prepared by O'Connor Sutton Cronin & Associates to support this application.

The NIS assesses the likely significant effects on the Natura sites arising from the proposed works. The existing walkway will be widened, repaired, and extended while a new path will also be constructed. In addition, ancillary structures such as benches, lighting, gates, bins, and bicycle racks will be installed. Due to the nature of the works, there is a risk of water quality impacts as a result of debris, sediment, dust, and contaminated run-off entering the watercourse.

The mitigation measures proposed are considered to be sufficient to ensure that potential impacts, mainly relating to water quality, are minimised. The conclusion is that, with mitigation in place, no significant negative impacts on the conservation status of the Natura 2000 network and its associated habitats and species are anticipated as a result of this development.

The proposed greenway does not meet the threshold requirements for the provision of an Environmental Impact Assessment Report (EIAR) as set out in the Planning and Development Regulations 2001 (as amended) and Planning and Development Act, 2000 (as amended). A standalone EIAR Screening Report prepared by OCSC has been produced for the application.

4 EXTENT OF PROPOSED WORKS

4.1 Site Location

The proposed greenway is approximately 1.6km in length. It will comprise of upgrade works to existing paths as well as the construction of new paths. Approximately 550m of the existing 950m path is located within the River Boyne and River Blackwater Special Area of Conservation (site code 002299) with the path being approximately 2m from the River Boyne at its closest point. The proposed new path is not located within the protected areas. The proposed site is 1.2 km to the east of the River Boyne and River Blackwater SPA (site code 004232) and 2.9 km to the west of the Boyne Estuary SPA (site code 004080).



Figure 4.1. Approximate linear site location indicated by the red lines overlapping the Boyne Estuary SAC and the waterway leading to SPA downstream (Source: EPA maps, 2022).

4.2 Project Justification

The proposed Boyne Greenway (North Bank) is an integral part of a wider recreation strategy to get more people off road onto walkways/greenways which forms part of Louth County Council's County Development Plan 2021-2027 and the Government's wider plan to promote healthy living. It will offer an attractive alternative transport choice for school children and residents, bringing significant environmental, economic and health benefits to the wider community. The proposal will help to provide a segregated off-road experience improving accessibility and connectivity, linking neighbourhoods, recreation areas and the town centre along a beautiful urban riverine landscape.

These are the building blocks required to boost a culture of cycling and walking as an alternative transport mode to achieve the target of Drogheda becoming less car dependent while contributing to lower emissions and a reduced carbon footprint.

The proposed Greenway (North Bank) is an extension of the current Boyne Greenway. The 1.9km long Boyne Greenway brings you from St. Dominic's Park near the 'Bridge of Peace' in Drogheda, along the south bank of the River Boyne to the site of the Battle of the Boyne Visitor Centre at Oldbridge

There are weeds and grass encroaching onto the existing path which will be removed / trimmed / scuffed back. There will be access control gates installed. Areas of fencing has also become damaged and will be replaced or removed. For longevity joints in the surfacing will be overbanded. Road signs and markings will be put in place. There will be public lighting installed along the path also.

4.3 Proposed Works Extents

The proposed works are comprised of the construction stages of the Boyne Greenway – North Bank in Drogheda, County Louth, an Outdoor Recreation and Infrastructure Scheme (ORIS) Project 2022. Works to be undertaken include provision of a path with a total length of c. 1.6km long. Of this c. 650m is a completely new path which will run through mainly scrub habitat. The remainder of the proposed works consists of the enhancement of an existing 950m pathway, widening an existing tarmacadam path from 2m to 3m with a bitmac surface, resurfacing of poor-quality surfaces, and provision of lighting. The proposed works go from Boyne Hall estate connecting to an existing footpath perpendicular to the Lower Mell street, running through the footpath up to the Horse lane, connecting back to Lower Mell street.



Plate 4.1. Existing Pathway



Plate 4.2 Area for new path extension

All the aforementioned details are included on the drawings contained in the drawing pack submitted as part of this application.

4.4 Timescale for the Completion of the Works

The anticipated construction time for the works, which will be undertaken in two phases, is approximately 9-12 months.

4.5 Existing Environment

The Boyne Walkway is situated on the north bank of the River Boyne in Drogheda town. The walkway consists of:

- an approximately 1.6km long section located adjacent to the River Boyne. This section is located primarily within greenfield space which has been improved by an existing path over approximately 950m in length. The other 650m extends through scrub and grassland areas. This path will extend from Horse Lane in the east to the southeastern corner of Boyne Lodge housing estate in the west, crossing over Toberboice Lane. There are also proposed access

paths onto the main path via the existing connections off Trinity Street between Riverview and Fountain Hill Roads.

The surrounding land use is primarily residential and commercial along Trinity Street and in Drogheda town centre to the east with public amenity and agricultural land is located adjacent to the proposed path in its central and western sections.

The site is located along the estuarine section of the Boyne channel and is within the boundaries of the River Boyne and River Blackwater SAC in its central and eastern sections. There is also downstream hydrological connections between the proposed works and both the Boyne Coast and Estuary SAC and the Boyne Estuary SPA, which are located approximately 3.7km and 2.75km, respectively, downstream of the eastern end of the site. The River Boyne and River Blackwater SPA is located approximately 1.2km upstream of the western end of the site. There is also an indirect hydrological pathway for effects on this designated site as the River Boyne is transitional at Drogheda, meaning water quality impacts may affect some upstream areas as well as downstream due to the tides.

4.6 Design Drawings

Refer to Drawing Pack accompanying this application.

4.7 Construction Phase(s)

It is anticipated that the construction works will be completed in two phases. The anticipated actions required for completion of the Boyne Greenway are as follows:

- Inductions and site set up by the appointed contractor. No item of plant or equipment (including stores or offices) shall be placed or parked in the SAC zone except while actively working within this zone or within the construction compound.
- Site protection measures: carry out mitigation measures as identified in the NIS.
- Remove, trim, or scuff back weeds and grass encroaching onto the existing path.
- Mill out and replace deteriorated sections of the existing footpath.
- Detail for the existing path upgrade and the new path have been provided in the drawings. They will comprise of 50mm flexible surfacing to CC-SPW-01100 followed by 150mm granular subbase material type B CC-SPW-00800 underlain by acceptable material to Appendix 6/1. For longevity joints in the surfacing will be overbanded. Standard detail drawing attached.
- Construct new sections of path as per above specifications.
- Replace or remove areas of fencing along the path that have become damaged.
- Install road signs and markings to the completed path.

- Install public lighting along the path.
- Install benches, litter bins, and bicycle racks at several locations along the path.
- Install access control gates at entrances to the path.
- Tidy of site and removal of all associated construction materials and debris.

4.8 Emissions/ Discharges During Construction

Based on implementation of the mitigation measures contained in the NIS, no direct discharges or emissions to land or river are predicted to arising from the proposed works.

4.9 Operations Phases

There are no operational requirements for the proposed works, aside from routine maintenance.

Drainage will be in the form of French/filter drains. Standard detail drawings attached.

Path lighting has been proposed (Refer to Appendix C). The preliminary design has been prepared and includes for lighting along the length of the path. The lighting will be directional and will ensure minimal spill over beyond the path confines.

4.10 Mitigation Measures

The main mitigation is that a site-specific CEMP and a detailed method statement will be drawn up for the works. The CEMP and method statement will incorporate the specifics of the mitigation provided in Section 5 of the NIS which are necessary to protect the qualifying interests of the European Designated Sites. An outline CEMP will be submitted as part of this application.

These documents will outline clearly and precisely how each step of the proposed works will be undertaken in compliance with mitigation to protect the sites. In particular, strict water quality protection measures will be implemented throughout the project to mitigate impacts on all aquatic Annex II species, including Atlantic salmon, Otter and River lamprey which occur in the vicinity of the works as well as other water dependent features of interest in the Boyne Coast and Estuary SAC and the Boyne Estuary SPA and that of the nearby River Boyne and River Blackwater SPA.

These mitigation measures include:

- On-site refuelling in areas setback from any watercourse or drain and outside the SAC which overlaps with the site.
- The use of spill kits.
- Any leaks or spills to be cleaned up immediately.

- Equipment and machinery will be regularly maintained and if repairs are not possible, will be removed from site.
- No concrete / cement mixing will be carried out adjacent to any watercourse or drain.
- Any tool washing and any waste / grey water will be stored securely behind bunded areas until its removal from the site.
- Contained chemical portaloos toilets will be used and all sewage will be appropriately removed from the site to an authorised treatment plant.
- Use of silt fencing in areas where soil disturbance will take place.
- Routine monitoring will be carried out to ensure compliance with measures throughout the works.

4.11 Flood Risk Assessment

The proposed development will increase hardstanding areas which have a low potential to impact rainwater infiltration into the soil. However, it is considered that the proposed works will not give rise to any additional flooding or impact adversely upon adjoining lands. Louth County Council Infrastructure Office completed a site visit (October 2022) and a review of the flood maps for the area and had the following comment (Refer to Appendix D):

‘The proposed development is located in the Drogheda and Flood Maps for this area are now available online at www.floodinfo.ie. The Flood Maps indicate that a significant portion of the proposed site is vulnerable to Fluvial Flooding with predicted Extreme Water Levels of between 3.877m – 4.167m for a 1% A.E.P. (1 in 100 year return period) while a small portion is also vulnerable to Coastal Flooding with a predicted Extreme Water Level of 3.57m for a 0.5% A.E.P. (1 in 200 year return period). The proposed development is for upgrading and new works along a Riverside Walk, constructed with flood resilient materials, which is an amenity open space, and in accordance with Table 3.1 of The Guidelines for Planning Authorities – The Planning System and Flood Risk Management”, November 2009, can be considered as a “Water-compatible development” appropriate to the Riverside location.’

4.12 Hydrological/ Hydrogeological Impact

The Boyne Estuary transitional waterbody is located directly south of the proposed development site. Transitional Water Quality status for the period 2018-2020 is given as ‘Potentially Eutrophic’. It is also noted to be ‘At Risk’ based on Water Framework Directive (WFD) Risk Status. Transitional Waterbody Status for the WFD is noted to be ‘Moderate’.

There are multiple emission points according to the online EPA maps. There is a storm water overflow pipe located upstream of the proposed development site. There are multiple storm water overflows from this point downstream, south of Drogheda town, on both sides of the estuary. The primary effluent discharge for the Drogheda WwTP, is located c. 1.8km downstream of the city and c. 4km downstream of the proposed development site.

4.13 Assessment of Landscape Status and Visual Impact

Once the works are in place, given that no new structures or buildings are proposed, no negative visual impact will occur. The positive visual impacts are going to be moderate permanent. The Proposed Development does not constitute a visual obstruction, but is a visual intrusion in some of the views.

Regarding the construction phase, the removal of some vegetation will have a slight negative, moderate and permanent impact on existing landscape character. Also, site hoarding, construction traffic, ground disturbance and temporary structures required for construction will have a negative moderate and short-term impact.

5 LIAISON WITH STAKEHOLDERS AND PRESCRIBED BODIES

As part of its obligations, Louth County Council has consulted with various stakeholders during the design phase of these works.

Prior to this Section 177AE Application, the following statutory bodies provided information via publicly available sources.

- National Parks and Wildlife Service (NPWS).
- Inland Fisheries Ireland (IFI).
- Environmental Protection Agency (EPA).

The following prescribed Bodies will be formally notified of this application:

- Irish Water
- An Chomhairle Ealaíon
- Fáilte Ireland
- An Taisce
- Heritage Council
- Inland Fisheries
- Department of Culture, Heritage and the Gaeltacht, now known as Department of Housing, Local Government & Heritage
- Transport Infrastructure Ireland
- Bord Gais
- Dep. of Environment Climate & Communications

6 SITE RULES & RESTRICTIONS

6.1 Site Rules

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

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

Contractor will be required to put in place systems to address the affects resulting from COVID-19, including, but not limited to, adherence to Government and HSE Guidelines.

6.2 Site Restrictions

The following site restrictions will apply at the Boyne Greenway (North Bank) project:

- Restrictions on Working Hours
- Normal working hours are as follows:
0800 - 1800 hrs Monday-Friday
0800 - 13.30 hrs Saturday
- Restrictions on Access
- The Contractor shall ensure that access to and from all properties adjoining the site shall not be unreasonably restricted during the construction works. The maintenance of access shall be the responsibility of the principal contractor.

7 UNFORSEEN CIRCUMSTANCES

Where unforeseen circumstances arise, the environmental issues arising must be submitted to the Employers Representative as soon as possible after the event.

Where unforeseen circumstances causing significant design changes the environmental implications arising are to be submitted to the Designers and the Employers Representative. Changes in design can only be implemented by the written approval of the Employers Representative prior to commencement of any works affected by the change in design.

Environmental issues arising during the course of construction from design changes, control measures, unsafe practices, incidents and accidents, amendments to the contractors Environmental Plan and information for the Safety and Health File will be examined at site meetings.

Any significant alteration to the scope of the works, for whatever reason, must be vetted by the Employers Representative. Any hazard discovered but not removed during the construction period must be recorded and a copy of the records sent to the Project Supervisor Design Process as soon as possible and in any case before Practical Completion.



APPENDIX A. Natura Impact Statement

NATURA IMPACT STATEMENT

Boyne Greenway - North Bank - Drogheda

Louth County Council

PROJECT NO. L340/1

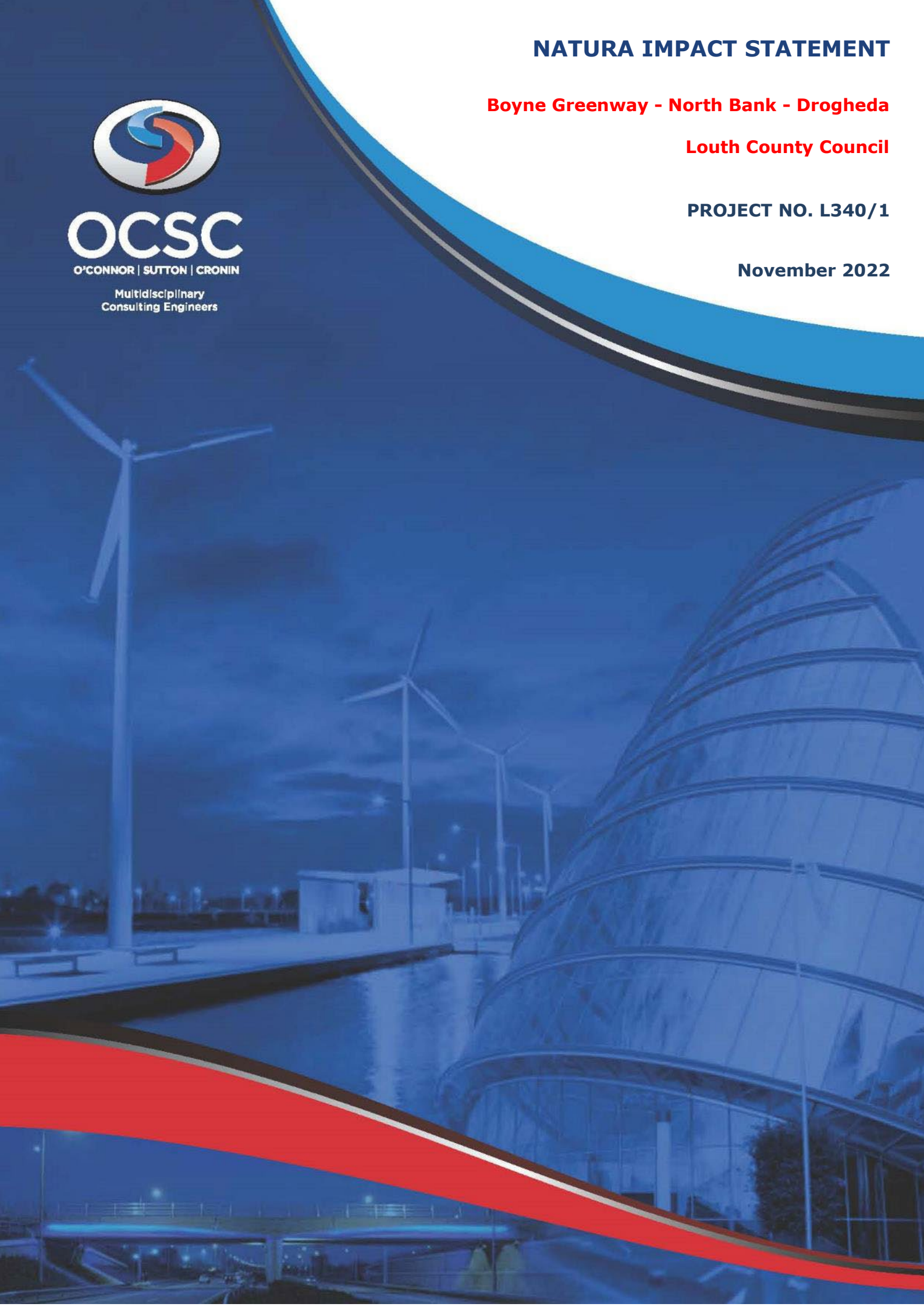
November 2022



OCSC

O'CONNOR | SUTTON | CRONIN

Multidisciplinary
Consulting Engineers



NATURA IMPACT STATEMENT

Boyne Greenway - North Bank - Drogheda

Louth County Council

PROJECT NO. L340/1

NOVEMBER 2022

NATURA IMPACT STATEMENT

Boyne Greenway - North Bank - Drogheda

for

Louth County Council



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NOTICE

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DOCUMENT CONTROL & HISTORY

OCSC Job No.: L340/1	Project Code	Originator	Zone Volume	Level	File Type	Role Type	Number	Status / Suitability Code	Revision
	L340/1	OCSC	ZZ	ZZ	RP	YE	800	S2	P3
Rev.	Status	Authors	Checked	Authorised	Issue Date				
P3	Final	EB	EB	EB	08.11.22				
P2	Revised	EB	EB	EB	07.11.22				
P1	Revised	EB	EB	EB	20.10.22				
P0	DRAFT	EB	LI/ GB	EB	01.09.22				

NATURA IMPACT STATEMENT

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1. INTRODUCTION

1.1. Project Contractual Bases & Parties Involved

This report has been prepared by O'Connor Sutton Cronin & Associates Ltd. (OCSC) at the request of their Client, Louth County Council, where it is proposed to develop the River Boyne Greenway.

The proposed works include upgrading a tarmacadam walkway adjacent to the River Boyne on the northern bank to the west of Drogheda Town, Co. Louth and the development of a new pathway. The total length of the path is c. 1.6km long. Of this c. 650m is a completely new path which will run through mainly scrub habitat. The remainder of the development consists of widening an existing tarmacadam path from 2m to 3m.

OCSC were commissioned to complete a Natura Impact Statement for the proposed works. This report assesses the effects that the proposed development would have on the Natura 2000 site network and the mitigation required. An OCSC Ecologist undertook a site visit on 4th October 2022.

The report was completed by Luis Iemma BSc, MSc, Ph.D, Senior Ecologist, assisted by Eadaoin Butler BSc, Consultant Ecologist, reviewed by Glenda Barry and approved by Eleanor Burke, BSc, MSc, DAS, MEnvSc, CSci, Technical Principal, and the OCSC Environmental Division Manager.

1.2. Project Description

This Natura Impact Statement (NIS) report has been prepared to assess the impact and propose mitigation to the proposed River Boyne Greenway (North Bank) Drogheda town, Co. Louth.

The proposed works are comprised of the construction stages of the Boyne Greenway – North Bank in Drogheda, County Louth, an Outdoor Recreation and Infrastructure Scheme (ORIS) Project 2022. Works to be undertaken include provision of a path with a total length of c. 1.6km long. Of this c. 650m is a completely new path which will run through mainly scrub habitat.

The remainder of the proposed works consists of the enhancement of an existing 950m pathway including widening of the existing tarmacadam path from 2m to 3m with a bitmac surface, resurfacing of poor-quality surfaces, and provision of lighting. The proposed works go from Boyne Hall estate connecting to an existing footpath perpendicular to the Lower Mell street, running through the footpath up to the Horse lane, connecting back to Lower Mell street.

There are sections of the existing footpath which have become deteriorated. These sections are isolated, and they will be milled out and replaced. Benches, bins and bicycle racks will be installed at several locations along the path. In addition, these areas will be resurfaced.

Detail for the existing path upgrade and the new path have been provided in the drawings. They will comprise of 50mm flexible surfacing to CC-SPW-01100 followed by 150mm granular subbase material type B CC-SPW-00800 underlain by acceptable material to Appendix 6/1.

There are weeds and grass encroaching onto the existing path which will be removed / trimmed / scuffed back. There will be access control gates installed. Areas of fencing has also become damaged and will be replaced or removed. For longevity joins in the surfacing will be overbanded. Road signs and markings will be put in place. There will be public lighting installed along the path also.

The existing path is located immediately within the boundary River Boyne and River Blackwater Special Area of Conservation (SAC) for c. 550m of the overall 950m at a distance of 2m from the River Boyne itself at its closest point. The proposed greenway is 1.2 km from the River Boyne and River Blackwater Special Protection Area (SPA) and 2.75km away from the Boyne Estuary SPA.

Due to the fact that the proposed works are within the SAC, there is a direct potential pathway for impacts (from construction activities) to affect downstream aquatic features of interest for which the SAC is designated, such as the River Lamprey (*Lampetra fluviatilis*), Salmon (*Salmo salar*), and Otter (*Lutra lutra*) as well as the potential to affect the two SPAs downstream, the River Boyne and River Blackwater SPA and the Boyne Estuary SPA. For the first, there is potential for impacts to affect Kingfisher (*Alcedo atthis*) and for the latter, many bird species.



Plate 1.1. Existing Pathway within SAC boundary

1.3. Legislative Context

The Habitats Directive promotes a hierarchy of avoidance, mitigation, and compensatory measures to be addressed in the AA process as follows:

- Firstly, a plan / project should aim to avoid any negative impacts on Natura 2000 sites by identifying possible impacts early and designing the project/plan to avoid such impacts.
- Secondly, mitigation measures should be applied during the appropriate assessment (stage 2) process to the point where no adverse impacts on the site(s) remain.
- Thirdly, a plan / project may have to undergo an assessment of alternative solutions. Under this stage of the assessment, compensatory measures are required for any remaining adverse effects, but they are permitted only if (a) there are no alternative solutions and (b) the plan / project is required for imperative reasons of overriding

public interest (the 'IROPI test'). European case law highlights that consideration must be given to alternatives outside the plan / project boundary area in carrying out the IROPI test.

1.4. Methodology and Approach

The NIS has been prepared taking into account legislation including the aforementioned legislation and guidance including the following:

- *Appropriate Assessment Screening for Development Management*. Office of the Planning Regulator, March 2021.
- *Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities*, Department of the Environment, Heritage and Local Government, 2009; 11 February 2010 revision.
- *Commission Notice: Managing Natura 2000 sites – The provisions of Article 6 of the Habitats Directive 92/43/EEC*, European Commission, 2018.
- *Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*, European Commission Environment DG, 2002.
- *Managing Natura 2000 sites: the Provisions of Article 6 of the Habitats Directive 92/43/EEC*, European Commission, 2000.

Using the above documents, it has been possible to carry out an NIS using the best available guidance and operating within the applicable legislation.

1.5. Relevant Legislation

European Nature Directives (Habitats and Birds)

The Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora) forms the basis for the designation of Special Areas of Conservation. Similarly, Special Protection Areas are classified under the Birds Directive (Council Directive 2009/147/EEC on the Conservation of Wild Birds). Collectively, Special Areas of Conservation (SAC) and Special Protection Areas (SPA) are referred to as the Natura 2000 network. In general terms, they are considered to be of exceptional importance for rare, endangered or vulnerable habitats and species within the European Community.

Under Article 6(3) of the Habitats Directive an 'appropriate assessment' must be undertaken for any plan or project that is likely to have a significant effect on the conservation objectives of a Natura 2000 site. An Appropriate Assessment is an evaluation of the potential impacts of a plan or project on the conservation objectives of a Natura 2000 site, and the development, where necessary, of mitigation or avoidance measures to preclude negative effects.

Article 6, paragraph 3 of the EC Habitats Directive 92/43/EEC ("the Habitats Directive") states that:

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications

for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public”.

European Communities (Birds and Natural Habitats) Regulations 2011

Part 5 of the European Communities (Birds and Natural Habitats) Regulations 2011 sets out the circumstances under which an ‘Appropriate Assessment’ is required. Section 42(1) requires that ‘a screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects, is likely to have a significant effect on the European site.’

Section 42(2) expands on this, stipulating that a public authority must carry out a screening for Appropriate Assessment before consent for a plan or project is given or a decision to undertake or adopt a plan or project is taken. To assist a public authority to discharge its duty in this respect, Section 42(3)(a) gives them the authority to direct a third party to provide a Natura Impact Statement, and Section 42(3)(b) allows them to request any additional information that is considered necessary for the purposes of undertaking a screening. Similarly, Section 177T states that a competent authority may give a notice in writing to the applicant concerned, directing him or her to furnish a Natura Impact Statement, and the applicant shall furnish the statement within the period specified in the notice.

A Natura Impact Statement must include such information or data as the public authority considers necessary to enable it to ascertain if the plan or project will affect the integrity of a Natura 2000 site. Where appropriate, a Natura Impact Statement also needs to include:

- I. the alternative solutions that have been considered and the reasons why they have not been adopted;
- II. the imperative reasons of overriding public interest that are being relied upon to indicate that the plan or project should proceed notwithstanding that it may adversely affect the integrity of a European site; and
- III. the compensatory measures that are being proposed.

Section 42(6) requires that *‘the public authority shall determine that an Appropriate Assessment of a plan or project is required where the plan or project is not directly connected with or necessary to the management of the site as a European Site and if it cannot be excluded, on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site’.*

1.6. Natura Impact Statement

The report prepared for the second stage of AA is referred to as a NIS. The approach taken to preparing the NIS is as follows:

- Set out information on the Natura 2000 sites identified at screening stage likely to be significantly affected by the project.
- Describe the elements of the project or plan (alone or in combination with other projects or plans) that are likely to give rise to significant effects on the environment.
- Set out the conservation objectives of the site.
- Describe how the project or plan will affect key species and key habitats. Acknowledge uncertainties and gaps in information.
- Describe how the integrity of the site (determined by structure and function and conservation objectives) is likely to be affected by the project or plan (e.g. loss of habitat, disturbance, disruption, chemical changes, hydrological changes, geological changes, etc.). Acknowledge uncertainties and any gaps in information.
- The appropriate assessment is carried out by the competent authority and is supported by the NIS.

The approach taken in preparing the NIS is based on standard methods and guidance as listed in the references section of this report.

1.7. Limitations

This Natura Impact Statement Report has been prepared for the sole use of Louth County Council ("the Client"). No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by OCSC.

This assessment is based on a review of available historical information, environmental records, consultations, relevant guidance information, and reports from third parties. All information received has been taken in good faith as being true and representative.

This report has been prepared in line with best industry standards. The methodology adopted and the sources of information used by OCSC in providing its services are outlined in this Report. The assessment undertaken by OCSC and described was undertaken in 2022 and is based on the information available during that period. A site walkover was completed on 4th October 2022. The scope of this Report and the services are accordingly factually limited by these circumstances.

OCSC disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report which may come or be brought to OCSC's attention after the date of the Report.

The conclusions presented in this report represent OCSC's best professional judgement based on review of the relevant information available at the time of writing. The opinions and conclusions presented are valid only to the extent that the information provided was accurate and complete.

2. DESCRIPTION OF THE EXISTING ENVIRONMENT

2.1. Site Location

The project description is critical for identification of impacts. The project description requires the identification of all features of the proposed project such as its scale and size and changes that will result from the project including excavation to be undertaken and resource requirements, e.g. water abstraction, emissions and waste, noise, light pollution, disturbance, etc. For large projects it may be necessary to identify the parameters for the construction, the operation, and the decommissioning phases. The boundaries of the project are critical, and all activities proposed should be within the application site.



Figure 2.1: Approximate linear site location indicated by the red line (Source: EPA Maps, 2022).

The proposed works are comprised of the construction stages of the Boyne Greenway – North Bank - in Drogheda, County Louth, an Outdoor Recreation and Infrastructure Scheme (ORIS) Project 2022. Works to be undertaken include provision of a path with a total length of c. 1.6km long. Of this c. 650m is a completely new path which will run through mainly scrub habitat.

The remainder of the proposed works consists of the enhancement of an existing 950m pathway including widening of the existing tarmac path from 2m to 3m with a bitmac surface, resurfacing of poor-quality surfaces, and provision of lighting. The proposed works go from Boyne Hall estate connecting to an existing footpath perpendicular to the Lower Mell street, running through the footpath up to the Horse lane, connecting back to Lower Mell street.

2.2. Water Quality

The Boyne Estuary transitional waterbody is located directly south of the proposed greenway. Transitional Water Quality status for the period 2018-2020 is given as 'Potentially Eutrophic'. It is also noted to be 'At Risk' based on Water Framework Directive (WFD) Risk Status. Transitional Waterbody Status for the WFD (Boyne Estuary) is noted to be 'Moderate'.

There are multiple emission points according to the online EPA maps. There is a storm water overflow pipe located upstream of the proposed development site. There are multiple storm water overflows from this point downstream, south of Drogheda town, on both sides of the estuary. The primary effluent discharge for the Drogheda WwTP, is located c. 1.8km downstream of the city and c. 4km downstream of the proposed development site.

3. RELATIONSHIP TO DESIGNATED SITES

Natura 2000 sites within 15 kilometres of the proposed structure were considered initially as per the NPWS guidance document. This initial screening revealed that the following sites lie within 15km radius of the development (Figure 3.1 and Table 1):

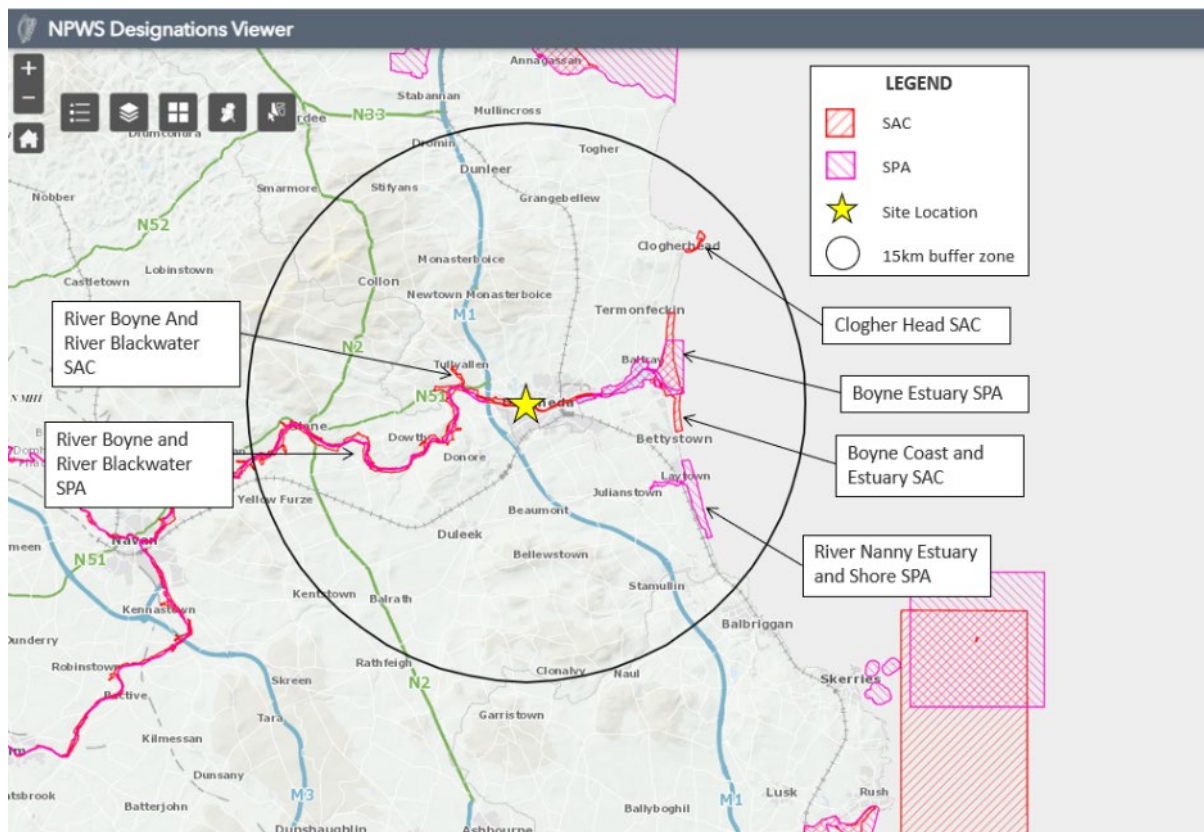


Figure 3.1. Designated Sites within 15km radius. Site location shown by a yellow star (Source: NPWS, 2022).

3.1. Zone of Influence

According to the DEHLG 2009 guidelines, “Although a distance of 15km is currently recommended in the case of plans...[however] for projects, the distance could be much less than 15km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis”. An OPR report (2021) states that a few projects have a zone of influence as large as 15km, but some more complex projects may require a greater zone of investigation.

Thus, the zone of influence must be defined for each project. A “zone of influence” is the difference between an activity's spatial footprint and the extent of the activity's effects on surrounding habitat and wildlife populations. Light, noise, and hydrological connections are the major influencers in this regard.

Table 1. European Sites within 15 kilometres (ZOI) to the proposed site.

Site Code	Site Name	Distance (km)	Sensitive Receptors (Qualifying Interest & Special Conservation Interests) [including the relevant code for the qualifying feature]	Site Synopsis and Existing threats or Sensitivities
002299	River Boyne and River Blackwater SAC	0.0S	Alkaline fens [7230] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0] <i>Lampetra fluviatilis</i> (River Lamprey) [1099] <i>Salmo salar</i> (Salmon) [1106] <i>Lutra lutra</i> (Otter) [1355]	This site comprises the freshwater element of the River Boyne as far as the Boyne Aqueduct, the Blackwater as far as Lough Ramor and the Boyne tributaries including the Deel, Stoneyford and Tremblestown Rivers. The site supports populations of several species listed on Annex II of the E.U. Habitats Directive, and habitats listed on Annex I of this Directive, as well as examples of other important habitat types. Although the wet woodland areas appear small there are few similar examples of this type of alluvial wet woodland remaining in the country, particularly in the north-east. The semi-natural habitats, particularly the strips of woodland which extend along the riverbanks, and the marsh and wet grasslands, increase the overall habitat diversity and add to the ecological value of the site, as does the presence of a range of Red Data Book plant and animal species and the presence of nationally rare plant species.
004232	River Boyne and River Blackwater SPA	1.2 W	Kingfisher <i>Alcedo atthis</i> [A229]	The River Boyne and River Blackwater SPA is a long, linear site that comprises stretches of the River Boyne and several of its tributaries; most of the site is in Co. Meath, but it extends also into Cos Cavan, Louth and Westmeath. The site is a Special Protection Area (SPA) under the E.U. Birds Directive of special conservation interest for the following species: Kingfisher. The River Boyne and River Blackwater Special Protection Area is of high ornithological importance as it supports a nationally important population of Kingfisher, a species that is listed on Annex I of the E.U. Birds Directive.
004080	Boyne Estuary SPA	2.75 E	Shelduck (<i>Tadorna tadorna</i>) [A048] Oystercatcher (<i>Haematopus ostralegus</i>) [A130] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Grey Plover (<i>Pluvialis squatarola</i>) [A141] Lapwing (<i>Vanellus vanellus</i>) [A142] Knot (<i>Calidris canutus</i>) [A143] Sanderling (<i>Calidris alba</i>) [A144] Black-tailed Godwit (<i>Limosa limosa</i>) [A156]	This moderately-sized coastal site is situated east of Drogheda on the border of Counties Louth and Meath. The site comprises most of the estuary of the Boyne River, a substantial river which drains a large catchment. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Shelduck, Oystercatcher, Golden Plover, Grey Plover, Lapwing, Knot, Sanderling, Black-tailed Godwit, Redshank,

Site Code	Site Name	Distance (km)	Sensitive Receptors (Qualifying Interest & Special Conservation Interests) [including the relevant code for the qualifying feature]	Site Synopsis and Existing threats or Sensitivities
			Redshank (<i>Tringa totanus</i>) [A162] Turnstone (<i>Arenaria interpres</i>) [A169] Little Tern (<i>Sterna albifrons</i>) [A195] Wetland and Waterbirds [A999]	Turnstone and Little Tern. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds. The Boyne Estuary is the second most important estuary for wintering birds on the Louth-Meath coastline. The site is of considerable ornithological importance for wintering waterfowl, with Black-tailed Godwit occurring in internationally important numbers and nine other species having populations of national importance. Of particular significance is that three species that regularly occur, Golden Plover, Bar-tailed Godwit and Little Tern are listed on Annex I of the E.U. Birds Directive. Part of the Boyne Estuary SPA is a Wildfowl Sanctuary.
001957	Boyne Coast and Estuary SAC	3.7 E	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	Boyne Coast and Estuary SAC is a coastal site which includes most of the tidal sections of the River Boyne, intertidal sand- and mudflats, saltmarshes, marginal grassland, and the stretch of coast from Bettystown to Termonfeckin that includes the Mornington and Baltray sand dune systems. The Boyne is the second most important estuary for wintering birds on the Louth-Meath coastline. The site is of considerable conservation interest as a coastal complex that supports good examples of eight habitats that are listed on Annex I of the E.U. Habitats Directive, including one which is listed with priority status, and for the important bird populations that it supports.
004158	River Nanny Estuary and Shore SPA	7.7 SE	Oystercatcher (<i>Haematopus ostralegus</i>) [A130] Ringed Plover (<i>Charadrius hiaticula</i>) [A137] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Knot (<i>Calidris canutus</i>) [A143] Sanderling (<i>Calidris alba</i>) [A144] Herring Gull (<i>Larus argentatus</i>) [A184] Wetland and Waterbirds [A999]	The site comprises the estuary of the River Nanny and sections of the shoreline to the north and south of the estuary (c. 3 km in length), in Co. Meath. The estuarine channel, which extends inland for almost 2 km, is narrow and well sheltered. Sediments are muddy in character and edged by saltmarsh and freshwater marsh/wet grassland. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Oystercatcher, Ringed Plover, Golden Plover, Knot, Sanderling and Herring Gull. The E.U. Birds Directive pays particular attention to wetlands, and as these form part of this

Site Code	Site Name	Distance (km)	Sensitive Receptors (Qualifying Interest & Special Conservation Interests) [including the relevant code for the qualifying feature]	Site Synopsis and Existing threats or Sensitivities
				SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds. The River Nanny Estuary and Shore SPA is of ornithological importance as it supports five species of wintering waterbirds and one gull species in numbers of national importance. The regular occurrence of two species listed on Annex I of the E.U. Birds Directive, i.e., Golden Plover and Bar-tailed Godwit, is of note.
001459	Clogher Head SAC	12 NE	Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030]	Clogher Head is a promontory of Silurian quartzite, located approximately 10 km north-east of Drogheda in Co. Louth. The rocks are covered with a thin layer of soil that, in places, supports a coastal heath community. Areas of sea cliff, bedrock shore and dry grassland also occur within the site. This headland supports one of the best-known examples of coastal heath in Co. Louth. It contains two habitats listed on Annex I of the E.U. Habitats Directive and supports a good diversity of coastal heath plants

The factors in defining the zone of influence above were as follows:

- The location of designated Natura 2000 sites.
- The footprint of the development
- The distance to which pollution generated could impact on downstream habitats.
- The extent of noise and light impacts on ecological receptors.

Given the type of project, the sites being given further consideration are the River Boyne and River Blackwater SAC, the River Boyne and River Blackwater SPA, and the Boyne Estuary SPA. These are shown in Figure 3.1. The existing path that will form part of the proposed Boyne Greenway (North Bank) is already within an area designated as an SAC (River Boyne and River Blackwater SAC). Additional sites were considered due to their proximity to the site and the hydrological link via the River Boyne. The other sites are too distant to be impacted or are within a separate water catchment area.



Figure 3.2. Approximate linear site location indicated by the red lines overlapping the Boyne Estuary SAC and the waterway leading to SPA downstream (Source: EPA maps, 2022).

3.2. Description of the Natura 2000 Sites

The Habitats Directive states, “Any plan or project not directly connected or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implication for the site in view of the sites conservation objectives...the competent national authorities shall agree to the plan or project only having ascertained that it will not adversely affect the integrity of the site...” The conservation objectives form the basis of the Appropriate Assessment as it is against these objectives that the assessment is made. The overall aim of

the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives, and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network. European and national legislation places a collective obligation in Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

The maintenance of habitats and species within Natura 2000 sites at favourable conservation conditions will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level. Favourable conservation status of a habitat is achieved when:

- its natural range and the area it covers within that range are stable or increasing;
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and
- the conservation status of its typical species is favourable. The favourable conservation status of a species is achieved when:
 - population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
 - the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
 - there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Tables 2 and 3 lists the species and habitats that the SAC and the SPA are designed to protect. It is in relation to the conservation objective to maintain or restore these habitats or species that this assessment is made.

3.3. River Boyne and River Blackwater SAC

The site is within the River Boyne and River Blackwater SAC which contains the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (Table 2).

Table 2. River Boyne and River Blackwater Qualifying Interest – Species & Habitats

Code	Qualifying Interest	Objectives
1099	River Lamprey (<i>Lampetra fluviatilis</i>)	To restore the favourable conservation condition
1106	Salmon (<i>Salmo salar</i>)	To restore the favourable conservation condition
1355	Otter (<i>Lutra lutra</i>)	To maintain the favourable conservation condition
7230	Alkaline fens	To maintain the favourable conservation condition
91E0	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)	To restore the favourable conservation condition

The conservation objectives above form the basis of this assessment. In relation to conservation condition, the bar of “restore” is more difficult to achieve than “maintain”. This will be considered should significant impacts be identified in relation to the habitats or species for which the site is selected.

This table should be read with information from the Article 17 reporting in respect of the Habitats Directive which indicates the status and trends of the designated species.

The Special Conservation Interests listed for the River Boyne and River Blackwater SAC details are as follows:

1. The site is a SAC selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive: Alkaline Fens, Alluvial Forests, River Lamprey (*Lampetra fluviatilis*), Atlantic Salmon (*Salmo salar*), and Otter (*Lutra lutra*).
2. The Boyne and its tributaries form one of Ireland’s premier game fisheries and the area offers a wide range of angling, from fishing for spring salmon and grilse to seatrout fishing and extensive brown trout fishing. Atlantic Salmon (*Salmo salar*) use the tributaries and headwaters as spawning grounds. Although this species is still fished commercially in Ireland, it is considered to be endangered or locally threatened elsewhere in Europe and is listed on Annex II of the Habitats Directive. Atlantic Salmon run the Boyne almost every month of the year.

3.4. River Boyne and River Blackwater SPA

River Boyne and River Blackwater SPA is listed as a SPA for the following species listed on Annex I / II of the E.U. Habitats Directive (Table 3).

Table 3. River Boyne and River Blackwater SPA Qualifying Interest – Species & Habitats

Code	Qualifying Interest	Objectives
[A229]	Kingfisher	To maintain or restore the favourable conservation condition

The conservation objectives above form the basis of this assessment. In relation to conservation conditions, the bar of “restore” is more difficult to achieve than “maintain”. This will be considered should significant impacts be identified in relation to the habitats or species for which the site is selected.

This table should be read with information from the Article 17 reporting in respect of the Habitats Directive which indicates the status and trends of the designated species.

The Special Conservation Interests listed for the River Boyne and River Blackwater SPA details are as follows:

The site is a SPA under the E.U. Birds Directive of special conservation interest for the following species: Kingfisher.

3.5. Boyne Estuary SPA

Boyne Estuary SPA is listed as a SPA for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (Table 3).

Table 4. Boyne Estuary SPA Qualifying Interest – Species & Habitats

Code	Qualifying Interest	Objectives
A048	Shelduck	To maintain the favourable conservation condition.
A130	Oystercatcher	To maintain the favourable conservation condition.
A140	Golden Plover	To maintain the favourable conservation condition.
A141	Grey Plover	To maintain the favourable conservation condition.
A142	Lapwing	To maintain the favourable conservation condition.
A143	Knot	To maintain the favourable conservation condition.
A144	Sanderling	To maintain the favourable conservation condition.
A156	Black-tailed Godwit	To maintain the favourable conservation condition.
A162	Redshank	To maintain the favourable conservation condition.
A169	Turnstone	To maintain the favourable conservation condition.
A195	Little Tern	To maintain the favourable conservation condition.
A999	Wetlands and Waterbirds	To maintain the favourable conservation condition.

The conservation objectives above form the basis of this assessment. In relation to conservation conditions, the bar of “restore” is more difficult to achieve than “maintain”. This will be considered should significant impacts be identified in relation to the habitats or species for which the site is selected.

This table should be read with information from the Article 17 reporting in respect of the Habitats Directive which indicates the status and trends of the designated species.

The Special Conservation Interests listed for the Boyne Estuary SPA details are as follows:

The site is a SPA under the E.U. Birds Directive, of special conservation interest for the following species: Shelduck, Oystercatcher, Golden Plover, Grey Plover, Lapwing, Knot, Sanderling, Black-tailed Godwit, Redshank, Turnstone and Little Tern. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

4. DIRECT AND INDIRECT IMPACTS

Having outlined the proposed project and the details of the Natura 2000 sites, an assessment for possible impacts can be carried out following the document, "Assessment of plans and projects significantly affecting Natura 2000 sites - Methodology guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission, 2002". The impact of the project on the conservation objectives of the selected Natura 2000 site must be examined in terms of both direct and indirect impact.

Direct impacts: loss of habitats or loss of nesting/den sites.

For example, if the main habitat on site was heath and the footprint building resulted in loss of heath habitat, that would fall into this category.

Indirect impacts: examples of indirect impacts are water pollution, light pollution, or noise pollution.

Annex I, II, and III Species - Direct Impacts

- River Lamprey (*Lampetra fluviatilis*) [1099]
- Salmon (*Salmo salar*) [1106]
- Otter (*Lutra lutra*) [1355]

Annex I, II, and III Species - Indirect Impacts

- Kingfisher (*Alcedo atthis*) [A229]
- Shelduck (*Tadorna tadorna*) [A048]
- Oystercatcher (*Haematopus ostralegus*) [A130]
- Golden Plover (*Pluvialis apricaria*) [A140]
- Grey Plover (*Pluvialis squatarola*) [A141]
- Lapwing (*Vanellus vanellus*) [A142]
- Knot (*Calidris canutus*) [A143]
- Sanderling (*Calidris alba*) [A144]
- Black-tailed Godwit (*Limosa limosa*) [A156]
- Redshank (*Tringa totanus*) [A162]
- Turnstone (*Arenaria interpres*) [A169]
- Little Tern (*Sterna albifrons*) [A195]
- Wetland and Waterbirds [A999]

Special Conservation Interest Habitats - Indirect Impacts

- Alkaline fens [7230]
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) [91E0]

A portion of the existing path (c 550m) overlaps with the River Boyne and River Blackwater SAC and, therefore, there is the potential that works may impact some Annex I, II, and III habitats or Special Conservation Interest Habitats listed in Table 2 as a result of the marginal widening of the existing path and resurfacing works.

No direct impacts are predicted for Annex I, II, and III habitats or Special Conservation Interest Habitats listed in Tables 3 or 4 although there is the potential for indirect for these.

Direct Impacts - Construction Phase - Typical risks associated with this project:

The mobilisation of sediments, fuel spillage or leakage, and the use of concrete products during site works pose a risk of water pollution which could directly impact the protected area in which the existing footpath located. This is particularly relevant to the rehabilitation of the existing path where parking, machinery usage, fuel and concrete storage and use, and the removal of vegetation and debris from the site may contribute to these risks. Mitigation is therefore proposed. In addition, the works may generate noise and dust which could directly impact protected areas. Direct impacts are summarised in Table 5 below.

Indirect Impacts - Construction Phase - Typical risks associated with this project:

The mobilisation of sediments, fuel spillage or leakage, and the use of concrete products during site works pose a risk of water pollution which could indirectly impact downstream protected areas. This is particularly relevant to the construction of the extended pathway where parking, machinery usage, fuel and concrete storage and use, and the removal of vegetation and debris from the site may contribute to these risks. In addition, the works may generate noise and dust which could indirectly impact nearby protected areas.

There are also reports of invasive species for this area, specifically Japanese Knotweed (NBDC reports 007X and 0007S). Therefore, invasive species accidentally brought from or to different areas could lead to the introduction and/or spread of invasive species such as Himalayan Balsam, Giant Hogweed, or Japanese Knotweed resulting in the establishment of invasive alien species which may have negative effects on the surrounding environs. Mitigation is therefore proposed. Note, invasive species were not noted by the OCSC Ecologist during the site visit on 4th October 2022.

Indirect impacts on species and habitats are summarised in Table 5.

Table 5. Summary of Impacts on Habitats identified as within the Zone of Influence of the development.

Qualifying Interest	Direct Impacts	Indirect Impacts
River Lamprey [1099] Salmon [1106] Otter [1355]	Yes - direct impacts as the proposed development is within the Natura 2000 network.	Indirect impacts such as pollution from hydrocarbons, cementitious products, and sedimentation during construction phases.
Shelduck [A048] Oystercatcher [A130] Golden Plover [A140] Grey Plover [A141] Lapwing [A142] Knot [A143] Sanderling [A144] Black-tailed Godwit [A156] Redshank [A162] Turnstone [A169] Little Tern [A195] Wetland and Waterbirds [A999] Kingfisher [A229]	No direct impacts are predicted.	Indirect impacts such as pollution from hydrocarbons, cementitious products, and sedimentation during construction phases.
Alkaline fens [7230] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	No direct impacts are predicted.	Indirect impacts such as sedimentation, hydrocarbon pollution, invasive species, and decreased water quality during construction phases.

5. MITIGATION

The main mitigation measures for this site include:

1. Implementation of a site-specific Construction Environmental Management Plan.
2. Physical mitigation installed to protect water quality in the greater area.
3. On-site management to protect water courses.
4. Avoid interfering with the hydrology of site.

5.1. Construction Environmental Management Plan

An Outline Construction Environmental Management Plan (CEMP) has been prepared for the project and forms part of this application. It examines potential construction related impacts and develops appropriate mitigation measures to ensure no construction related impacts on the conservation objectives of the River Boyne and River Blackwater SAC, the River Boyne and River Blackwater SPA, or the Boyne Estuary SPA.

Specifically, the outline CEMP and subsequent contractor CEMP will cover:

- Detail the establishment of a site compound for the storage of plant, machinery, fuel and materials during the construction phase of the project. A Contractors compound has been identified within the Trinity Stret Carpark.
- Ensure all plant and machinery are refuelled at the Contractors compound at the start of each working day.
- Ensure all plant and machinery are being regularly checked for leaks.
- Ensure no hydrocarbons will be stored at the project site other than within the compound and that they are within a bunded storage area.
- Ensure a spill kit is available at the project site for accidental leaks.
- Detail measures to ensure that construction or demolition debris do not enter the river during works on the Greenway.
- Detail measures to mitigate silt mobilisation and subsequent potential for runoff.
- Detail the roles and responsibilities of construction and associated staff regarding the protection of the receiving environment.
- Ensure that the removal and disposal of wastewater from temporary welfare facilities in the construction compounds and throughout the site is carried out by a fully permitted waste collector holding valid Waste Collection Permits as issued under the Waste Management (Collection Permit) Regulations, 2007.
- Adopt a 'leave no trace' with education and awareness programmes to be implemented ensuring that littering does not develop into a significant issue.

Reference should be made to the following guidance documents:

- IFI, (2010) 'Biosecurity Protocol for Field Survey Work'
- IFI, (2016) 'Guidelines of protection of Fisheries during construction works in and adjacent to waters'
- NRA, (2010) 'The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads'

- CIRIA (2006) 'Control of Water Pollution from Linear Construction Projects- Site Guide (C649)'
- CIRIA (2005) 'Environmental Good Practice – Site Guide (C650)'

5.2. Construction Phase – Direct Impacts

While no evidence of otters was identified during the site walkover, there is a section of scrub with some trees and a hedgerow near the site which could provide a suitable otter resting place. The proposed greenway extension would be a barrier between this and the main river corridor. In addition, otters while commuting may stray from the riparian edge and be present on the site. Otters will often cross roads some distance from watercourses. In the event that otters are identified in a pre-construction survey, then mammal-resistant fencing should be incorporated on either side of all watercourses at which otter presence is known and should stretch to at least 25m and preferably to 50m or more either side of the crossing. Note, evidence of otters were not identified during the site visit in October 2022.

Riparian habitats also can often be improved by additional planting along the affected watercourses.

Pre-construction otter surveys should be undertaken prior to the commencement of any works in order to identify any changes in otter activity, holt locations, etc. This will ensure that the prescribed mitigation measures in the NIS remain adequate to address possible impacts on otters. It is also important to ensure that no new holts have been created in the intervening period.

The pre-construction survey should be conducted no more than 10-12 months in advance of construction. This will ensure that there will be sufficient time to comply with all licensing requirements and that the necessary actions can be undertaken to protect otter populations prior to the commencement of construction.

The survey should be supplemented by a further inspection of the development area immediately prior to site clearance.

Where more than 36 months has elapsed between the time of a statutory approval and the initiation of the construction phase, an appropriate level of resurvey will be required - because the baseline data may have altered during the intervening period. This will allow adjustments to be made to the mitigation strategy specified in the NIS, where appropriate.

5.3. Construction/Rehabilitation Phase – Indirect Impacts

Erosion causes many and varied problems for salmonids by clogging spawning and nursery habitats with silt. Erosion also affects channel depth and width which in turn militates against the proper river channel form of pool-glide-riffle sequence. It is essential that the form of rivers is natural in a changing climate with natural solutions in the form of soft engineering to the fore. A stable riparian zone is essential to stop erosion and provide a vegetated riverbank for control of water temperature. Riparian zone vegetation also regulates erosion, pH, and colour which are essential to the wellbeing of juvenile salmonids.

5.4. Ecological Supervision

Prior to commencement of works, a suitably qualified ecologist should be appointed to act as an ecological clerk of works (ECoW). The ECoW should:

- Review the final contractor CEMP and supply input in respect of environmental and ecological matters including a review of the agreed point of discharge from all dewatering activities (should they be required).
- Provide advice on all relevant mitigation measures set out in the outline CEMP, contractor CEMP, and the NIS.
- Carry out regular inspection and monitoring of the construction work, particularly in relation to ensuring the implementation of the proposed silt fencing to ensure no impacts on the conservation objectives of any Natura 2000 site.
- Have the authority to halt works in the event of any non-compliance or failure of the mitigation measures detailed in the NIS.

5.5. Invasive Species

In line with good practice, methods for the prevention of spread of Invasive Alien Species should ensure that the following guidelines are implemented:

- Kelly, J., Maguire, C.M. and Cosgrove, P.J., Muir, R.A. (2015). Best Practice Management Guidelines Japanese knotweed *Fallopia japonica*. Prepared for NIEA and NPWS as part of Invasive Species Ireland.
- IFI, (2010) 'Biosecurity Protocol for Field Survey Work'
- NRA Guidelines on the Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads (2010). In addition, good construction site hygiene should be employed to prevent the introduction and spread of problematic invasive alien plant species (e.g. Himalayan Balsam, Japanese Knotweed, etc.).
- All plant and equipment employed on the construction site (e.g. excavator, footwear, etc.) must be thoroughly cleaned down prior to arrival on site to prevent the spread of invasive plant species. This is to be undertaken offsite. Cleaning on site could result in the introduction of invasive species that could be attached to the equipment / machines onto the site and could then establish themselves and spread on the site and to other areas. Of particular concern in relation to cleaning on / near the site is that contaminated run-off from the cleaning could carry invasive species into the adjacent watercourse. This will be avoided by off-site cleaning. This process will be detailed in the contractor's method statement.
- Any soil and topsoil required on the site will be sourced from a stock that has been screened for the presence of any invasive species and where it is confirmed that none are present.
- All fill and material sourced or relocated within the site should be screened at source for the presence of invasive species by the ECoW to prevent the spread of these species along the road corridor. This is in line with the guidance for the control of non-native invasive species set out in the NRA publication 'Guidelines on the Management of Noxious Weeds and Non-native Invasive Plant Species on National Roads' (NRA, 2010) to be employed by the contractor.

5.6. Silt Management

The first step to prevent silt from entering protected habitats is to minimise the generation of silt laden runoff through planning of construction activities by working during clement weather and minimising the storage of sediment producing material. Where silt laden runoff is generated, it should be prevented from entering sensitive habitats. Specifically, the following actions should be taken:

- The minimum area necessary for an active work area will be identified, and there must be no access to works vehicles outside the fenced off areas. All works are to be located within the confines of these fences. No works should take place outside the fences to prevent damage to areas outside the necessary development footprint.
- Excavation, where required in places, should be undertaken during clement weather to minimise runoff.
- Where possible, minimise areas stripped of vegetation using a phased approach during construction.
- Avoid stockpiles of excavated material to control silt runoff. An area has been identified outside of the protected area for stockpiling, if required.
- Backfilling shall, wherever practicable, be undertaken immediately after the specified operations preceding it have been completed.
- Silt fencing should be erected along the boundaries of the watercourse during the construction works. This will mitigate any sediment run-off resulting from excavations, debris removal from the embankments, and construction entering the adjacent body of water. A double layer of geotextile membrane is recommended for use.

5.7. Fuel and Oil Control

Ensure all plant and machinery are refuelled at the Contractors compound at the start of each working day.

Only designated, trained, and competent operatives should be authorised to refuel plant. Measures such as bunded storage, drip trays and fuel absorbent mats must be used during all refuelling operations.

5.8. Site drainage

- No direct discharges to water are to be made.
- Natural vegetation on verges of the proposed development must be preserved when possible, acting as a filter to any sediment laden runoff.
- Stockpiles of excavated materials should be small and must be surrounded with silt fencing to prevent any pathway to any sensitive receptors downstream. An area has been identified outside of the protected area for stockpiling, if required.
- Silt fencing installed adjacent to the greenway under construction must remain in place until the works in that area have been completed.
- Whilst no significant silt laden run off is anticipated in this project, the site should be regularly monitored by construction staff for signs of run-off such as silt in surrounding vegetation. Measures will be put in place to prevent this and may include the provision of an additional layer of silt fence. A silt fence may be constructed by attaching a

double layer sheet of geotextile membrane to a stock fence and burying the bottom of the membrane into the ground, thus allowing water to pass through but not the heavier fraction of the sediment.

During the operational phase of the greenway drainage runoff will be addressed via French drains.

5.9. Lighting

No temporary artificial lighting is expected to be required during Construction as works will be limited to daytime hours. In the event that it is required, in order to minimise the impact to potential bats in the area, directional lighting (i.e. lighting which is focused on work areas and not nearby countryside) shall be used.

The installation of public lighting is needed for public safety. In general, artificial light creates a barrier for commuting bats. Any permanent lighting structures being installed should be slightly angled so the areas with potential for bat presence, remain shaded and outside of direct lighting. Installation of shorter lamp posts would also be beneficial for permanent lighting as it keeps light focused on the target area i.e. the path, with less indirect lighting to the surrounding area. A preliminary lighting plan has been prepared.

5.10. Noise Control

Where possible loud equipment should be substituted with a quieter alternative. If this is not feasible then existing equipment can be retrofitted with damping materials, mufflers or enclosures.

5.11. Dust Control

- Water bowsers should be used to dampen down areas during time of dry weather.
- Stockpiles should be kept to a minimum.
- Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.
- Avoid dry sweeping of large areas.
- Use water-assisted dust sweeper(s) on access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use.
- Surfacing equipment (e.g. planer) only to be operated with any manufacturers dust abatement measures in place.

6. STATEMENT OF IMPACTS AND CONCLUSION OF NIS

A portion of the existing footpath is located just within the Natura 2000 network (550m) with the remaining 100m of the existing path outside of the boundary and 950m of the proposed greenway also outside of the Natura 2000 network. Having considered all the habitats and species for which the nearby Natura 2000 sites are designated, it was concluded that the main risk was to water quality in the River Boyne as well as to the River Boyne and River Blackwater SAC, the Boyne Coast and Estuary SAC, and the Boyne Estuary SPA.

Mitigation was proposed to reduce this risk to water pollution to a non-significant level. This includes careful project management in respect of water protection and proper management of fuels and building materials.

The mitigation will be the responsibility of the grantee of planning and may be implemented through a contractor. The conclusion is that, with mitigation in place, no significant negative impacts on the conservation status of the Natura 2000 network and its associated habitats and species are anticipated as a result of this development.



APPENDIX B. Plates

Plates – Boyne Greenway North Bank



PLATE 1: Existing footpath



PLATE 2: Location of extension to path



PLATE 3: Location of extension to path



PLATE 3: Location of extension to path



PLATE 5: Location of existing path by Anglo Printing



APPENDIX C. Preliminary Lighting Design



Lighting Application Specialists (LiAS)

Preliminary Design

Project Name: River Boyne, Drogheda_R1 - Solar PV option.

LiAS Reference: D-478560

Key Account Manager: Seán Campbell

Email: Seán.Campbell@signify.com

Phone: +353 87 062 9330

Address: Suite 12, Plaza 256, Blanchardstown Corporate Park 2,

Dublin 15, Dublin, D15 TR96



Lighting Application Notes

This preliminary design is produced by the Lighting Application Specialist (LIAS) team of Signify based on information supplied by the Customer for the purpose of identifying suitable products and costing the proposal. This design cannot be used for Construction. This design does not purport to eliminate health and safety risks as a risk assessment has not been undertaken. Depending on the level of information received, a number of assumptions may have been applied in order to create an indicative lighting proposal and costing model, according to lighting industry guidelines and incorporating industry best practice methods. These assumptions are documented below and will require confirmation by the Principle Designer nor are we the PSDP (which is not Signify) during the detailed design phase.

Project Specific Comments/Assumptions

- Lighting Calculation has been produced to achieve Lighting Class as specified by Client
- Where column heights have not been provided/specified, these have been assumed to be 6m.
- It has been assumed that luminaires will be mounted post-top on outreach brackets).

Generic Comments/Assumptions (unless otherwise stated above)

- Preliminary Design proposals produced by the Signify LiAS Team are not to be used for installation purposes. It is the responsibility of the Principle Designer and/or Principle Contractor to ensure all Installation and Maintenance can be done in a safe manner, carried out by competent persons, based on their agreed Risk Assessments and Method Statements.
- The Luminaire Maintenance Factors have been based on 6-year cleaning intervals within an E3/E4 Environmental Zone and it is assumed that lamp/luminaire failures will be replaced on a 'spot replacement'.
- Energy consumptions have been based on the luminaire/s having Constant Light Output (CLO) enabled and the quoted wattage/s are the average over 100,000 hours (without dimming).
- The design calculations produced by Signify do not account for the effect obstructions, such as trees, will cause.
- Signify has not been provided with utility plans showing Buried, Above Ground or Overhead utilities. Therefore, all column/luminaire locations are indicative and are subject to review/verification by the Principle Designer.
- Unless stated otherwise, Signify has not visited site. Therefore, all column/luminaire locations are indicative and are subject to an onsite verification arranged/performed by the Principle Designer.
- Signify has not produced any Private Cable Network electrical calculations or reviewed the DNO network to confirm power supplies to the proposed lighting.
- Signify has not performed any asset condition testing and therefore assumes that any existing lighting columns/wall mounted brackets are structurally capable of supporting the weight & windage of the proposed luminaire/s. This must be verified by the Principle Designer before installation works commence.
- Unless stated otherwise, Signify is not supplying the new lighting columns (including brackets etc) and therefore it is the responsibility of the Principle Designers to confirm that all proposed equipment is suitable for the intended locations (e.g. raise & lower, ground condition, foundation type, saline environment, etc).
- Unless stated otherwise, luminaires will be supplied in their standard colour.
- **WARNING** - All proposed locations are only adversary and will need to be measured and set back from any ESNB low voltage assets 230v, any larger ESNB assets such as 400v or above. We advise you refer to the ESNB guidance docs on set back from ESNB assets before setting out the site or sending anyone to work. This will be down to the installation contractor to set out the column locations on site.

DATE: 7 October 2022
DESIGNER: Seán Campbell
PROJECT No: D-478560
PROJECT NAME: River Boyne, Drogheda_R1 - Solar PV option.



Using new locations indicated on the drawing plotted
All wattages with CLO Active & Dimming Profile 2A 12am to 6am
@Various mounting height, MF = 0.76
(E3/E4 zone 6yr clean)
Lantern A - 3.1Klm 3000K Solar PV lantern
Grids 1, 2,3, & 4 all reach P3 as per EN13201:2015

River Boyne, Drogheda_R1 - Solar PV option.



the meaning of light

Seán Campbell

Key Account Manager – Road Lighting Ireland,
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A carbon neutral company



Our global brands are

PHILIPS interact  **COLOR KINETICS** hue personal wireless lighting

WiZ

BrightSites  **trulifi** NatureConnect

by @ignify

by @ignify

by @ignify

Layout Report

General Data

Dimensions in Metres Angles in Degrees

Calculation Grids

ID	Grid Name	X	Y	X' Length	Y' Length	X' Spacing	Y' Spacing
1	Grid 1	4703.04	4571.18	374.00	165.00	1.50	1.50
2	Grid 2	5076.99	4546.93	373.75	189.23	1.49	1.72
3	Grid 3	5449.06	4492.80	372.04	223.00	1.49	1.38
4	Grid 4	5820.44	4529.38	127.23	167.52	1.50	1.50

Luminaires

Luminaire A Data

Supplier	
Type	BRP710 LED30 WW MR 12V LFP AIO
Lamp(s)	LED
Lamp Flux (klm)	3.11
File Name	BRP710 LED30 WW MR 12V LFP Solar.ies
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	435.1, 22.3, 0.6
No. in Project	67

Luminaire B Data

Supplier	
Type	BRP710 LED30 WW MR 12V LFP AIO
Lamp(s)	LED
Lamp Flux (klm)	3.11
File Name	BRP710 LED30 WW MR 12V LFP Solar.ies
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	435.1, 22.3, 0.6
No. in Project	1

Luminaire C Data

Supplier	
Type	BRP710 LED30 WW MR 12V LFP AIO
Lamp(s)	LED
Lamp Flux (klm)	3.11
File Name	BRP710 LED30 WW MR 12V LFP Solar.ies
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	435.1, 22.3, 0.6
No. in Project	1

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	4717.00	4714.20	6.00	8.00	0.00	0.00	0.20			
2	A	4733.14	4700.24	6.00	81.00	5.00	0.00	0.20			
3	A	4755.76	4698.69	6.00	83.00	0.00	0.00	0.20			
4	A	4776.37	4690.76	6.00	66.00	0.00	0.00	0.20			
5	A	4796.44	4680.63	6.00	61.00	0.00	0.00	0.20			
6	A	4818.15	4669.87	6.00	66.00	0.00	0.00	0.20			
7	A	4838.06	4659.67	6.00	63.00	0.00	0.00	0.20			

Layout Continued

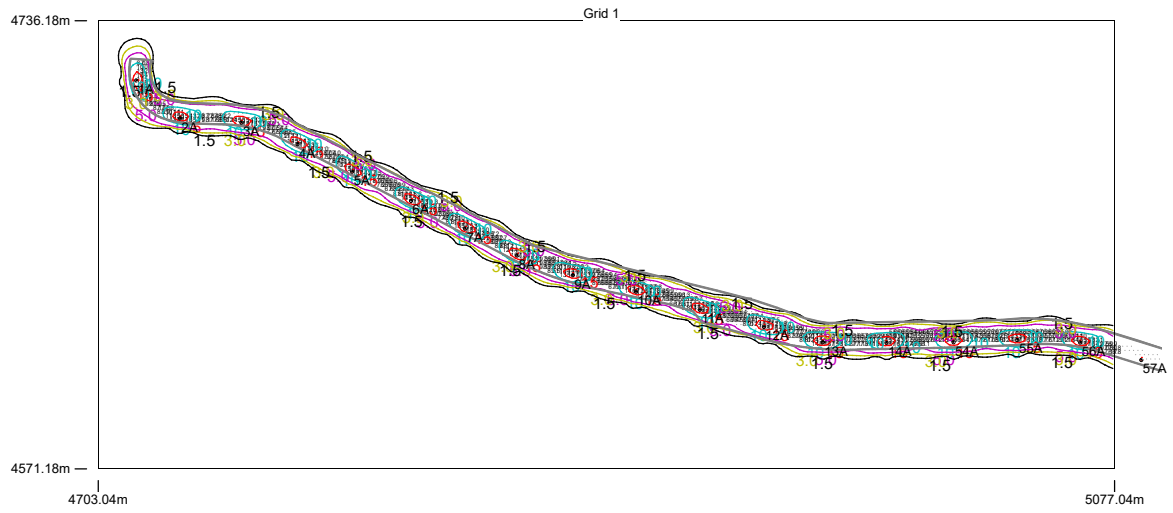
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
8	A	4857.20	4649.79	6.00	68.00	0.00	0.00	0.20			
9	A	4877.65	4642.54	6.00	79.00	0.00	0.00	0.20			
10	A	4900.86	4636.47	6.00	77.00	0.00	0.00	0.20			
11	A	4924.37	4629.80	6.00	74.00	0.00	0.00	0.20			
12	A	4947.96	4623.53	6.00	77.00	0.00	0.00	0.20			
13	A	4969.67	4617.87	6.00	90.00	0.00	0.00	0.20			
14	A	4993.03	4617.70	6.00	92.00	0.00	0.00	0.20			
15	A	5265.76	4644.04	6.00	4.00	0.00	0.00	0.20			
16	A	5263.75	4669.95	6.00	2.00	0.00	0.00	0.20			
17	A	5262.10	4696.50	6.00	2.00	0.00	0.00	0.20			
18	A	5260.79	4716.98	6.00	0.00	0.00	0.00	0.20			
19	A	5282.59	4624.67	6.00	61.00	0.00	0.00	0.20			
20	A	5305.64	4613.49	6.00	63.00	0.00	0.00	0.20			
21	A	5330.79	4605.93	6.00	247.00	10.00	0.00	0.20			
22	A	5355.15	4597.37	6.00	78.00	0.00	0.00	0.20			
23	A	5374.55	4608.77	6.00	306.00	10.00	0.00	0.20			
24	A	5397.07	4619.14	6.00	296.00	0.00	0.00	0.20			
25	A	5420.19	4630.70	6.00	296.00	0.00	0.00	0.20			
26	A	5443.78	4642.73	6.00	296.00	3.00	0.00	0.20			
27	A	5466.54	4655.30	6.00	296.00	5.00	0.00	0.20			
28	A	5491.14	4661.99	6.00	282.00	5.00	0.00	0.20			
29	A	5507.39	4675.95	6.00	349.00	0.00	0.00	0.20			
30	A	5512.27	4698.11	6.00	349.00	0.00	0.00	0.20			
31	A	5375.97	4593.26	6.00	80.00	0.00	0.00	0.20			
32	A	5398.16	4588.56	6.00	82.00	2.00	0.00	0.20			
33	A	5420.74	4585.56	6.00	83.00	0.00	0.00	0.20			
34	A	5468.08	4580.93	6.00	83.00	0.00	0.00	0.20			
35	A	5492.99	4578.06	6.00	83.00	0.00	0.00	0.20			
36	A	5519.71	4575.69	6.00	83.00	0.00	0.00	0.20			
37	A	5547.02	4573.01	6.00	83.00	0.00	0.00	0.20			
38	A	5571.76	4565.20	6.00	60.00	0.00	0.00	0.20			
39	C	5589.73	4549.77	6.00	29.00	0.00	0.00	0.20			
40	A	5606.50	4542.80	6.00	83.00	0.00	0.00	0.20			
41	A	5630.65	4539.26	6.00	83.00	0.00	0.00	0.20			
42	A	5655.82	4536.63	6.00	90.00	0.00	0.00	0.20			
43	A	5681.18	4537.24	6.00	90.00	0.00	0.00	0.20			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
44	A	5725.75	4535.92	6.00	77.00	0.00	0.00	0.20			
45	A	5750.81	4530.16	6.00	77.00	0.00	0.00	0.20			
46	A	5776.36	4523.90	6.00	72.00	0.00	0.00	0.20			
47	A	5799.73	4514.82	6.00	67.00	0.00	0.00	0.20			
48	A	5821.54	4505.75	6.00	71.00	0.00	0.00	0.20			
49	A	5844.99	4494.93	6.00	69.00	0.00	0.00	0.20			
50	A	5868.46	4485.30	6.00	59.30	0.00	0.00	0.20			
51	A	5889.48	4470.65	6.00	54.00	0.00	0.00	0.20			
52	A	5910.64	4455.05	6.00	53.00	0.00	0.00	0.20			
53	B	5930.85	4450.57	6.00	287.00	0.00	0.00	0.20			
54	A	5017.74	4617.87	6.00	92.00	0.00	0.00	0.20			
55	A	5041.24	4618.67	6.00	92.00	0.00	0.00	0.20			
56	A	5064.33	4617.75	6.00	83.00	0.00	0.00	0.20			
57	A	5086.84	4611.33	6.00	77.00	0.00	0.00	0.20			
58	A	5110.08	4603.57	6.00	77.00	0.00	0.00	0.20			
59	A	5132.52	4596.84	6.00	77.00	0.00	0.00	0.20			
60	A	5155.82	4595.19	6.00	90.00	0.00	0.00	0.20			
61	A	5180.41	4595.49	6.00	92.00	0.00	0.00	0.20			
62	A	5204.93	4596.23	6.00	93.00	0.00	0.00	0.20			
63	A	5227.32	4596.05	6.00	93.00	0.00	0.00	0.20			
64	A	5249.82	4596.78	6.00	93.00	0.00	0.00	0.20			
65	A	5273.55	4596.41	6.00	93.00	0.00	0.00	0.20			
66	A	5296.43	4597.02	6.00	93.00	0.00	0.00	0.20			
67	A	5318.87	4597.70	6.00	93.00	0.00	0.00	0.20			
68	A	5443.57	4583.21	6.00	83.00	0.00	0.00	0.20			
69	A	5702.20	4538.05	6.00	90.00	0.00	0.00	0.20			

Horizontal Illuminance (lux)

Grid 1

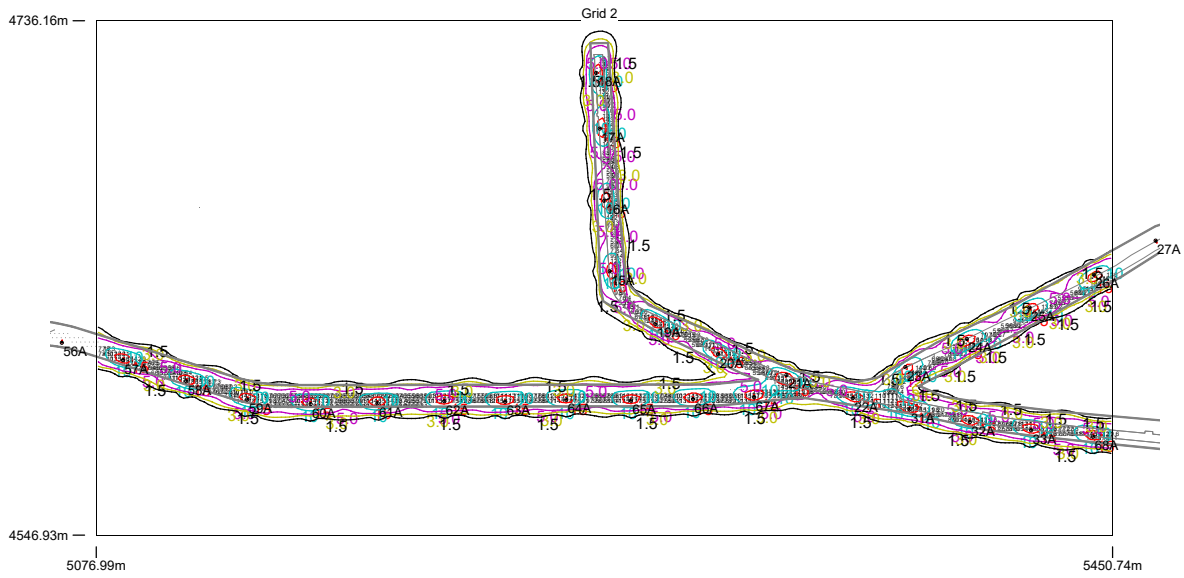


Results

Eav	10.39
Emin	4.50
E _{max}	17.97
E _{min} /E _{max}	0.25
E _{min} /E _{av}	0.43

Horizontal Illuminance (lux)

Grid 2



Results

Eav	10.88
Emin	4.76
E _{max}	18.54
E _{min} /E _{max}	0.26
E _{min} /E _{av}	0.44

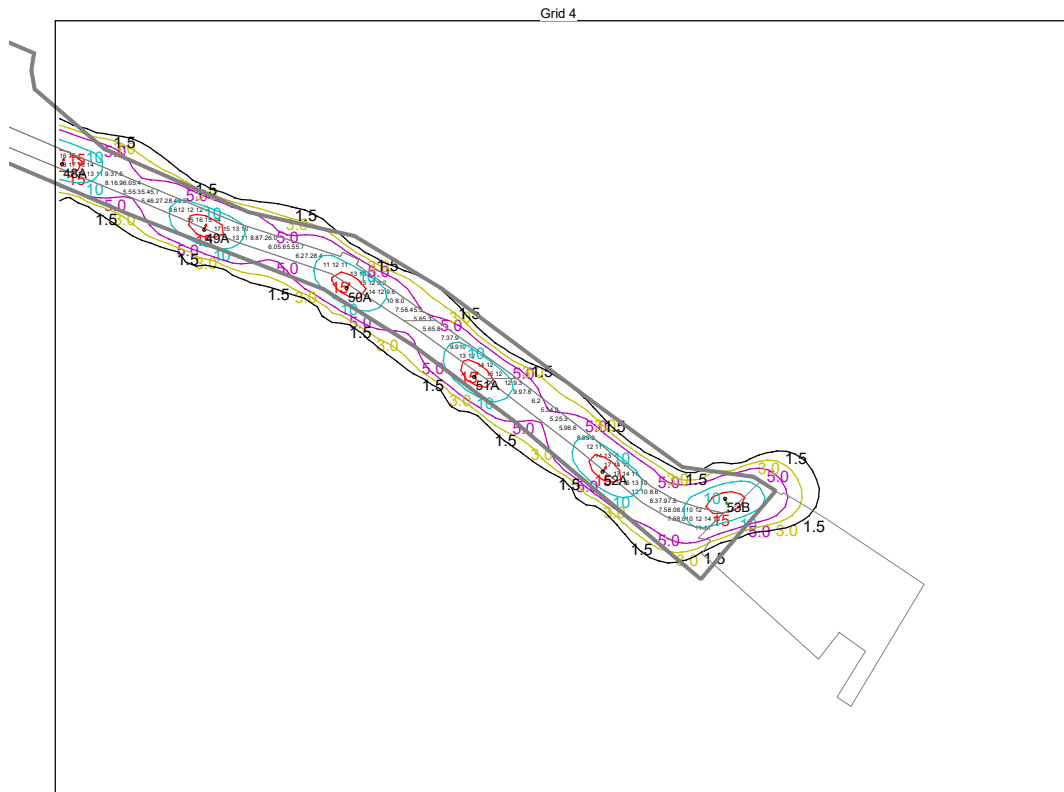
Horizontal Illuminance (lux)

Grid 3



Horizontal Illuminance (lux)

Grid 4



Results

Eav	10.17
Emin	4.83
E _{max}	17.65
E _{min} /E _{max}	0.27
E _{min} /E _{av}	0.47



APPENDIX D. Louth County Council Memo

Memo

To: Louth County Council Planning Section

From: James Searson, Executive Engineer, Infrastructure

Date: 25th October 2022

Re: Planning Application from Louth County Council

Location: Boyne River Walkway, Drogheda, County Louth

I refer to your recent correspondence in relation to the proposal and to your recent correspondence in relation to the application for Permission for development to upgrade the Boyne River Walkway.

Referral of a site location map and correspondence, pertaining to the proposed development, for assessment is noted and acknowledged.

Having examined the information supplied and carrying out a site inspection on 21st October 2022, **I would have the following comment;**

1. The proposed development is located in the Drogheda and Flood Maps for this area are now available online at www.floodinfo.ie. The Flood Maps indicate that a significant portion of the proposed site is vulnerable to Fluvial Flooding with predicted Extreme Water Levels of between 3.877m – 4.167m for a 1% A.E.P. (1 in 100 year return period) while a small portion is also vulnerable to Coastal Flooding with a predicted Extreme Water Level of 3.57m for a 0.5% A.E.P. (1 in 200 year return period). The proposed development is for upgrading and new works along a Riverside Walk, constructed with flood resilient materials, which is an amenity open space, and in accordance with Table 3.1 of The Guidelines for Planning Authorities – The Planning System and Flood Risk Management”, November 2009, can be considered as a “Water-compatible development” appropriate to the Riverside location.



25/10/2022

Signed: _____
James Searson
Executive Engineer