



Pedestrian and Cycle Link
from Killucan/Rathwire to
The Royal Canal Greenway
at
Thomastown, Co Westmeath

Screening for Appropriate Assessment

PREPARED ON BEHALF OF;
WESTMEATH COUNTY COUNCIL

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1. Introduction

1.1 Overview

Maurice O'Connor has recently been commissioned by Westmeath County Council to provide ecological consultancy services for the development Pedestrian and Cycle link, Thomastown to Killucan, Co. Westmeath. A full description of the proposed amenity area is given in Section 2.

1.2 Project Rationale

The proposed development is a pedestrian and cycle link from the Royal Canal at Thomastown to Killucan, Co. Westmeath. This links to the Royal Canal Greenway at Thomastown Co. Westmeath. The purpose of the proposed development is to provide a safe walking and cycling link from the Royal canal to Killucan and Rathwire.

Figure 1: Pedestrian and cycle link from the Royal Canal at Thomastown to Killucan at Co. Westmeath



1.3 Requirement for Appropriate Assessment

Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 437 of 2011) (as amended) transposes Article 6 of the Habitats Directive (92/43/EEC) into Irish law. The regulations require that where a public authority wishes to progress a project (which is not directly connected with or necessary to the management of the site as a European Site), a screening for Appropriate Assessment of the project must 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 project, individually or in combination with other plans or projects is likely to have a significant effect on the European site.

The Regulations require that a screening for Appropriate Assessment must be carried out before a decision to undertake the project is taken.

1.3.1 European Sites (European Sites)

In accordance with the requirements of the Habitats Directive (92/43/EEC) and the Birds Directive (2009/147/EC), Member States have identified a network of sites of conservation importance, hosting habitats and/or species identified in the Directives as needing to be either maintained at or returned to favourable conservation status. These sites are known as the European network and in Ireland, European sites comprise areas designated as Special Areas of Conservation (SACs), candidate Special Areas of Conservation (cSACs), Special Protection Areas (SPAs) and candidate Special Protection Areas (cSPAs).

These Directives require that where a project is likely to have a significant effect on a European Site, while not directly connected with or necessary to the nature conservation management of the site, it shall be subject to 'Appropriate Assessment' to identify any implications for the site in view of the site's conservation objectives. Specifically, Article 6(3) of the Habitats Directive states:

*"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".*

The proposed development is for a pedestrian and cycle link from the Royal Canal at Thomastown to Killucan, Co. Westmeath. This links to the Royal Canal Greenway at Thomastown Co. Westmeath. **The application is not directly connected with or necessary to the management of any European sites and must therefore be subjected to screening for Appropriate Assessment.**

This report is a screening for Appropriate Assessment for the proposed development of Pedestrian and Cycle link, Thomastown to Killucan, Co. Westmeath. and is carried out in accordance with the requirements of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 437 of 2011) (as amended). The intention of this screening for Appropriate Assessment is to determine whether the proposed development is likely to have a significant effect on a European site(s), either alone or in combination with other plans or projects. Where significant effects are determined to be likely the proposed works are statutorily required to be subjected to Appropriate Assessment. This screening for Appropriate Assessment has been carried out in accordance with the following European Commission Guidance:

- EC (2000) 'Managing European Sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC';
- EC (2001) 'Assessment of plans and projects significantly affecting European sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC'.

1.4 Statement of Authority

1.4.1 Maurice O Connor

This AA Screening Report has been prepared by Maurice O Connor, Environmental Consultant. Maurice holds BSc (Hons) degree in Wildlife Biology from Institute of Technology Tralee and an MSc in Ecological Assessment from National University of Ireland Cork (UCC). Maurice is an experienced ecological consultant with over 6 years' professional experience in Ireland, working independently and as an employee within consultancy. He has strong generalist ecological field skills in terrestrial and riparian environments and through his experience can demonstrate undertaking a range of ecological surveys including habitat, invasive and protected species survey, delivering initial site appraisals and identification of ecological constraints to inform Ecological Impact Assessments (EclA) and AA. Maurice has undertaken ecological assessments and surveys on a variety of project types (e.g. road schemes, waste, water, energy and housing) involving survey, mitigation and enhancement. During his time as an environmental consultant, Maurice has completed numerous AA assessments for both plans and projects.

2 Description of the Proposed Development and Receiving Environment

2.1 Guidance

Both EU and national guidance exists in relation to Member States fulfilling their requirements under the Habitats Directive, with particular reference to Article 6(3) and 6(4) of that Directive. This AA has been undertaken in line with the following guidance:

- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. DoEHLG (2010);
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10 and PSSP 2/10. National Parks and Wildlife Service (NPWS) (2010);
- Assessment of plans and projects significantly affecting European sites Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission (2001);
- Managing European sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. European Commission (2000a);
- Communication from the Commission on the Precautionary Principle. European Commission, (2000b); and
- Assessment of plans and projects significantly affecting European sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Office for Official Publications of the European Communities, Luxembourg. European Commission (2002).

Definitions of conservation status, integrity and significance used in this assessment are defined in accordance with '*Managing European sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*' (EC, 2000):

- The conservation status of a natural habitat is defined as the sum of the influences acting on a natural habitat and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical species;
- The conservation status of a species is defined as the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its population;
- The integrity of a European Site is defined as the coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or populations of species for which the site is or will be classified;
- Significant effect should be determined in relation to the specific features and environmental conditions of the protected site concerned by the plan or project, taking particular account of the site's conservation objectives.

2.2 Description of the Proposed Development

The proposed development is not connected with or necessary to the management of any European site. The proposed walk and cycle link comprises of a linear walking and cycling path, incorporating a section of existing roadway. The path follows the existing hedgeline of privately owned improved grassland. There are no further construction works planned for the site.

These works will create a safe link between the urban area of Killucan and Rathwire and the Royal Canal greenway so it can be accessed more easily and safely by pedestrians and cyclists.

2.3 Site Access

Access to the site is via the Royal Canal Greenway and Killucan Road.

2.4 Construction Phase

Site activities will include the following:

- Light excavation machinery will be used to prepare the path to the levels proposed.
- No interference with any natural riparian boundary. A temporary fence will be erected to prevent contractors unintentionally depositing or damaging any natural boundary.
- Stockpiling subsoil and topsoil will be on levelled ground and kept to a minimum height to prevent runoff.
- Areas cleared for hardcore will be filled for transporting materials on site, to pre identified locations for storage of construction materials, located away from the riparian habitat in the interest of pollution prevention.
- After delivery of materials for the construction, machinery used daily will comprise of excavators, dumpers, surface paver, hand tools, wheelbarrows etc. Possible sources of runoff are the active mixing area and exposed areas of soils.
- During landscaping of bare soils, no stockpiles of soils to be left on site, any remaining construction/demolition waste to be removed appropriately.

2.5 Site Description and Receiving Environment

The proposed development site is located at Killucan, County Westmeath. Land use in the surrounding area is predominantly farmland with the urban area of Rathwire to the North of the new path. The proposed project is a 1.7km pedestrian and cycle path connecting Rathwire to the Royal Canal Greenway. The proposed development adjoins the Proposed Natural Heritage Area (PNHA) Royal Canal (Site Code: 002103). The nearest European sites are listed in Table 1. No Annex I or Annex II species were recorded within or immediately surrounding the site during the site survey.

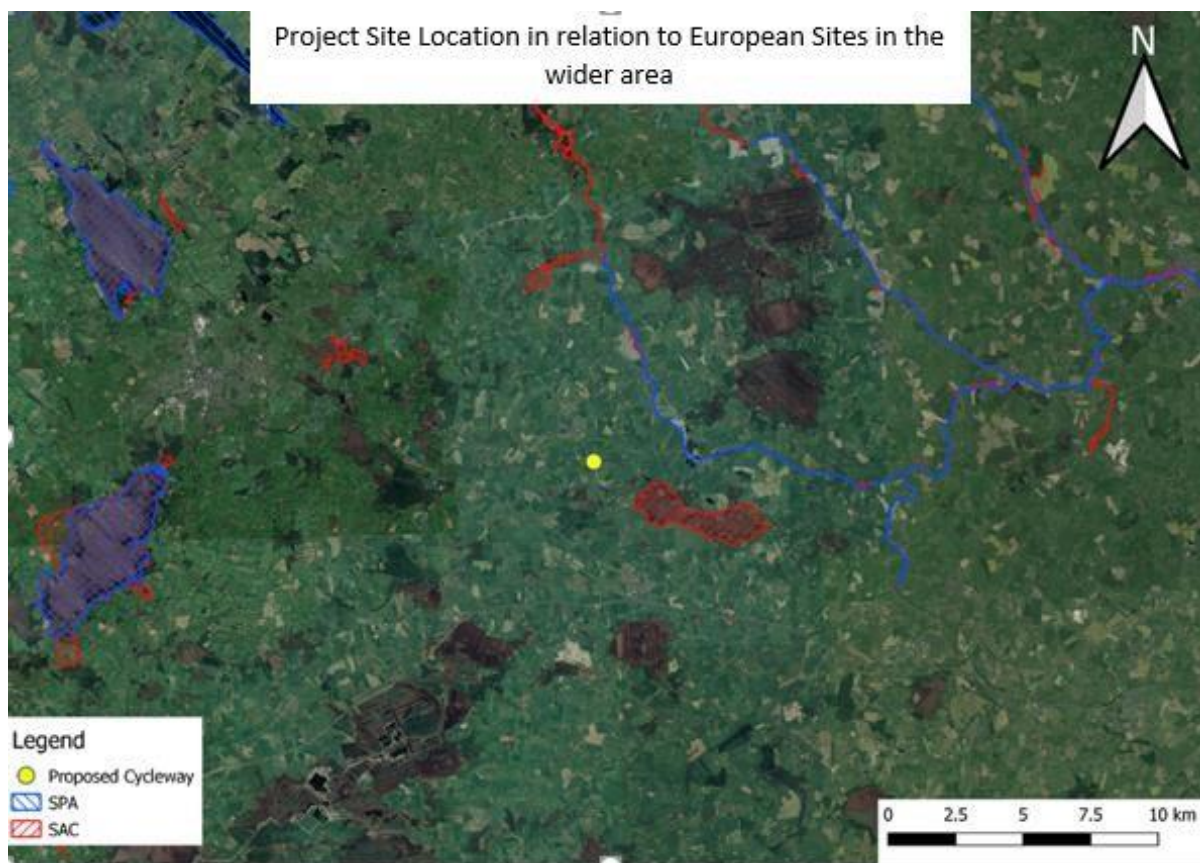


FIGURE 1 EUROPEAN SITES IN THE WIDER AREA

2.6 Elements of the Project with Potential for having Significant Effects

There is a potential for pollution of watercourses due to sediment loading or a pollution event from contaminants entering the watercourses during the construction phase of the project.

2.7 Baseline Environmental Condition

2.7.1 Overview of Baseline Data

The proposed development site is located between Thomastown and Rathwire, County Westmeath. Habitats and features adjacent to the 1.7km proposed path were surveyed and found to comprise mostly of improved grassland, with some treelines and built areas. Access to the site is via the L-1015 local road and the Royal Canal Greenway. Habitats recorded on the site and immediate area are shown in Figure 2. No annex I or Annex II habitats or species were recorded in the area during the survey.

The site is adjacent to the proposed Natural Heritage Area (Site code: 002103) for the Royal Canal. This spans the length of the canal (Approx. 174km) There are several other European sites recorded within the area, shown in Figure 4 and discussed in Section 3.

2.7.2 Habitats

The assessment of protected species and habitats and/or invasive species were undertaken in line with the following guidelines:

- Chartered Institute of Ecology and Environmental Management (CIEEM, 2017). Guidelines For Preliminary Ecological Appraisal. Second Edition.
- Fossitt, J. (2000). Guide to Habitats in Ireland. The Heritage Council.
- NRA (2010). Guidelines on the Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads.

A detailed walkover of the site was carried out on 02nd July 2021 by Senior Ecologist, Thomas Sheehan. Habitats and flora within the site were classified using the Heritage Council's Guide to Habitats in Ireland (Fossitt, 2000). Within each habitat, dominant and abundant plant species and indicator species were recorded. A description of the habitats within the vicinity of the site boundary and the immediate surrounding area is presented hereunder. A habitat map is presented in Figure 2 which presents the habitats present adjacent to the proposed development.

Improved Grassland (GA1)

This was the dominant habitat found adjacent to the proposed development. Plant species recorded included common species typical of this habitat type such as Thistle (*Cirsium spp.*), White Clover (*Trifolium repens*), Nettle (*Urtica dioica*), Creeping Buttercup (*Ranunculus repens*) and Rye grass (*Lolium spp.*).

Treelines (WL2)

This habitat type was found in between sections of improved grassland (GA1) and directly adjacent to the proposed cycleway. It was comprised of a mixture of species including Sycamore (*Acer pseudoplatanus*), Ash (*Fraxinus excelsior*), Whitethorn (*Crataegus monogyna*) and Beech (*Fagus sylvatica*).

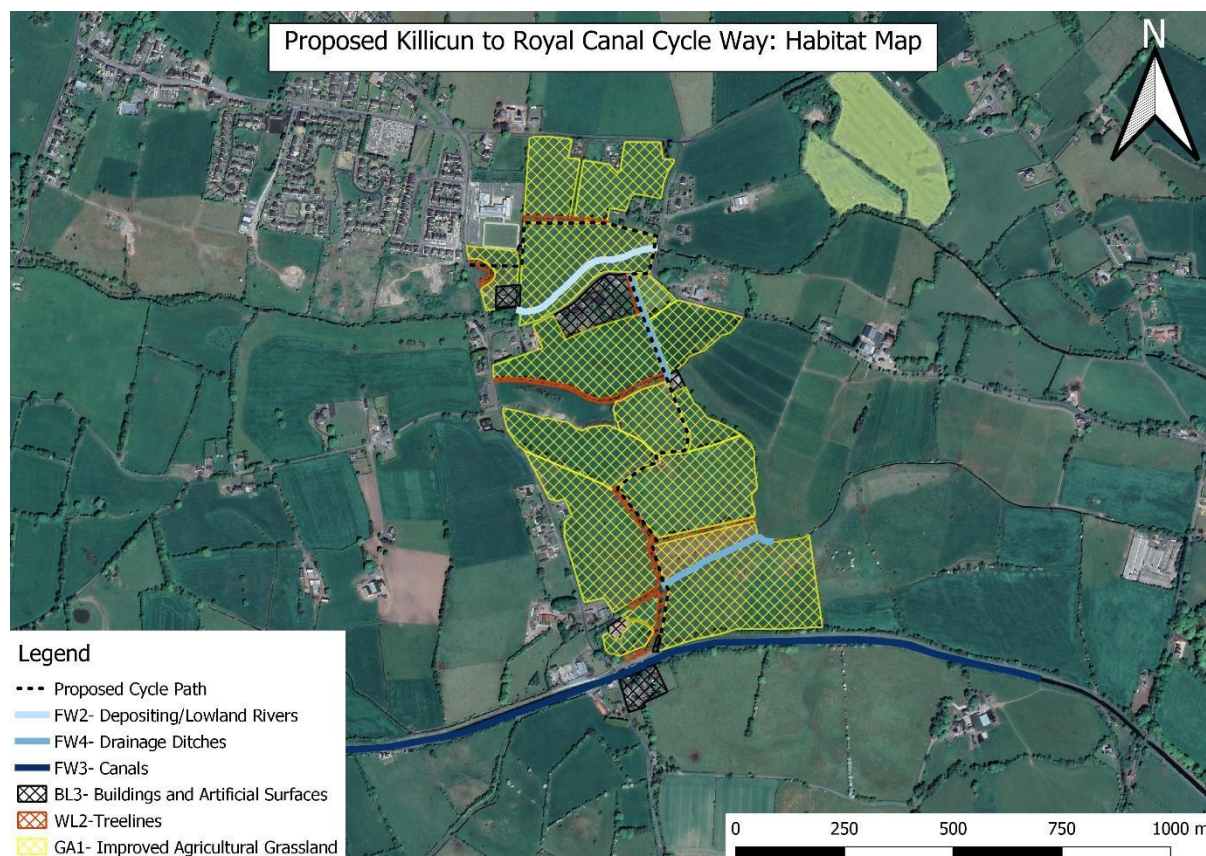


FIGURE 2 HABITAT MAP

2.7.3 Mammals and Aquatic Species

No mammals were recorded on site during the course of the field study.

2.7.4 Invasive Species

No invasive Species were recorded during the course of the field study.

2.7.5 Aquatic Environment

Three water courses occur within 1km of the site, the largest of which is the Royal Canal which runs for almost 147km from Cloondara in County Longford, as far as the River Liffey in Dublin, where the former watercourse discharges into Dublin Bay. The Royal Canal is classified as having a good ecological potential, and is not classified as being an ‘at risk’ canal waterbody (EPA, 2020)

The Riverstown river is a 4th order river which runs West to East and is a tributary of the Deel (5th order) which flows into the River Boyne and River Blackwater SAC and SPA. Both the Riverstown river and the Deel are classified as “moderate” under the Water Framework Directive.

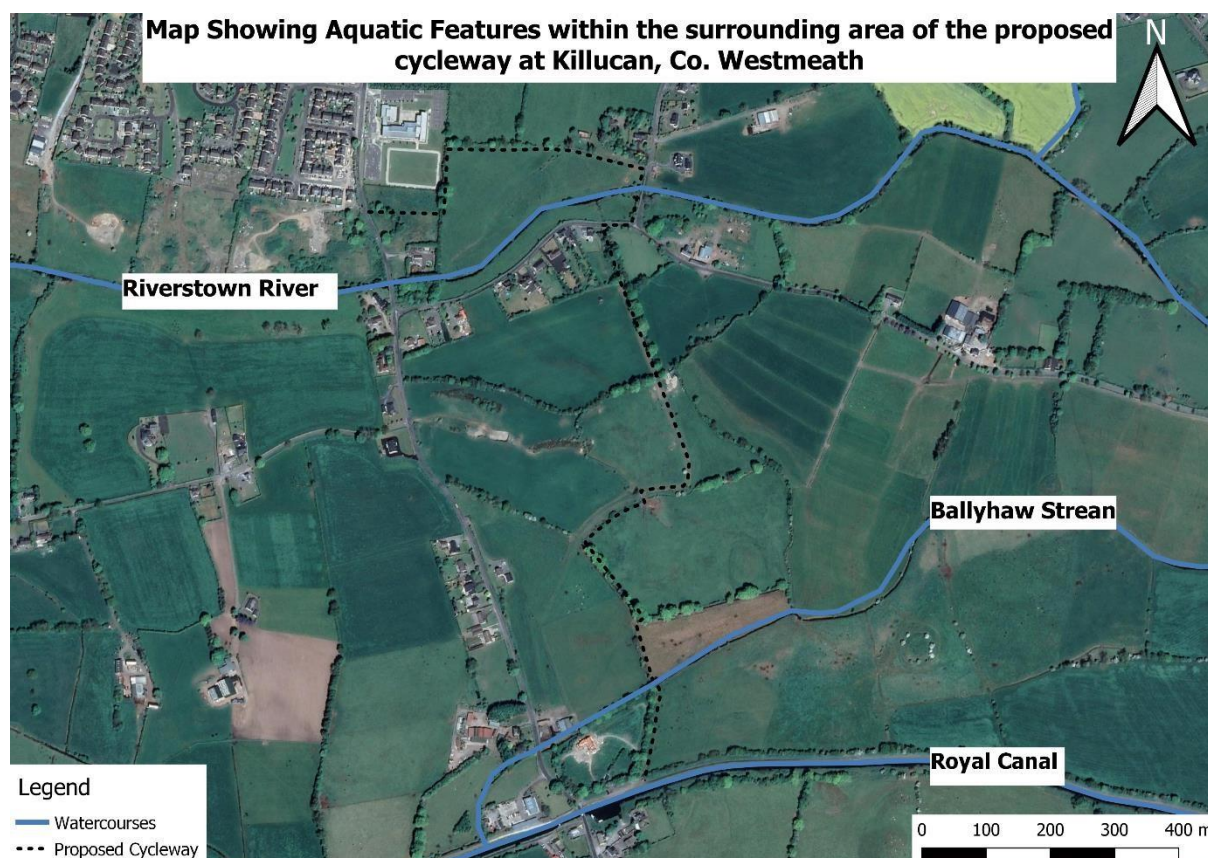


FIGURE 3 AQUATIC ENVIRONMENT

The Ballyhaw stream also occurs in the area and is a first order stream which is also a tributary of the Deel. This stream does not have a Water Framework Directive status and owing to its size, was classified as a drainage ditch during the walkover habitat survey.

3. Distance from European Sites or Key Features of the Sites

3.1 Zone of Influence (Zoi)

DEHLG Guidance states that screening for Appropriate Assessment should be carried out for any European site within the likely Zone of Influence of a plan or project. For projects, the guidance recommends that the Zone of Influence must be evaluated on a case-by-case basis regarding the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects. Projects have the potential to impact on European sites beyond the confines of the individual sites themselves.

The Zone of Influence of a project is the area in which qualifying interests are present which are sensitive to the ecological impacts that may be caused by the activities associated with the project. The zone of influence will therefore vary relative to the scale of the impact and relative to the ecology of the sensitive receptor.

The potential Zone of Influence is defined as:

- Areas directly within the land take for the proposed development;
- Areas which will be temporarily affected;
- Areas likely to be impacted by hydrological disruption; and
- Areas where there is a risk of pollution and disturbance (e.g. noise).

To establish the zone of influence, nationally available data on protected habitats and species was mapped using GIS. This data was interrogated for any physical, hydrological, or ecological connectivity to the activities associated with the proposed works.

The desk based assessment of available records of protected species and habitats included the following sources:

- Conservation Status Assessment Reports [1] (CSARs), Backing Documents and Maps prepared in accordance with Article 17 of the Habitats Directive;
- Published and unpublished NPWS reports on protected habitats and species including Irish Wildlife Manual reports, Species Action Plans, and Conservation Management Plans; and
- Existing relevant mapping and databases e.g. waterbody status, species and habitat distribution etc. (sourced from the Environmental Protection Agency - <http://gis.epa.ie/>, the National Biodiversity Data Centre - <http://maps.biodiversityireland.ie> and the National Parks and Wildlife Services - <http://www.npws.ie/mapsanddata/>).

The findings of the desk-based assessment were investigated and verified by ecological field assessment, carried out on July 02nd by Senior Ecologist, Thomas Sheehan. The spatial scope of the field assessment was relative to the physical, hydrological, or ecological connectivity of the proposed works and the qualifying features of the European sites within the zone of influence.

3.2. European Sites Within Zone of Influence

The European sites which have a physical, hydrological or ecological connection to the activities associated with the project are presented in Table 1 below and described hereunder. **TABLE 1 EUROPEAN SITES WITHIN ZONE OF INFLUENCE**

European Site	Site Code	Distance from Works
River Boyne and River Blackwater SAC	002299	3.36km North
River Boyne and River Blackwater SPA	004232	3.36km North
Boyne Coast and Estuary SAC	001957	87km
Boyne Estuary SPA	004080	86.9km
Wooddown Bog SAC	002205	8.48km
Mount Hevey Bog SAC	002342	2.15km

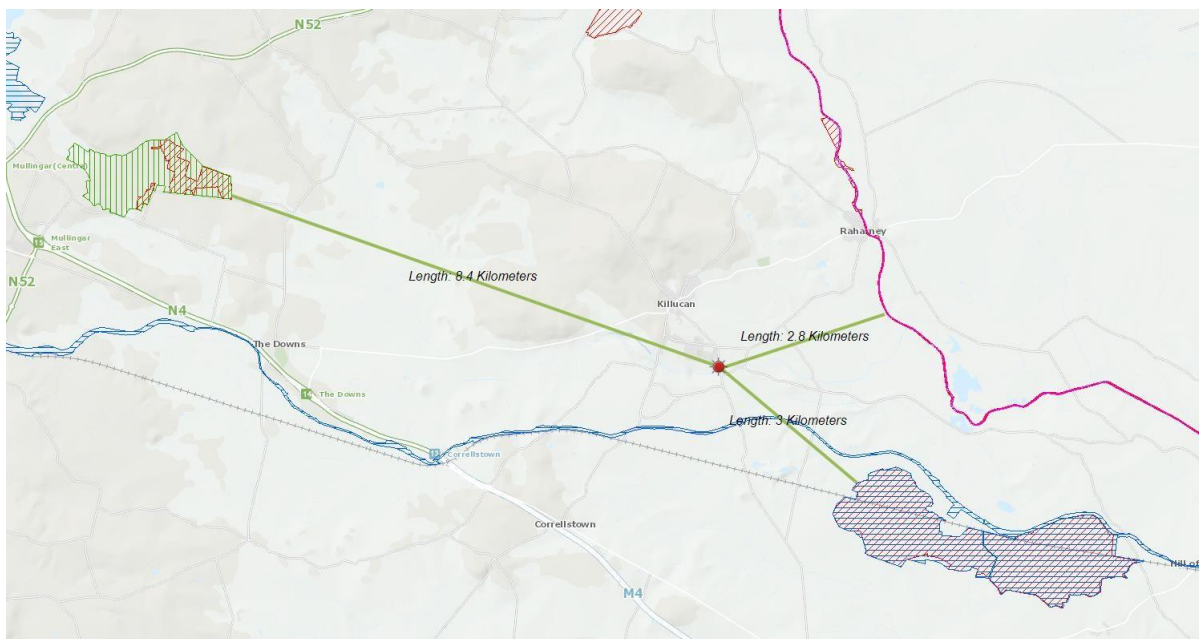


FIGURE 4 EUROPEAN SITES WITHIN ZOI

3.2.1 Characteristics of European Sites within Zoi

TABLE 2 RIVER BOYNE AND RIVER BLACKWATER SAC QUALIFYING INTERESTS

Annex I Habitats	Annex II Species
Alkaline fens [7230] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0]	<i>Lampertra fluviatilis</i> (River Lamprey) [1099] <i>Salmo salar</i> (Salmon) [1106] <i>Lutra lutra</i> (Otter) [1355]

TABLE 3 RIVER BOYNE AND RIVER BLACKWATER SPA QUALIFYING INTERESTS

Annex II Species
Kingfisher (<i>Alcedo atthis</i>) [A229]

TABLE 4 BOYNE COAST AND ESTUARY SAC QUALIFYING INTERESTS

Annex I Habitats

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 (*Glauco-Puccinellietalia maritimae*) [1330]
 Embryonic shifting dunes [2110]
 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120]
 Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]

TABLE 5 BOYNE ESTUARY SPA QUALIFYING INTERESTS

Annex II Species

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]

TABLE 6 WOODDOWN BOG SAC QUALIFYING INTERESTS

Annex I Habitats

Degraded raised bogs still capable of natural regeneration [7120]

TABLE 7 MOUNT HEVEY BOG SAC QUALIFYING INTERESTS

Annex I Habitats

Active raised bogs [7110]
 Degraded raised bogs still capable of natural regeneration [7120]
 Depressions on peat substrates of the Rhynchosporion [7150]

3.2.2 River Boyne and River Blackwater SAC 002299

The river Boyne and river Blackwater SAC is located 2.8km North East of the site and is also hydrologically connected to the site by the Riverstown River and the Deel. The proposed development

is 33km upstream of the SAC. This SAC supports two Annex 1 listed habitats and three Annex II listed species.

Annex I listed habitats Alkaline fens and Alluvial forests are qualifying interests of the SAC. The Alkaline fen is found mostly around Lough Shesk, Freehan Lough and Newtown Lough area. Open water is usually fringed by Bulrush (*Typha latifolia*), Common Club-rush (*Scirpus lacustris*) or Common Reed (*Phragmites australis*), and this last species also extends shore wards where a dense stand of Great Fen-sedge (*Cladium mariscus*) frequently occurs. This in turn grades into a sedge and grass community (*Carex spp.* and Purple Moor-grass, *Molinia caerulea*), or one dominated by Black Bog-rush (*Schoenus nigricans*).

The Annex II listed species, Atlantic Salmon (*Salmo salar*), spawn in tributaries and headwaters of the Boyne. The Boyne is known as one of Ireland's best fisheries for salmon, spring trout and brown trout. Salmon populations have been severely damaged on the past by an arterial drainage scheme in the 1970's and have not recovered to the numbers present before this scheme. The fish population of the river system also supports an otter (*Lutra lutra*) population, this is also an Annex II listed species. Potential threats to these species include, changes in water quality and sedimentation which can affect salmon spawning, by reduction of area of suitable spawning habitat.

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 river banks, 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.

3.2.3 River Boyne and River Blackwater SPA

River Boyne and River Blackwater SPA [004232] is designated for Kingfisher. The conservation objective document for this SPA is a generic document which states that the objective of the site is "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA."

3.2.4 Boyne Coast and Estuary SAC

The Boyne coast and Estuary SAC includes a variety of coastal habitats. Dunes systems, composing of embryonic, marram and fixed dunes, tidal mudflats and sandflats, estuaries, annual vegetation of drift

lines Salicornia mud and Atlantic salt meadows. Dune systems are found at 2 sites, Baltray and Mornington and are of conservation value.

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. However, due to the habitats and species which are present and the nature and distance of the proposed project it will not have any impact on the Conservation Objectives of the SAC.

3.2.5 Boyne Estuary SPA 004080

This SPA is on the East coast of Ireland where the Boyne river flows into the Irish Sea. 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, 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 Little Tern population in the area has, in some years, been recorded having national significance. The site is also of considerable ornithological importance for wintering waterfowl. Black Tailed Godwit occur in internationally important numbers. Part of this SPA is also designated as a wildfowl sanctuary.

3.2.6 Wooddown Bog SAC

This Special Area of Conservation which is situated approximately 8.48km from the site of the proposed works and designated for the protection of the Annex II habitat Degraded raised bogs still capable of natural regeneration [7120]. It is not hydrologically connected to the site of the proposed works.

The site is part of a raised bog that includes both areas of high bog and cutover bog. The site is bordered by open high bog on its northern and western margins, by forestry on cutover bog on its eastern margin and by agricultural grassland on its southern side. It also includes areas of coniferous forestry, and associated drainage. low canopy Downy Birch (*Betula pubescens*) and Willow (*Salix* spp.) woodland. Part of the cutover supports Downy Birch and Common Gorse (*Ulex europaeus*) scrub. Young trees of Lodgepole Pine (*Pinus contorta*) are encroaching onto the adjacent high bog to the north and west of the site through natural regeneration.

3.2.7 Mount Hevey Bog SAC

Situated approximately 2.15km from the proposed development, Mount Hevey Bog is a Special Area of Conservation designated under the E.U. Habitats directive for the presence of Raised bog (Active),

Degraded Raised Bog and Rhynchosporion Vegetation. Although it is close in proximity, this SAC is not hydrologically connected to the site of the proposed works.

The Annex I listed Active raised bog is wet and actively peat forming with a high percentage cover of peat forming mosses. Degraded raised bog corresponds to those areas of high bog whose hydrology has been adversely affected by peat cutting, drainage and other land use activities, but which are capable of regeneration

Much of the high bog has vegetation typical of the Midlands Raised Bog type. The vegetation consists of Heather (*Calluna vulgaris*), cottongrasses (*Eriophorum angustifolium* and *E. vaginatum*), Bog Asphodel, White Beak-sedge and midland indicator species Bog-rosemary (*Andromeda polifolia*) and the bog moss *Sphagnum magellanicum*. The wet quaking area in the eastern section of the bog has pools that support the bog moss *Sphagnum cuspidatum*, with White Beak-sedge, cottongrasses and Heather at the edges. The hummock/hollow complex supports a range of hummock-forming bog mosses, including *Sphagnum imbricatum* and *S. fuscum*, as well as other species such as *S. capillifolium*, *S. magellanicum* and *S. papillosum*. Other plants found in the hummock/hollow complexes are Bog-rosemary, Cross-leaved Heath (*Erica tetralix*), Bog Asphodel and Deergrass.

Current land use on the site consists of limited mechanised peat-cutting, mostly on the eastern end of the high bog. There are areas of old peat cuttings all around the site with some very old abandoned regenerating cutover along the edge of the railway. The area to the east of the site has been afforested. Areas of cutover have been reclaimed for agricultural purposes. Damaging activities associated with these land uses include drainage throughout the site (both old and recent) and burning of the high bog. These are all activities that have resulted in loss of habitat and damage to the hydrological status of the site and pose a continuing threat to its viability.

4. Screening

4.1 Introduction

The purpose of Screening is to determine whether AA is required. This is done by examining whether:

- A plan or project which is directly connected with or necessary to the management of the site can be excluded from AA; and
- The potential effects of a plan or project, either alone or in-combination with other plans or projects, on a European site in view of its conservation objectives and considering whether these effects will be significant.

4.1.1 The Likely Significant Effect Test

Screening is underpinned by an interpretation of LSE, as this interpretation provides the benchmark for a finding of likely effects. Any assessment of significance must satisfy the principles that underpin a satisfactory determination for LSE with regard to the accumulation of impacts and an understanding of the nature, probability and severity of potential impacts. The terms ‘likely’ and ‘significance’ have been defined variously by governments and through the courts. The following sections seek to provide clarification on the current interpretation of these key terms as determined by recent guidance and case law.

4.1.2 An interpretation of ‘likely’

European case law has established that the benchmark requirement of ‘likely’ should not be regarded as a measure of probability in the context of an AA. Rather, a LSE finding is an acknowledgment that the risk of a significant effect occurring exists. This approach is consistent with the findings in the Waddensee judgement, which found that “[...] *if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site [...]*” then a LSE finding is appropriate.

More recently, this position was upheld in the European Court of Justice (ECJ) in Case C-258/11 (Sweetman v An Bord Pleanála (Ireland)), where the judgment interprets “likely” to mean “may”; “*the test is set at a lower level [...]*” and “*there is no need to establish such an effect; it is [...] merely necessary to determine that there may be such an effect*” (emphasis original). In cases where there is a determination that there is no significant effect, the Waddensee judgment establishes that there must remain “*no reasonable scientific doubt as to the absence of such effects.*”

4.1.3 An interpretation of ‘significant’

It was clarified in the ECJ Case C-127/02 (the Waddensee judgment) that the measure of significance should be made against the ecological objectives for which the site was designated: “*where a plan or project [...] is likely to undermine the site’s conservation objectives, it must be considered likely to have a significant effect on that site*”.

The proposed development is not directly connected with or necessary to the management of any European site therefore Screening for AA is required. This involves the following:

- Proposed development description;
- European site (s) identification, qualifying interests and conservation objectives;
- Ecology baseline conditions within and in close proximity to proposed development
- Assessment of likely effects; and
- Screening conclusion.

4.2 Identification of Potential Effects on European Sites

Based on the project description as set out in Section 2.2 and the ZoI over which the effect could occur, i.e. the distance at which the proposed development could have potential effects, using professional judgement and published guidance, potential effects can be identified for River Boyne and River Blackwater SAC. Table 8 focuses on the potential effects that could occur during the construction and operational phases of the proposed development.

4.3 Qualifying Interests Potentially Exposed to Risk from the Proposed Development

4.3.1 River Lamprey (*Lampetra fluviatilis*) [1099]

Potential impacts to lamprey could result from changes in water quality associated with pollutants emanating from the proposed development site. Sediment releases could affect the species, either directly or through the deterioration of clean gravels at spawning grounds downstream.

4.3.2 Atlantic Salmon (*Salmo salar*) [1106]

The viability of salmon populations is strongly influenced by water quality. Any impact on the watercourse from the proposed development, particularly on spawning and juvenile habitat downstream, has the potential to adversely affect the salmon population of the SAC. A fundamental requirement for salmon spawning is access to suitable spawning habitat - gravels need to be clear of sediment and the eggs submerged in well-oxygenated water during incubation. Degradation of salmon spawning habitat through increased suspended solids could hinder successful reproduction and longterm population viability. An increase in suspended sediment and turbidity within the river channel is also undesirable as elevated levels of suspended solids can clog the respiratory structures of salmon (Bash et al., 2001).

4.3.3 Otter (*Lutra lutra*) [1355]

Otter are ultimately dependent on water quality. Pollution of surface water and any consequent reduction of fish stocks on which otter depend could present a threat to the otter population. The potential for adverse impacts upon fish species would affect food availability for otter. However, to undermine the conservation objectives and integrity of the SAC there would need to be a large-scale or persistent pollution event that degraded water quality such that there were substantial fish kills and/or degraded feeding habitat upriver due to restricted fish passage to up river sites.

4.3.4 Alkaline fens [7230]

Drainage, either within or surrounding the fen habitat can result in the drawdown of the alkaline fen groundwater table. The depth, geometry and density of drainage (hydromorphology) will indicate the scale and impact on fen hydrology. Drainage can result in loss of characteristic species and transition

to drier habitats. However, to undermine the conservation objectives and integrity of the SAC there would need to be a large-scale or persistent pollution event that degraded water quality to such an extent that would give rise to a change in hydro morphological conditions.

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

Drainage, either within or surrounding the alluvial forest habitat can result in the drawdown of the groundwater table. The depth, geometry and density of drainage (hydromorphology) will indicate the scale and impact on the forest hydrology. Drainage can result in loss of characteristic species and transition to drier habitats. However, to undermine the conservation objectives and integrity of the SAC there would need to be a large-scale or persistent pollution event that degraded water quality to such an extent that would give rise to a change in hydro morphological conditions.

4.4 Conservation Objectives

To determine how the project would affect River Boyne and River Blackwater SAC 002299 and River Boyne and River Blackwater SPA 004232 qualifying interests, this assessment has focused on the effects that may possibly occur that could undermine the conservation objectives for the SACs. The conservation objectives of River Boyne and River Blackwater SAC 002299 and River Boyne and River Blackwater SPA 004232 are provided by the National Parks and Wildlife Service (NPWS, 2017) and aim to define the parameters for 'favourable conservation condition' for the species within the sites. The overarching objectives for these sites is to:

TABLE 8 ASSESSMENT OF POTENTIAL IMPACTS

European site name and code	Distance of site from projects	Conservation Objectives and Qualifying Interests(*=priority habitat).	Pathway	Potential for Likely Significant Effects
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River Boyne and River Blackwater SAC 002299	Proposed development site within 2km of the boundary of the SAC.	<p>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected (NPWS, 2017).</p> <p>Annex I Habitats Alkaline fens [7230] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0] <i>Lampertra fluviatilis</i> (<i>River Lamprey</i>) [1099] <i>Salmo salar</i> (Salmon) [1106] <i>Lutra lutra</i> (Otter) [1355]</p>	<p>The SAC boundary is located approximately 2.8km from the proposed area of works. The hydrological link is 33km from the site of the proposed works.</p> <p>During field surveys, no Annex I habitats were recorded within the proposed area of works or the immediate surrounding area.</p> <p>The SAC is listed for the Annex I Habitat [7230] Alkaline Fen and [91E0] Alluvial forests.</p> <p>The above habitats are sensitive habitats and are susceptible to run-off, sedimentation or pollution events (e.g. from oils and other hydrocarbons).</p> <p>Furthermore, this SAC is listed for the Annex II species, <i>Lampertra fluviatilis</i> (<i>River Lamprey</i>) [1099], <i>Salmo salar</i> (Salmon) [1106] and <i>Lutra lutra</i> (Otter) [1355].</p> <p>The river lamprey and salmon are sensitive to sedimentation in their breeding habitat caused by disturbance of the river bed and introduction of materials from works carried out. This effect on salmonid populations impacts the food supply for the Annex II listed otter which is also a conservation objective of this site.</p>	<p>Extremely Unlikely</p> <p>There are no instream works planned and there are no works planned in or around riparian boundaries. There is no potential for direct impacts on Annex I habitats as none are present within the footprint of the proposed development or the immediate environs.</p>
River Boyne and River Blackwater SPA 004232	Proposed development site within 33 km of the boundary of the SPA.	<p>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SPA has been selected (NPWS, 2017).</p> <p>Annex II Species Kingfisher (<i>Alcedo atthis</i>) [A229]</p>	<p>The SPA supports one Annex II Species, the Kingfisher. This bird is found along rivers and canals and feeds on small species of fish and larger insects.</p>	<p>Extremely Unlikely</p> <p>The River Boyne and River Blackwater SPA is 33km downstream of the site of the proposed and it is not envisaged that there is any potential impact from works being carried out on the Kingfisher, due to the distance from the site and the nature of the project.</p>
Wooddown Bog SAC 002205	Proposed development within 8.48km of the boundary of the SAC.	<p>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected (NPWS, 2017).</p> <p>Annex I Habitats Degraded raised bogs still capable of natural regeneration [7120]</p>	<p>The SAC boundary, as already stated is approx. 8.46km from the site of the proposed works.</p> <p>The SAC is designated for the protection of the Annex I habitat Degraded raised bogs still capable of natural regeneration [7120].</p> <p>The SAC is not hydrologically connected to the site of the proposed works and there is no pathway for impact envisaged.</p>	<p>Extremely Unlikely</p> <p>Wooddown Bog SAC is over 8km from the site of the proposed works and with no hydrological connection or other pathways for impact, the potential for impact is extremely unlikely.</p>

<p>Mount Hevey Bog SAC 002342</p>	<p>Proposed development within 2.15km of the boundary of the SAC.</p>	<p><i>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected (NPWS, 2017).</i></p> <p>Annex I Habitats</p> <p>Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150]</p>	<p>The SAC boundary, as already stated is approx. 2.15km from the site of the proposed works. There is no hydrological link between the 2 sites.</p> <p>During field surveys, no Annex I habitats were recorded within the proposed area of works or the immediate surrounding area.</p> <p>The SAC is listed for the Annex I Habitats Active raised bog, degraded raised bog capable of regeneration and depressions on peat substrates of the Rhynchosporion.</p> <p>These habitats are sensitive to runoff, sedimentation, pollution and drainage.</p>	<p>Extremely Unlikely</p> <p>Mount Hevey Bog SAC is only 2.15km from the site of the proposed works and is positioned to the South West. There is no hydrological link between the SAC and the site of the proposed works. There is no other potential for direct impact and no other pathways are foreseen.</p>
<p>Boyne Coast and Estuary SAC 001957</p>	<p>Proposed development within 87km of the boundary of the SAC.</p>	<p><i>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected (NPWS, 2017).</i></p> <p>Annex I Habitats</p> <p>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 (Glauco-Puccinellietalia maritima) [1330] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]</p>	<p>The SAC boundary is 87km from the site of the proposed works. It is designated for 8 Annex I habitat types all of which are specifically coastal habitats.</p> <p>The site is designated for, Estuaries, Mudflats and sandflats not covered y seawater at low tide, annual vegetation of drift lines, Salicornia and other annuals colonising mud and sand, Atlantic salt meadows, embryonic shifting dunes, shifting dunes along the shoreline with Ammophila arenaria (white dunes) and fixed coastal dunes with herbaceous vegetation.</p> <p>These habitats are a significant distance from the site of proposed works</p>	<p>Extremely Unlikely</p> <p>The proposed project is situated 87km from this SAC. There is a hydrological connection between the two sites however due to the scale and distance at which the works are occurring it is unlikely that there will be any effect on the SAC.</p>
		<p>Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</p>		

Boyne Estuary SPA 004080	Proposed development within 87km of the boundary of the SAC.	<p><i>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected (NPWS, 2017).</i></p> <p>Annex I Species</p> <p>Shelduck (<i>Tadorna tadorna</i>) [A048]</p> <p>Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</p> <p>Golden Plover (<i>Pluvialis apricaria</i>) [A140]</p> <p>Grey Plover (<i>Pluvialis squatarola</i>) [A141]</p> <p>Lapwing (<i>Vanellus vanellus</i>) [A142]</p> <p>Knot (<i>Calidris canutus</i>) [A143]</p> <p>Sanderling (<i>Calidris alba</i>) [A144]</p> <p>Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</p> <p>Redshank (<i>Tringa totanus</i>) [A162]</p> <p>Turnstone (<i>Arenaria interpres</i>) [A169]</p> <p>Little Tern (<i>Sterna albifrons</i>) [A195]</p> <p>Wetland and Waterbirds [A999]</p>	The SAC boundary is 87km from the site of the proposed works. It is designated for 11 Annex I bird species which are specific to coastal areas.	<p>Extremely Unlikely</p> <p>The proposed project is situated 87km from this SPA. There is a hydrological connection between the two sites however due to the scale and distance at which the works are occurring it is extremely unlikely that there will be any effect on the SPA.</p>
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4.5 Plans and Projects Which Might Act in Combination

Article 6(3) of the Habitats Directive requires 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.

The Westmeath County Council planning database was searched to determine if any plans or projects were likely to have an in-combination effect on the site. There were no plans or projects listed on the database likely to have an in-combination effect on the site.

AA Screening for the Eurovelo project has already concluded that there was no potential for impacts on European Sites from the Eurovelo project, therefore there is no potential for in-combination effects on European Sites from the proposed project.

This is a small development, which can be easily managed without any potential for significant risk to the environment. The site is sufficiently far away from other commercial development of any scale in the locality such that there is no significant cumulative environmental impact likely during the ongoing period for development, given the low annual throughput.

5. Assessment of Significance

The significance impact is assessed relative to the existing condition/conservation status of the European Sites identified in Section 3.2.1 and to the scale of the impact in space and time. Impacts are assessed as significant where the conservation objectives of a European site are undermined.

Where it is determined that a likely effect of the proposed development will have a significant impact on a European site, the project must be assessed through full Appropriate Assessment. The

precautionary principle must be applied in determining significance of an impact. Where the significance of an impact cannot definitively be ascertained on the basis of the information available it is required to progress to full Appropriate Assessment i.e., a measure cannot be screened out unless there is certainty that no significant impact is likely.

Impacts on the identified European sites have been assessed as extremely unlikely. There will therefore be no impacts on the conservation condition of the European sites within the Zone of Influence.

6. Screening Statement

The current assessment investigates the potential adverse effects on the qualifying interests of European Sites, specifically;

- River Boyne and River Blackwater SAC 002299,
- River Boyne and River Blackwater SPA 004232,
- Boyne Coast and Estuary SAC 001957,
- Boyne Estuary SPA 004080,
- Wooddown Bog SAC 002205,
- Mount Hevey Bog SAC 002342.

arising from the proposed development at Thomastown to Killucan, Co. Westmeath. The assessment considers whether development alone or in combination with other projects or plans, will have adverse effects on the integrity of the European sites.

It is concluded that there is no potential for significant effects on the integrity of the above mentioned European sites from the proposed development, either alone or in-combination with other plans and/or projects. The findings of this screening for Appropriate Assessment are summarised in the Findings of no Significant Effects Matrix hereunder.

TABLE 9 SCREENING ASSESSMENT

Findings of No Significant Effects Screening Matrix	
Name of project or plan	Pedestrian and Cycle link, Thomastown to Killucan, Co. Westmeath.
Name and location of European sites	<ul style="list-style-type: none"> • River Boyne and River Blackwater SAC 002299, • River Boyne and River Blackwater SPA 004232, • Boyne Coast and Estuary SAC 001957, • Boyne Estuary SPA 004080, • Wooddown Bog SAC 002205, • Mount Hevey Bog SAC 002342.
Description of the project or plan	The proposed development is a pedestrian and cycle link from the Royal Canal at Thomastown to Killucan, Co. Westmeath. This links to the Royal Canal Greenway at Thomastown Co. Westmeath. The purpose of the proposed development is to provide a safe walking and cycling link from the Royal canal to Killucan and Rathwire
Is the project or plan directly connected with or necessary to the management of the site?	No
Are there other projects or plans that together with the project or plan being assessed could affect the site?	No
<i>The assessment of significance of effects</i>	
Describe how the project or plan (alone or in combination) is likely to affect the European site.	No likely effects determined. All potential impacts are determined as extremely unlikely.
Explain why these effects are not considered significant	No impact have been determined therefore there can be no alteration of the conservation condition or objectives of the European sites due to the proposed works
<i>Data collected to carry out the assessment</i>	

Who carried out the assessment?	Sources of data	Level of assessment
Maurice O Connor, Ecologist	Refer to references section	Desk study plus field assessment

7 References

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