

# Meadowbrook Cycle Scheme

AA Screening

Kildare County Council

24/02/2022



# Notice

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## Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
Rev 1.0	Final	NOC/CW	CW	NS	ST	24/02/2022

## Client signoff

Client	Kildare County Council
Project	Meadowbrook Cycle Scheme
Job number	5208212
Client signature / date	

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# 1. Introduction

Kildare County Council propose to deliver several high-quality cycle schemes within Maynooth, County Kildare. The proposed Meadowbrook Cycle Scheme will aim to deliver a level of service in line with the National Cycle Manual (NCM).

Atkins were commissioned by Kildare County Council to provide Engineering-led Multi-disciplinary Consultancy and Design services for the concept development & option selection, preliminary design and statutory processes of cycle provisions and associated works including public realm and urban enhancements on Meadowbrook Road & Beaufield Close in Maynooth, Co. Kildare.

Kildare County Council have appointed Atkins (Ireland) Ltd. to prepare a Screening for Appropriate Assessment report for the proposed scheme Meadowbrook Cycle Scheme.

## 1.1. Project details

The Meadowbrook Cycle Scheme consists of 2 routes located to the south of Maynooth, the routes of the proposed scheme are illustrated below in Figure 1.1.

The routes within the scope of this scheme are as follows:

- Meadowbrook Road – From a tie-in point at the existing cycle infrastructure just north of Meadowbrook Lawns to the tie-in point of existing cycle infrastructure of the Meadowbrook Link Road.
- Beaufield Close – Between R408 (Newtown Road) / Beaufield Close junction and Meadowbrook Road / Beaufield Close junction.

### **Meadowbrook Road**

The construction of this section of the scheme will involve the installation of northbound and southbound to-standard Raised Cycle Lanes / Tracks parallel to the carriageway, with parallel to-standard footpaths; with sections of realigned footpath to reduce the impact on trees insofar as possible.

The construction of the proposed works on Meadowbrook Road involves the following:

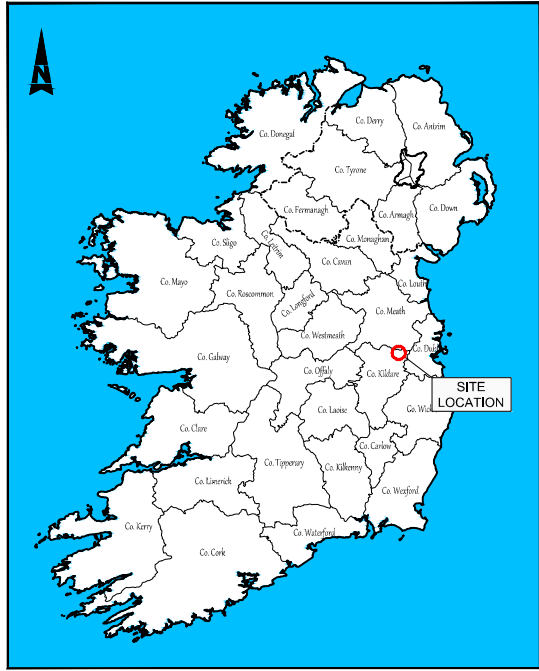
- The removal of existing kerbing and footways, and the construction of new kerbs and footways, to provide for a narrower road width (which encourages lower traffic speeds).
- Formalised pedestrian crossings (uncontrolled) will be added.
- The existing road will be resurfaced.
- Junction treatment is to be applied throughout the route, to narrow the junctions.

### **Beaufield Close**

The construction of this section of the scheme will consist of northbound and southbound cycle tracks behind verges, parallel to the carriageway with generally parallel footpaths, with sections of realigned footpath to reduce the impact on trees where possible, while providing a facility along the route which is in accordance with current standards.

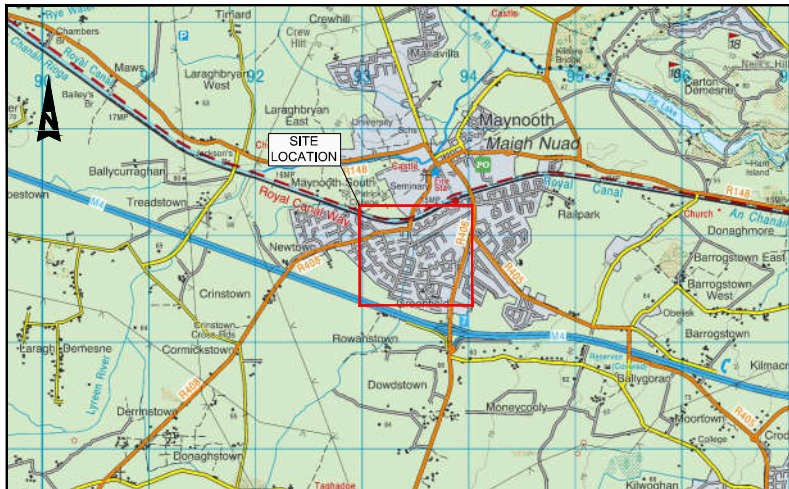
The construction of the proposed works on Beaufield Close involves the following:

- The removal of existing footways, and the construction of new footways, while retaining the existing kerblines, with the exception of localised kerb replacement as required.
- The upgrade of the existing signalised pedestrian crossings along the route.
- Junction treatment is to be applied throughout the route, to narrow the junctions.
- The existing road will be resurfaced.



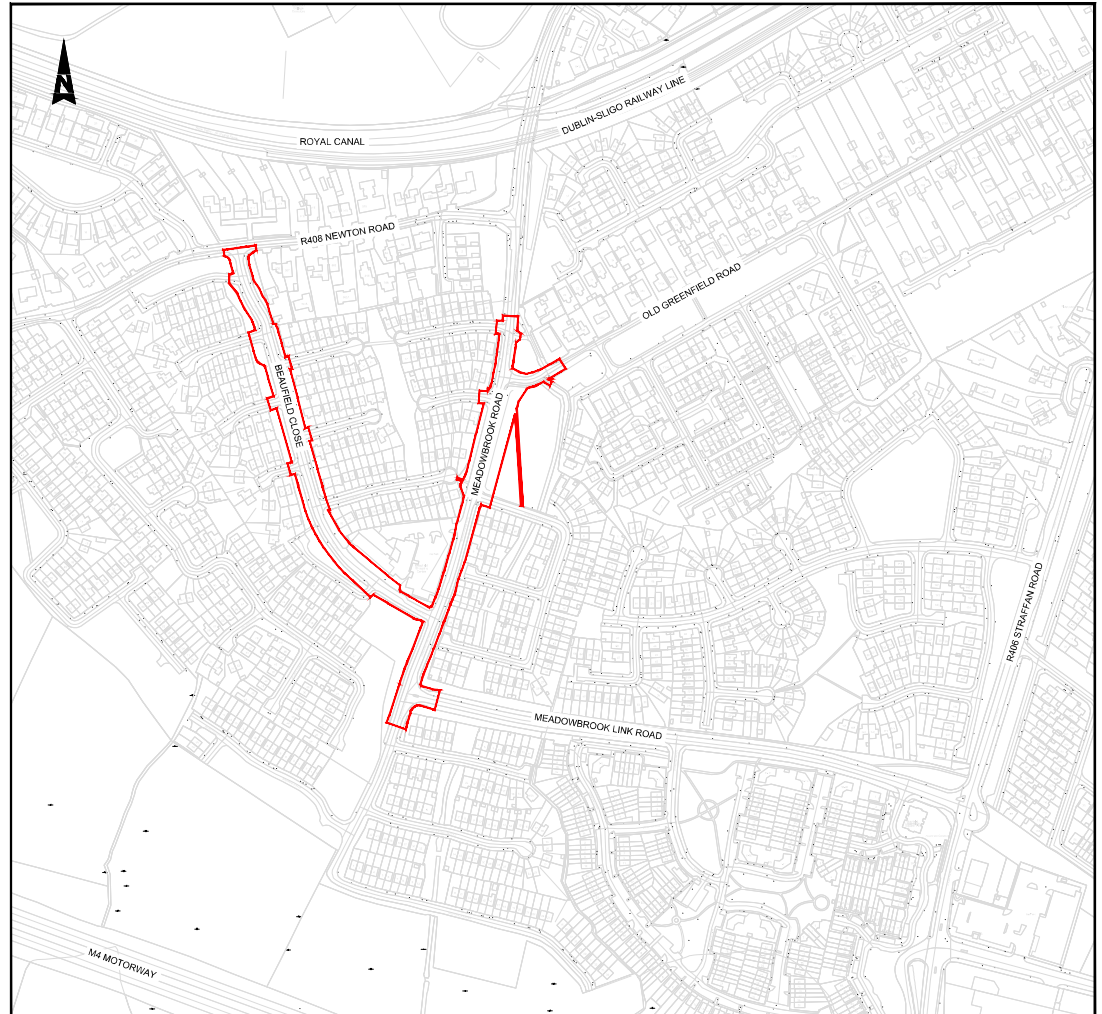
**IRELAND LOCATION MAP**

Scale at A1 1:2,000,000  
Scale at A3 1:4,000,000



**SITE MAP - MEADOWBROOK CYCLE SCHEME**

Scale at A1 1:25,000  
Scale at A3 1:50,000



**SITE PLAN - MEADOWBROOK CYCLE SCHEME**

Scale at A1 1:2500  
Scale at A3 1:5000

# Figure 1.1 Scheme Extents for Meadowbrook Cycle Scheme

Rev	Description	By	Date	Chk'd	Auth
-	FOR INFORMATION	JD	22.10.21	RR	ST



Adkins House, 150-155 Airside  
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Client	KILDARE COUNTY COUNCIL
Project	MEADOWBROOK CYCLE SCHEME

Purpose	FOR INFORMATION
Title	SITE LOCATION MAP
Original Scale	AS SHOWN
Design/Drawn	JD
Checked	RR
Authorised	ST
Date	22.10.21
Date	22.10.21
Date	22.10.21
Status	1
Drawing Number	5208212 / HTR / DR / 0001
Rev	-

## 1.2. Construction Methodology

Works will commence with the clearance and off-site removal of redundant road signage and other existing road furniture as required. The works will be undertaken using a combination of operatives using hand tools, mechanical excavators and small dumper trucks. To facilitate the main works, underground utilities which conflict with the main works will be uncovered using mechanical excavators and hand digging where appropriate. A utility survey, including slit trenches for verification, is being carried out as part of the Preliminary Design Phase to determine the location of services to the most accurate extent possible. Any service diversions or protection works will be determined at Detailed Design. This is likely to be restricted to locations where the proposed facilities cross or interface with public roads.

Following the diversion of utilities, the initial paved areas construction phase will be undertaken. This will include the excavation and removal of the existing stone, soil, concrete and bitumen materials along the route followed by the installation of new paved area base materials, or their retention, where proposed levels and material conditions allow. Any excavations will be largely undertaken by mechanical means, with any excess soil arisings to be removed off site by the Contractor to an appropriately licenced waste recovery or waste disposal facility, or reused onsite (within the red line boundary) where testing confirms its suitability. The base layers of the paved areas, where required, are to be made of compacted stone materials.

Drainage works will involve the reinstatement of existing gullies, or installation of new gullies if required, and the use of the existing surface water network. So as not to unduly increase the load on the existing drainage network, where applicable, the following will apply:

- footways and/or cycle tracks will have such crossfalls so that they discharge surface water into adjacent green areas (rather than towards the road, and hence into the existing surface water network), and/or,
- porous pavement shall be used in cycle tracks and/or footways.

Therefore it is envisaged that the existing drainage network will be unaffected by the works (notwithstanding the need to relocate some gullies to suit the new arrangements). Details of the drainage design shall be confirmed in Phase 5 Detailed Design.

The works will also involve constructing the civil engineering elements required to facilitate the commissioning of the traffic signals (including Zebra crossing belisha beacons) and the public lighting elements at the latter stages of construction once all the heavy civil engineering works have been executed. Service chambers and underground duct sets will be laid within trenches and backfilled with suitable granular material. Signal poles (including Zebra crossing belisha beacon poles) and public lighting columns will be erected, and duct connections will be made to the base of each pole unit. The final pavement surface course will be laid using an asphalt paving machine followed by compaction using a roller.

For soft landscaping areas topsoil profiles will be graded to tie into the new pavement levels followed by grass seeding. The top soiling and seeding will be undertaken using a combination of mechanical excavator, tractor unit drawing a rotavator / rake / seed spreader and also operatives using hand tools for areas where machinery access is unavailable. Minimal demolition works are proposed as part of the proposed project i.e. clearance and off-site removal of redundant road signage, kerb removal, etc.

### 1.2.1. Drainage

Drainage works are likely to run in tandem with the pavement construction phase, are considered to be minimal and restricted to areas where the scheme interfaces with the public road. Drainage for the proposed scheme will be provided using existing or new gullies and, new or existing storm drainage pipes where appropriate. The new paved areas for non-motorised users will generally slope towards the road in order to minimise the need for additional drainage collection measures, except where appropriate they may discharge to adjacent grass verges.

There is 1 no. watercourse in the vicinity of the proposed scheme; The Taghadoe Stream. This stream is not crossed by the alignment of the proposed cycle route. This stream is culverted under Meadowbrook Road and is not crossed by the alignment of the proposed cycle route, as such no in stream works are necessitated. Whilst it cannot be fully confirmed, the existing surface water drainage network along Meadowbrook Road likely outfalls to this culverted urban watercourse.

## 2. Scope of Study

The aim of this report is to provide supporting information to assist the competent authority to carry out an AA determination with respect to the proposed project.

### 2.1. Legislative Context

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora, known as the 'Habitats Directive' provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 – 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservations of an EU-wide network of sites known as European sites. European sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/EEC).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans or projects that could potentially affect European sites. Article 6(3) establishes the requirement for Appropriate Assessment: -

*“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.”*

Article 6 (4) deals with the steps that should be taken when it is determined, as a result of Appropriate Assessment, that a plan or project will adversely affect a European site. Alternative solutions, imperative reasons of overriding public interest (IROPI) and compensatory measures need to be addressed in this case. Article 6(4) states: -

*“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.*

*Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”*

### 2.2. Appropriate Assessment Process

Guidance on the AA process was produced by the European Commission (EC, 2001; 2018), which was subsequently used to develop guidance for Ireland by the Department of Environment, Heritage and Local Government in 2009 (DEHLG, 2009), National Parks and Wildlife Service in 2018<sup>1</sup> (NPWS 2018) and the Office of the Planning Regulator (2021). These guidance documents set out a staged approach to complete the AA process and outline the issues and tests at each stage. The stages outlined below are taken from the guidance document Appropriate Assessment of Plans and Projects in Ireland –

<sup>1</sup> <https://www.npws.ie/development-consultations>

Guidance for Planning Authorities (DEHLG, 2009) and Office of the Planning Regulator; *Appropriate Assessment Screening for Development Management* (2021).

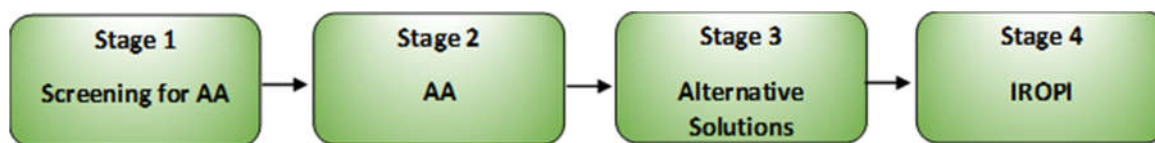


Figure 2-1 Appropriate Assessment Process (Source: DEHLG, 2009).

## 2.2.1. Screening for Appropriate Assessment

Screening is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3): -

- i. Whether a plan or project is directly connected to or necessary for the management of the site, and
- ii. Whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a European site in view of its conservation objectives.

If the effects are deemed to be significant, potentially significant, or uncertain, then the process must proceed to Appropriate Assessment.

## 2.2.2. Appropriate Assessment

Appropriate Assessment considers whether the plan or project, alone or in combination with other projects or plans, will have adverse effects on the integrity of a European site, and includes any necessary mitigation measures.

The competent authority can only agree to the plan or project after having ascertained that it will not adversely affect the integrity of the site(s) concerned. If this cannot be determined, and where sufficient mitigation cannot be achieved, the alternative solutions need to be considered and the process proceeds to the consideration of alternative solutions.

## 2.2.3. Alternative Solutions

This examines any alternative solutions or options that could enable the plan or project to proceed without adverse effects on the integrity of a European site. The process must return to AA as alternatives will require assessment in order to proceed. Demonstrating that all reasonable alternatives have been considered and assessed, and that the least damaging option has been selected, it is necessary to examine whether there are imperative reasons of overriding interest (IROPI).

## 2.2.4. IROPI

This examines whether there are imperative reasons of overriding public interest for allowing a plan or project that will have adverse effects on the integrity of a European site to proceed in cases where it has been established that no less damaging alternative solution exists. Compensatory measures must be proposed and assessed, of which the Commission must be informed.

The AA process only progresses through the full process for certain plans and projects. For example, for a project not connected with the management of a European site and where no likely significant effects on a European site in view of its conservation objectives are identified, the process stops at Screening for AA. Throughout the process the precautionary principle must be applied, which requires that the conservation objectives of Natura 2000 should prevail where there is uncertainty (EC, 2001; 2018).



## 3. Methods

### 3.1. Guidance documents

The Screening for Appropriate Assessment was prepared with reference and due consideration to the following documents and case law, including but not limited to: -

- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild flora and fauna (Habitats Directive);
- Statutory Instrument No. 477/2011 — European Communities (Birds and Natural Habitats) Regulations 2011;
- National Parks and Wildlife Service - Development Consultations<sup>2</sup> (NPWS 2018)
- European Commission (2018). Managing Natura 2000 sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC;
- European Commission (2001). Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC;
- European Commission (2021). Assessment of plans and projects in relation to Natura 2000 sites: Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC.
- Department of the Environment, Heritage and Local Government (2010). Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities;
- National Roads Authority (2009). Guidelines for Assessment of Ecological Impacts of National Roads Scheme;
- Office of the Planning Regulator (2021). Appropriate Assessment Screening for Development Management. OPR Practice Note PN01; and,
- Case C-323/17 People Over Wind & anor. V. Coillte, Kelly v An Bord Pleanála & anor [2019] IEHC 84 and other relevant court rulings and case law.

### 3.2. Desk Study

A desk study was carried out to collate information available on European sites in the vicinity of the proposed project. These areas were viewed using Google Earth, Google maps<sup>3</sup> and Bing maps<sup>4</sup> (last accessed on 23/02/2022).

The National Parks and Wildlife Service (NPWS) and National Biodiversity Data Centre (NBDC) online databases were reviewed concerning European sites and their features of interest in the vicinity of the proposed project.

The Environmental Protection Agency (EPA) mapping<sup>5</sup> system was used to identify any hydrological connection between the proposed project and European sites.

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<sup>2</sup> <https://www.npws.ie/development-consultations>

<sup>3</sup> <https://www.google.ie/maps>

<sup>4</sup> <http://www.bing.com/maps/>

<sup>5</sup> <https://gis.epa.ie/EPAMaps/>

Locations and boundaries of all European sites within 15km of the proposed projects were identified and reviewed using the NPWS online map viewer. Boundary shapefiles were also downloaded from this site to facilitate the preparation of project graphics.

Desktop information on relevant European sites were reviewed on the NPWS website, including the site synopsis for each SAC/SPA, the conservation objectives, the site boundaries as shown on the NPWS online map viewer, the standard Natura 2000 Data Form for the SAC/SPA which details conditions and threats of the sites, and published information and unpublished reports on the relevant European sites.

Relevant planning information for the surrounding area was reviewed using the planning enquiry systems of Kildare County Council. Search criteria were implemented to determine whether such projects or plans would be relevant to this study and this information was used to determine potential cumulative impacts from other plans / projects with the proposed project.

### 3.3. Site Visit

Site visits were undertaken by an Atkins environmental consultant with experience of surveying for invasive plant species within the Meadowbrook Cycle Scheme area during September 2021. Surveys were undertaken in accordance with CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. (Version 1.1 – Updated September 2019).

The proposed project site was surveyed for invasive plant species listed on the third schedule of the EC (Birds and Natural Habitats) Regulations 2011 S.I. No. 477/ 2011. Species surveyed for included Japanese knotweed (*Fallopia japonica*) and associated hybrids. Surveys were undertaken during September 2021 which is within the seasonally appropriate window to assess the project site for the presence of invasive plant species. The site was walked, and any visible signs of invasive plant species were recorded. Photographs were taken of any non-native invasive plant species observed. All of the project site was accessible and no limitations to the site surveys are noted.

The findings of site surveys have been used to inform this report. Site photographs are presented below.

### 3.4. Statement of Authority

The Screening for Appropriate Assessment report was prepared by Niamh O'Connell and Colin Wilson and Niamh Sweeney provided peer review and support.

**Niamh O'Connell** (Atkins Galway) is working as an Environmental Engineering Specialist and has completed BSc (Hons) in Chemistry of Pharmaceutical Compounds and a P.G. Certificate in Environmental Sustainability. Niamh has worked in water services, as well as ecological and environmental consultancy since 2018, working on a wide range of projects including water and wastewater treatment plants, and Strategic Infrastructure Developments. A focus of Niamh's work to date has been on the preparation of Environmental Impact Assessment Reports, as well as input to wastewater treatment plant design and wastewater infrastructure planning. Niamh collated ecological information to inform this AA report.

**Colin Wilson** (Atkins Dublin) has a BSc (Hons) in Environmental Science. He has over 12 years working in the fields of ecology and environmental management. He is a Senior Ecologist with experience in ecological surveying, environmental assessment, on-site ecological supervision and mitigation. He has experience on multiple road projects regarding all elements of surface and groundwater management, monitoring, sampling and associated reporting. Colin also has a broad range of experience in invasive species management, biosecurity and control. Colin has prepared AA screening reports, Natura Impact Statements and has also been involved in the development of Environmental Operating Plans and Construction Environmental Management Plans for a number of national infrastructure projects.

**Niamh Sweeney** (BSc, MSc (Res)) is a freshwater ecologist with over 10 years' experience in ecological consultancy, with specialisms in macroinvertebrate and diatom taxonomy. Niamh has worked on numerous Screenings for Appropriate Assessment, Natura Impact Statements and Ecological Impact Assessments for private architect firms, waste companies, numerous County Councils, the OPW and Inland Fisheries Ireland.

## 4. Existing Environment

The proposed cycle scheme is located entirely within the existing footprint of the road network to the south of the town of Maynooth. These lands have historically been zoned as Existing Residential & Infill and Open Space & Amenity. The proposed scheme is entirely within an urban area and does not extend beyond the footprint of the existing road network, road verges and residential-area green spaces and does not encroach into any protected habitats.

The proposed project is within the Liffey and Dublin Bay Water Framework Directive (WFD) Catchment area and the Lyreen sub-catchment area. All surface hydrological features within the vicinity of the project flow in a general north-eastern direction. There are no karst features reported by GSI (2022) within the vicinity of the scheme.

The project site was reviewed for the presence of watercourses or surface water features. A review of EPA datasets<sup>6</sup> identified the Taghadoe stream (IE\_EA\_09L020100) is culverted at the northern extent of the scheme before flowing in a northern direction and joining with the Lyreen River, which subsequently conjoins with the Rye Water River. The Taghadoe River and the Lyreen River have been assigned a 'Poor' Water Framework Directive status (WFD 2013-18) with the Rye Water River being assigned a WFD 'Moderate' status in the upper section and a 'Poor' status in the lower section. All of these watercourses are reportedly 'At risk' of not meeting the WFD objectives (EPA, 2022).



**Figure 4.1** Watercourses in proximity to the proposed project.

<sup>6</sup> <https://gis.epa.ie/EPAMaps/>

The Royal Canal proposed Natural Heritage Area (pNHA) is the closest designated conservation site, located ca. 165m to the north of the proposed site. Portions of the Rye Water Valley are designated as an SAC; Rye Water Valley/Carlton SAC and this area is also a pNHA. There are no nature reserves or national parks within the vicinity of the proposed scheme.

Wetland Survey Ireland<sup>7</sup> identify 3 no. wetland habitats located within 2km of the proposed scheme; Lyreen River (ca. 1.5km north) classified as a river/riparian woodland, Lyreen Angling Center (ca. 1.8km north) classified as an artificial pond/reed swamp and Rye Water Valley/Carlton (ca. 2km north) which is encompassed within the SAC.

## 4.1. Site Visits

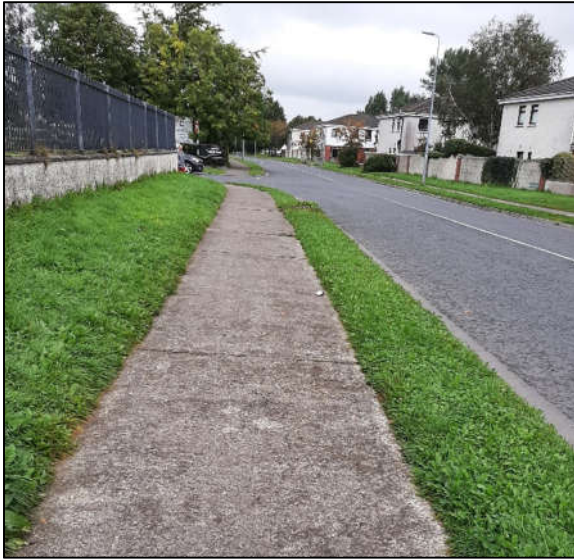
The project site is entirely within urban areas and is along the existing road network and adjoining footpaths (defined BL3 – Buildings and artificial surfaces under Fossitt’s classification of habitats) as confirmed in the site walkover. The eastern section of the site is along a laneway (part of Old Greenfield Road) which is now closed off on one end to traffic. Traffic access is available for the entire laneway with bollards in place to prevent through traffic onto Meadowbrook Road. This section of the route is aligned with a hedgerow (Fossitt’s WL1 – Hedgerows) and amenity grasslands (Fossitt’s GA2 Amenity grassland) to the south and residential properties align the northern boundary of the laneway. The northern extents of the project along Meadowbrook Road is close to the culverted Taghadoe Stream but is not crossed by the alignment of the proposed cycle route.

No evidence of third schedule invasive plant species were recorded within the extents of the project site.

Plates 4.1 – 4.4 below depict the urban setting of the proposed scheme.

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<sup>7</sup> <http://www.wetlandsurveysireland.com/wetlands/map-of-irish-wetlands--/map-of-irish-wetlands---map/index.html>



**Plate 4-1 - Meadowbrook Road**



**Plate 4-2 - Meadowbrook Road including existing cycle track**



**Plate 4-3 - Old Greenfield Road tie in**



**Plate 4-4 - Beaufield Close**

## 5. Appropriate Assessment Screening

### 5.1. Connectivity of Works Area to European Sites

The 'zone of influence' (Zoi) for a project is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries. The zone of influence will vary for different ecological features depending on their sensitivity to an environmental change (CIEEM, 2019).

A distance of 15km is recommended in the case of plans, as a potential zone of influence and this distance is derived from UK guidance (Scott Wilson et al., 2006). However, for projects the distance could be much less, and in some cases less than 100m. National Parks and Wildlife Service and Office of the Planning Regulator guidance<sup>8</sup> advises that this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in-combination effects.

Thus, given the nature, scale and extent of the proposed project, the potential zone of influence will consider European sites with regard to the location of a European site, the QIs of the site and their potential mobility outside that European site, the Cause-Pathway-Effect model and potential environment effects of the proposed project.

The proposed project site does not lie within any European site. The potential zone of influence of the proposed is limited to those European sites and associated ecological receptors with potential hydrological connectivity to the proposed project.

There are 7 no. European sites within the potential zone of influence of the project; 5 no. SACs and 2 no. SPAs.

Table 5-1 details the European sites that are within the potential Zoi of the proposed project, which lists their associated qualifying interests and specifies if the European site is within the Zoi of the proposed project or not.

Figures 5-1 illustrates the locations of the European sites within the potential Zoi of the proposed project.

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<sup>8</sup> DoEHLG (2009). *Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities*. Department of Environment, Heritage and Local Government, Dublin, Ireland.  
OPR (2021) Appropriate Assessment Screening for Development Management. OPR Practice Note PN01. Office of the Planning Regulator. Dublin, Ireland.

**Table 5-1 European sites within potential Zone of Influence of the proposed project.**

Site Name and Code	Approximate distance from project	Features of Interest	Within the ZoI
Rye Water Valley/Carton SAC (001398)	Ca. 2km Ca. 2.6km downstream via the Taghadoe Stream	<ul style="list-style-type: none"> <li>• Petrifying springs with tufa formation (Cratoneurion) [7220]</li> <li>• Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]</li> <li>• Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]</li> </ul>	<p>Yes</p> <p>There is potential indirect, hydrological connectivity from the project site to this SAC via road drainage network, the Taghadoe Stream and subsequently the Lyreen stream</p> <p>This site is discussed further below.</p>
Ballynafagh Bog SAC (000391)	ca. 14.2km	<ul style="list-style-type: none"> <li>• Active raised bogs [7110]</li> <li>• Degraded raised bogs still capable of natural regeneration [7120]</li> <li>• Depressions on peat substrates of the Rhynchosporion [7150]</li> </ul>	<p>No</p> <p>There is no direct overlap between the proposed works and Ballynafagh Bog SAC.</p> <p>There is no indirect connectivity from the proposed project to this SAC via watercourses, groundwater, drains, ditches or any other vectors.</p> <p>The location, scale and nature of the proposed project is such that they will not contribute to direct, indirect or in-combination impacts on habitats for which the SAC has been designated and do not have the potential to affect the conservation objectives of these habitats.</p> <p>This site is therefore not considered further.</p>
Ballynafagh Lake SAC (001387)	Ca. 14.2km	<ul style="list-style-type: none"> <li>• Alkaline fens [7230]</li> <li>• Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]</li> <li>• Euphydryas aurinia (Marsh Fritillary) [1065]</li> </ul>	<p>No</p> <p>There is no direct overlap between the proposed works and Ballynafagh Lake SAC.</p> <p>There is no indirect connectivity from the proposed project to this SAC via watercourses, groundwater, drains, ditches or any other vectors.</p> <p>The project site is entirely urban in nature and as such does not proffer habitats suitable for Vertigo or Marsh Fritillary.</p> <p>The location, scale and duration of proposed project is such that they will not contribute to direct, indirect or in-combination impacts on habitats or species for which the SAC has been designated and do not have the potential to affect the conservation objectives of these habitats and species.</p> <p>This site is not considered further.</p>



Site Name and Code	Approximate distance from project	Features of Interest	Within the Zol
North Dublin Bay SAC (000206)	<p>Ca. 27.67km direct line distance.</p> <p>Ca. 36.65km downstream via watercourses</p>	<ul style="list-style-type: none"> <li>• Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>• Annual vegetation of drift lines [1210]</li> <li>• Salicornia and other annuals colonising mud and sand [1310]</li> <li>• Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]</li> <li>• Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</li> <li>• Embryonic shifting dunes [2110]</li> <li>• Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]</li> <li>• Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</li> <li>• Humid dune slacks [2190]</li> <li>• <i>Petalophyllum ralfsii</i> (Petalwort) [1395]</li> </ul>	<p>No</p> <p>There is no direct overlap between the proposed works and North Dublin Bay SAC.</p> <p>There is potential for indirect connectivity from the proposed project to this European site via the Taghadoe Stream, the Lyreen stream, the Rye Water River and the River Liffey. The total downstream distance to this European site is ca. 36.6km.</p> <p>Whilst this potential connectivity exists, it is indirect and weak. The intervening land use and the separation distance of ca.&gt;36km of watercourses means the water quality within the European site will not be negatively impacted by potential contaminants (e.g. silts, sediments or other construction related pollutants) due to the dilution factor the watercourses would present and the settling out that would occur over such a distance. Therefore, the surface water features of the Taghadoe Stream, the Lyreen stream, the Rye Water River and subsequently the River Liffey are not considered a viable pathway through which the European site could be impacted.</p> <p>This site is not considered further.</p>
South Dublin Bay SAC	<p>Ca. 26km direct line distance.</p> <p>Ca. 34.89km downstream via watercourses</p>	<ul style="list-style-type: none"> <li>• Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>• Annual vegetation of drift lines [1210]</li> <li>• Salicornia and other annuals colonising mud and sand [1310]</li> <li>• Embryonic shifting dunes [2110]</li> </ul>	<p>No</p> <p>There is no direct overlap between the proposed works and South Dublin Bay SAC.</p> <p>There is potential for indirect connectivity from the proposed project to this European site via the Taghadoe Stream, the Lyreen stream, the Rye Water River and the River Liffey. The total downstream distance to this European site is ca. 35km.</p> <p>Whilst this potential connectivity exists, it is indirect and weak. The intervening land use and the separation distance of ca.&gt;34km of watercourses means the water quality within the European site will not be negatively impacted by potential contaminants (e.g. silts, sediments or other construction related pollutants) due to the dilution factor the watercourses would present and the settling out that would occur over such a distance. Therefore, the surface water features of the Taghadoe Stream, the Lyreen stream, the Rye Water River and subsequently the</p>

Site Name and Code	Approximate distance from project	Features of Interest	Within the ZOI
			<p>River Liffey are not considered a viable pathway through which the European site could be impacted.</p> <p>This site is not considered further.</p>
<p>North Bull Island SPA (004006)</p>	<p>Ca. 27.67km direct line distance Ca. 36.65km downstream via watercourses</p>	<ul style="list-style-type: none"> <li>• Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</li> <li>• Shelduck (<i>Tadorna tadorna</i>) [A048]</li> <li>• Teal (<i>Anas crecca</i>) [A052]</li> <li>• Pintail (<i>Anas acuta</i>) [A054]</li> <li>• Shoveler (<i>Anas clypeata</i>) [A056]</li> <li>• Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</li> <li>• Golden Plover (<i>Pluvialis apricaria</i>) [A140]</li> <li>• Grey Plover (<i>Pluvialis squatarola</i>) [A141]</li> <li>• Knot (<i>Calidris canutus</i>) [A143]</li> <li>• Sanderling (<i>Calidris alba</i>) [A144]</li> <li>• Dunlin (<i>Calidris alpina</i>) [A149]</li> <li>• Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</li> <li>• Curlew (<i>Numenius arquata</i>) [A160]</li> <li>• Redshank (<i>Tringa totanus</i>) [A162]</li> <li>• Turnstone (<i>Arenaria interpres</i>) [A169]</li> <li>• Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</li> <li>• Wetland and Waterbirds [A999]</li> </ul>	<p>No</p> <p>There is no direct overlap between the proposed works and North Bull Island SPA.</p> <p>The project site is sufficiently remote (ca. 28km) from the SPA that there is no potential for impacts to qualifying interest (QI) waterbirds accommodated with the SPA. The proposed project site is along urban roadways and as such there are no habitats suitable for QI birds that may utilise lands outside of the SPA site extents. The location, scale and nature of the project is such that it will not contribute to direct, indirect or in-combination impacts on bird species for which the SPA has been designated and does not have the potential to affect the conservation objectives of these species.</p> <p>There is potential for indirect connectivity from the proposed project to this European site via the Taghadoe Stream, the Lyreen stream, the Rye Water River and the River Liffey. The total downstream distance to this European site is ca. 36.6km.</p> <p>Whilst this potential connectivity exists, it is indirect and weak. The intervening land use and the separation distance of ca.&gt;36km of watercourses means the water quality within the European site will not be negatively impacted by potential contaminants (e.g. silts, sediments or other construction related pollutants) due to the dilution factor the watercourses would present and the settling out that would occur over such a distance. Therefore, the surface water features of the Taghadoe Stream, the Lyreen stream, the Rye Water River and subsequently the River Liffey are not considered a viable pathway through which the European site could be impacted. The proposed project will not impact on the wetland habitats which support the waterbirds given the lack of viable pathway from the project site to the SPA site.</p> <p>This site is not considered further.</p>

Site Name and Code	Approximate distance from project	Features of Interest	Within the Zol
South Dublin Bay and River Tolka Estuary SPA (004024)	Ca. 24.5km direct line distance Ca. 34.35km downstream via watercourses	<ul style="list-style-type: none"> <li>• Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</li> <li>• Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</li> <li>• Ringed Plover (<i>Charadrius hiaticula</i>) [A137]</li> <li>• Grey Plover (<i>Pluvialis squatarola</i>) [A141]</li> <li>• Knot (<i>Calidris canutus</i>) [A143]</li> <li>• Sanderling (<i>Calidris alba</i>) [A144]</li> <li>• Dunlin (<i>Calidris alpina</i>) [A149]</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</li> <li>• Redshank (<i>Tringa totanus</i>) [A162]</li> <li>• Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</li> <li>• Roseate Tern (<i>Sterna dougallii</i>) [A192]</li> <li>• Common Tern (<i>Sterna hirundo</i>) [A193]</li> <li>• Arctic Tern (<i>Sterna paradisaea</i>) [A194]</li> <li>• Wetland and Waterbirds [A999]</li> </ul>	<p>No</p> <p>There is no direct overlap between the proposed works and South Dublin Bay and River Tolka SPA.</p> <p>The project site is sufficiently remote (ca. 24.5km) from the SPA that there is no potential for impacts to qualifying interest (QI) waterbirds accommodated with the SPA. The proposed project site is along urban roadways and as such there are no habitats suitable for QI birds that may utilise lands outside of the SPA site extents. The location, scale and nature of the project is such that it will not contribute to direct, indirect or in-combination impacts on bird species for which the SPA has been designated and does not have the potential to affect the conservation objectives of these species.</p> <p>There is potential for indirect connectivity from the proposed project to this European site via the Taghadoe Stream, the Lyreen stream, the Rye Water River and the River Liffey. The total downstream distance to this European site is ca. 34km.</p> <p>Whilst this potential connectivity exists, it is indirect and weak. The intervening land use and the separation distance of ca.&gt;34km of watercourses means the water quality within the European site will not be negatively impacted by potential contaminants (e.g. silts, sediments or other construction related pollutants) due to the dilution factor the watercourses would present and the settling out that would occur over such a distance. Therefore, the surface water features of the Taghadoe Stream, the Lyreen stream, the Rye Water River and subsequently the River Liffey are not considered a viable pathway through which the European site could be impacted. The proposed project will not impact on the wetland habitats which support the waterbirds given the lack of viable pathway from the project site to the SPA site.</p> <p>This site is not considered further.</p>

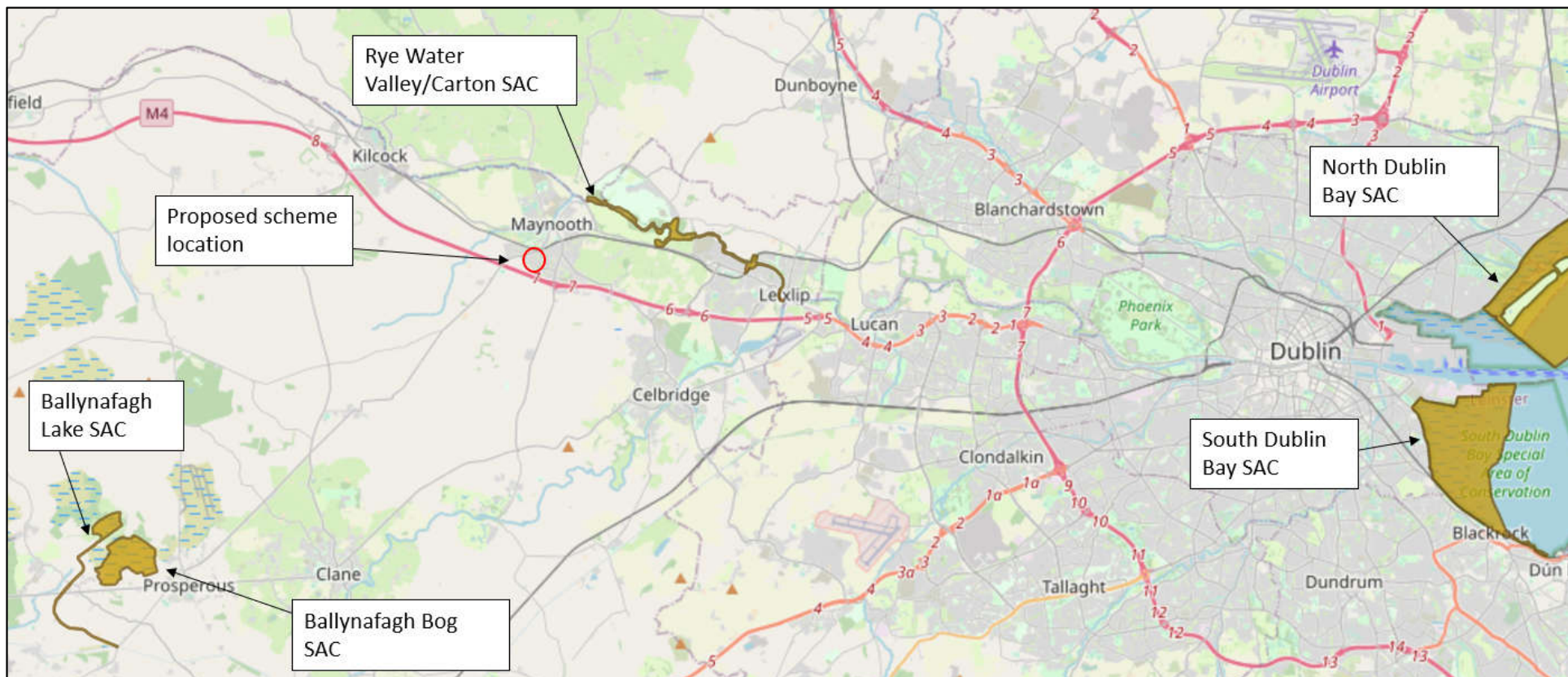


Figure 5-1 - SACs within potential zone of influence of the project.

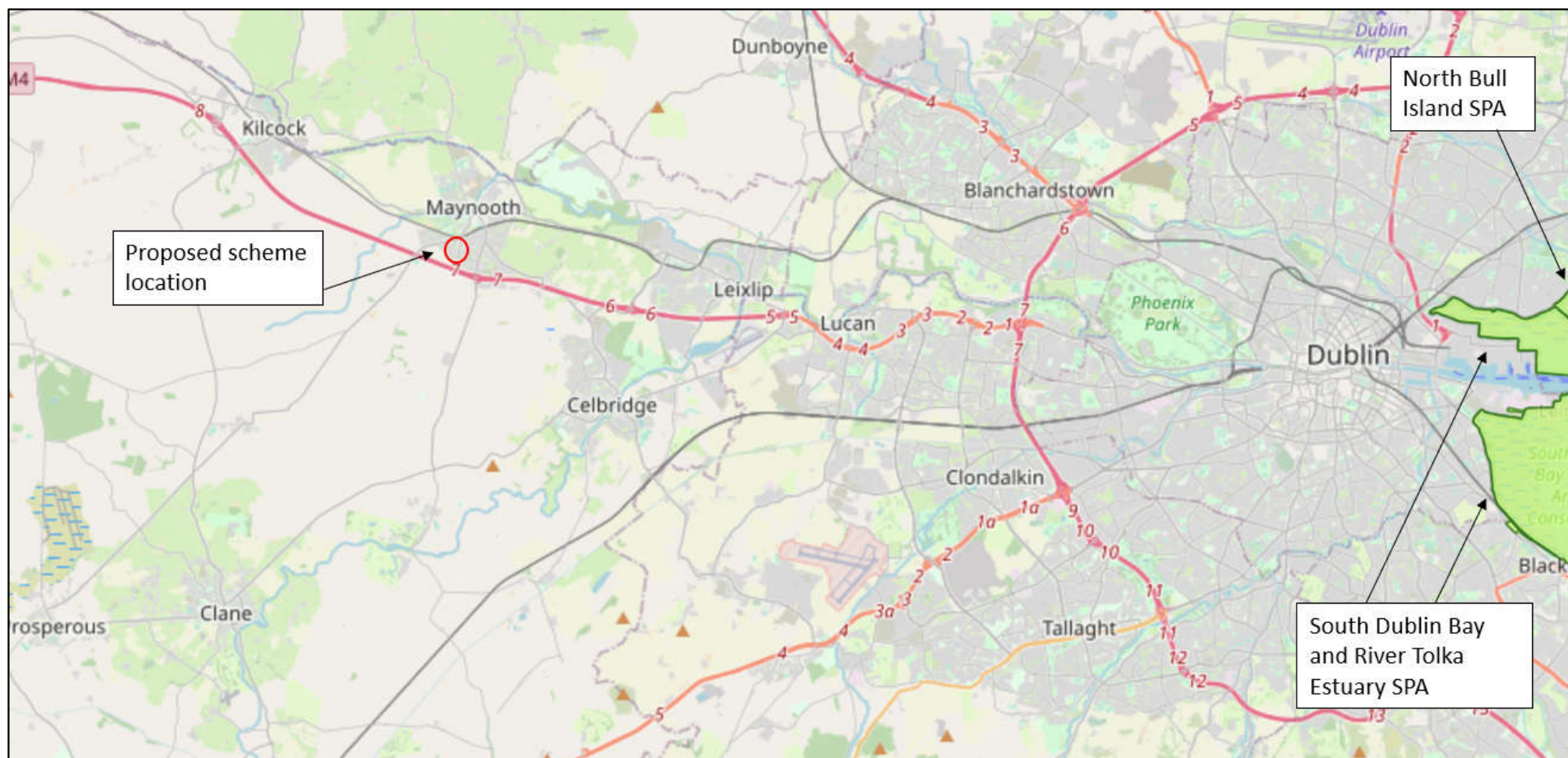


Figure 5-2 - SPAs within potential zone of influence of the project.

### 5.1.1. Brief Description of Rye Water Valley/Carnton SAC

A synopsis of the SAC, as detailed by NPWS, is as follows<sup>9</sup>: -

*“The Rye Water in Carnton Estate is dammed at intervals, creating a series of lakes. Reed Sweet-grass (Glyceria maxima) is frequent around the lakes, along with Yellow Iris (Iris pseudacorus), Reed Canary-grass (Phalaris arundinacea), Bulrush (Typha latifolia), Water Forget-me-not (Myosotis scorpioides), Marsh-marigold (Caltha palustris) and starworts (Callitriche spp.). Along the remainder of the site the river has been dredged and much of the reed fringe removed.*

*The marsh, mineral spring and seepage area found at Louisa Bridge supports a good diversity of plant species, including stoneworts, Marsh Arrowgrass (Triglochin palustris), Purple Moor-grass (Molinea caerulea), sedges (Carex spp.), Common Butterwort (Pinguicula vulgaris), Marsh Lousewort (Pedicularis palustris), Grass-of-parnassus (Parnassia palustris) and Cuckooflower (Cardamine pratensis). The mineral spring found at the site is of a type considered to be rare in Europe and is a habitat listed on Annex I of the E.U. Habitats Directive. The Red Data Book species Blue Fleabane (Erigeron acer) is found growing on a wall at Louisa Bridge.*

*The Rye Water is also a spawning ground for Trout and Salmon, and the rare, Whiteclawed Crayfish (Austropotamobius pallipes) has been recorded at Leixlip. The latter two species are listed on Annex II of the E.U. Habitats Directive. The rare Narrowmouthed Whorl Snail and Desmoulin’s Whorl Snail occur in marsh vegetation near Louisa Bridge. Both are rare in Ireland and in Europe, and are listed on Annex II of the E.U. Habitats Directive. The scarce dragonfly, Orthetrum coerulescens, has also been recorded at Louisa Bridge. The conservation importance of the site lies in the presence of several rare and threatened plant and animal species, and the presence of petrifying springs, a habitat type listed on Annex I of the E.U. Habitats Directive. The woods found on Carnton Estate and their birdlife are of additional interest.”*

#### 5.1.1.1. Conservation Objectives

The Habitats Directive defines when the conservation status of the listed habitats and species is considered as favourable. The definitions it uses for this are specific to the Directive. In summary, they require that the range and areas of the listed habitats, and the range and population of the listed species, should be at least maintained at their status at the time of designation. Site-specific conservation objectives aim to define favourable conservation conditions for a particular habitat or species at that site.

Article (1) of the Habitats Directive (92/43/EEC) describes favourable conservation status for habitats and species as follows.

Favourable conservation status of a habitat is achieved when: -

- Its natural range, and area it covers within that range, are stable or increasing, and
- 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, and

<sup>9</sup> <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY001398.pdf>

- 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.

Site-specific conservation objectives have not been set for the Rye Water Valley/Carton SAC. Thus, there is one conservation objective for Rye Water Valley/Carton SAC, which is 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, and was published by NPWS (2021) Version 8.0; 23/03/2021.

## 5.2. Threats and Pressures

The threats, pressures and activities<sup>10</sup> of the with impact on Rye Water Valley/Carton SAC are itemised in Table 5.2 below.

**Table 5.2 Threats, pressures and activities with impacts on the SAC.**

Rank	Threats and pressures (code)	Threats and pressures (type)	Inside/outside/both (i/o/b)
L	A08	Fertilisation	o
M	E01.01	Continuous urbanisation	o
M	J02.05.02	Modifying structures of inland water courses	i
L	A08	Fertilisation	i
L	A10.01	Removal of hedges and copses or scrub	i
M	B	Sylviculture, forestry	i
L	A04	Grazing	i
L	A04	Grazing	o
L	E01.03	Dispersed habitation	o
L	D01.02	Roads, motorways	o

<sup>10</sup> <https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF001398.pdf>

### 5.3. Likelihood of Potential Impacts on European Sites

The available information on the European Sites within the potential Zol of the proposed project was reviewed to establish whether or not the proposed Meadowbrook Cycle Scheme project is likely to have a significant effect on the conservation objectives of the SACs. The likelihood of impacts on the features of interest of European Sites identified in this report is based on information collated from the desk study, site visit, site plans and other available existing information.

The likelihood of impacts occurring are established in light of the type and scale of the proposed works, the location of the proposed works with respect to European sites and the features of interest and conservation objectives of the European sites.

This screening report is prepared following the Cause – Pathway – Effect model. The potential impacts are summarised into the following categories for screening purposes.

- Direct impacts refer to habitat loss or fragmentation arising from land-take requirements for development or agricultural purposes. Direct impacts can be as a result of a change in land use or management, such as the removal of agricultural practices that prevent scrub encroachment.
- Indirect and secondary impacts do not have a straight-line route between cause and effect. It is potentially more challenging to ensure that all the possible indirect impacts of the plan/project – in combination with other plans and projects - have been established. These can arise, for example, when a development alters the hydrology of a catchment area, which in turn affects the movement of groundwater to a site and the qualifying interests that rely on the maintenance of water levels. Deterioration in water quality can occur as an indirect consequence of development, which in turn changes the aquatic environment and reduces its capacity to support certain plants and animals. The introduction of invasive species can also be defined as an indirect impact. Disturbance to fauna can arise directly through the loss of habitat (e.g. displacement of qualifying interest species) or indirectly through noise, vibration and increased activity associated with construction and operation.

### 5.4. Identification of Potential Impacts on European Sites

The Rye Water Valley/Carton SAC covers a geographical area of over 70ha and the qualifying habitats and species for which they are designated are also spread widely throughout. Therefore, designated SAC features which have no potential of being impacted by the proposed project, either because they do not occur within the area likely to be affected or because of distance from the works areas of the proposed project, are listed as such below. Table 5-3 below presents an overview of the potential for impacts on the habitats and species listed as features of interest within the SAC.

Rye Water Valley/Carton SAC is designated for the protection of a terrestrial habitat; Petrifying springs with tufa formation (*Cratoneurion*). There are also 2 no. of protected species detailed as the qualifying interest of the SAC; Narrow-mouthed Whorl Snail and Desmoulin's Whorl Snail.

The NPWS Conservation Objective documentation for the SAC was reviewed to determine the location of qualifying interest habitats, and site documentation does not record any qualifying interest habitats within the area of the project. Similarly, the site visit did not record any qualifying interest habitats.

The proposed route alignment does not intersect the Rye Water Valley/Carton SAC. The alignment of the proposed route does not encroach into any of the qualifying interest habitats associated with the SAC nor does it encroach on habitats that would be utilised by the Narrow-mouthed Whorl Snail and the Desmoulin's Whorl Snail. As such there will be no direct impacts, such as loss of SAC habitat, as a result of the construction of the project on the qualifying interest habitats and species of the SAC.



Surface water drainage from the hard-standing areas of the route will utilise existing or new gullies and existing or new road drainage networks where appropriate. The alignment of the route is along existing roadways and footpaths and as such significant impacts on surface water drainage flows are not anticipated from the construction of the route. Some areas of the grass verge will need to be removed to facilitate the new footpath on the Meadowbrook Road and Beaufield Close. The excavations of the grass verges may provide a pathway for entry of soil, silt or sediment to the stream. However, given the nature and scale of the proposed scheme, significant effects upon the water quality of the Taghadoe stream are not considered likely.

Notwithstanding the limited potential for water quality impacts to the stream, the qualifying interest habitats and species of the Rye Water Valley/Carlton SAC are terrestrial in nature. As such, petrifying springs and snails accommodated within the SAC cannot be impacted via the hydrological pathway of the Taghadoe stream and Lyreen stream. Given the qualifying interest species are terrestrial in nature, potential impacts via surface water pathways is negated.

The excavations associated with the construction of the proposals will be relatively shallow (ca. <500mm) and therefore no significant impacts on groundwater are likely. Given the location, scale and nature of the cycleway project, there will be no indirect impacts through hydrogeological pathways during the construction of the route on Rye Water Valley/Carlton SAC.

Given the nature, scale and location of the proposed route it is considered that the construction and operation of the proposed scheme will not have any effect on the qualifying interest habitats and species of Rye Water Valley/Carlton SAC.

**Table 5-3 SAC qualifying interests within the potential Zol of the proposed project.**

Habitat / Species	Comment	Within Zol
<b>Rye Water Valley/Carlton SAC</b>		
<ul style="list-style-type: none"> <li>Petrifying springs with tufa formation (Cratoneurion) [7220]</li> </ul>	<p>The alignment of the proposed route is dominated by hard standing areas such as roadways and pathways. Petrifying springs do not occur with the proposed project site, as confirmed by the site visit.</p> <p>This habitat type is terrestrial in nature and cannot be impacted via hydrological pathways.</p> <p>Given the nature, scale and location of the proposed project, there will be no effects to this habitat either directly, indirectly on or in combination with other projects.</p>	No
<ul style="list-style-type: none"> <li>Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]</li> <li>Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]</li> </ul>	<p>The alignment of the proposed route is dominated by hard standing areas such as roadways and pathways. Habitats suitable for accommodating Vertigo species do not occur within the proposed project site, as confirmed by the site visit.</p> <p>The NPWS site synopsis lists that both the Narrow-mouthed Whorl Snail and the Desmoulin's Whorl Snail are found in marsh vegetation near the Louisa Bridge, which is located in Leixlip, ca. 6km from the proposed site. There is no direct or indirect connectivity to this habitat hosting the snail species.</p> <p>These species are not aquatic and as such cannot be impacted via a deterioration in surface water quality within the Taghadoe stream.</p> <p>Given the location, scale and nature of the project, there is no risk of displacement of Vertigo snails during either the construction or operation of the proposed route.</p>	No

	Given the nature, scale and location of the proposed project, there will be no effects to Vertigo snails either directly, indirectly on or in combination with other projects.	
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## 5.5. In-combination Impacts

The Kildare County Development Plan (KCDP) 2017-2023 sets out policies and objectives for the development of County Kildare. The Plan aims to promote the sustainable development of Kildare through provision of physical and social infrastructure to support urban and rural communities. The Plan describes key policies relating to the promotion of walking and cycling in the county, including preparation of a Cycle Network Study for all the major towns in Kildare and active support of the implementation of the National Cycle Policy Framework. The Plan highlights the need for public realm enhancements under the Design Manual for Urban Roads and Streets. The Plan aims to secure development of the Greater Dublin Area Cycle Network Plan Urban and Inter Urban Schemes, including the Maynooth Town North South Corridor. The NTA also describes the National Cycle Network (NCN) Route 8 from Galway to Dublin along the Royal Canal through Maynooth.

Throughout the preparation of the KCDP, the Appropriate Assessment process was integrated into the various stages of the plan process and has guided preparation of development scenarios for the city. A Natura Impact Report<sup>11</sup> accompanied the Kildare County Development Plan and addressed Stage 1 Appropriate Assessment and Stage 2 Natura Impact Report.

The findings of the NIR are as follows: -

*‘Stage 1 Screening and Stage 2 appropriate assessment of the Kildare County Development Plan 2017-2023 have been carried out. Implementation of the Plan has the potential to result in impacts to the integrity of European Sites, if unmitigated.*

*The risks to the safeguarding and integrity of the qualifying interests and conservation objectives of European Sites have been addressed by the inclusion of mitigation measures that will prioritise the avoidance of effects in the first place and mitigate effects where these cannot be avoided. In addition, all lower level plans and projects arising through the implementation of the Plan will themselves be subject to AA when further details of design and location are known.*

*Having incorporated mitigation measures, it is considered that the Plan will not have a significant adverse effect on the ecological integrity of any European Site<sup>12</sup>.*

The Maynooth Local Area Plan 2013-2019 (most current version) outlines as a strategic goal; ‘To build on Maynooth’s strengths and to provide a focused approach to planning for future growth in a coherent sustainable, spatial fashion’. The Maynooth Local Area Plan was subject to the Appropriate Assessment process which concludes; ‘... the Maynooth Local Area Plan 2013-2019 shall not give rise to effects on the integrity of any Natura 2000 site, having regard to their conservation objectives and either alone or in-combination with other plans, programmes or projects.’

A search of Kildare County Planning records has been undertaken for the applications submitted within the past 5 years. This search identified over 50 no. developments, given the urban location of the proposed project. The majority of these developments have already been constructed or are of small scale in nature (i.e. extension works, or property retention works) or are considered to be a reasonable distance from the proposed works and have therefore not been considered further.

<sup>11</sup><https://kildare.ie/CountyCouncil/AllServices/Planning/DevelopmentPlans/KildareCountyDevelopmentPlan2017-2023/EnvironmentalReports/AA%20Natura%20Impact%20Report%202017.pdf>

<sup>12</sup> Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be: (a) no alternative solution available, (b) imperative reasons of overriding public interest for the plan to proceed; and (c) adequate compensatory measures in place.

2 no. relevant developments have been further evaluated with respect to cumulative impacts with the proposed Meadowbrook Cycle Scheme, as follows;

- **Anthony Murray. Change of use of retail unit (201461). Granted March 2021.**

This development will be constructed adjacent to the proposed project and accessed off Meadowbrook Road along which the proposed project is aligned. This planning permission is for the change of use of an existing retail unit to a pizza takeaway and works will be minor in nature. There may be a cumulative impact on traffic, dust and noise; however due to the nature and scale of the project it is not anticipated that these impacts will be significant. The contractor for the proposed project, Meadowbrook Cycle Scheme, will provide a traffic management plan for the works to ensure minimal impact on traffic. The Contractor will also be obliged to prepare a project specific CEMP prior to commencement of the proposed project, which will include specific control measures in accordance with standard industry best practice to be implemented to fully address any potential air quality / dust emissions, noise / vibration nuisance, and onsite noise / vibration monitoring should this be necessary. No significant cumulative impacts are anticipated.

- **Tanya & Stephen Nevin. Construction of detached dwelling house and associated works (19625). Granted August 2019.**

This development will be constructed to the north of the proposed project and will be accessed off Meadowbrook Road to the north of the proposed project. This planning permission is for the construction of a detached two-storey house and associated site works. There may be a cumulative impact on traffic, dust and noise; however due to the nature and scale of the project it is not anticipated that these impacts will be significant. The contractor for the proposed project will provide a traffic management plan for the works to ensure minimal impact on traffic. The Contractor will also be obliged to prepare a project specific CEMP prior to commencement of the proposed project, Meadowbrook Cycle Scheme, which will include specific control measures in accordance with standard industry best practice to be implemented to fully address any potential air quality / dust emissions, noise / vibration nuisance, and onsite noise / vibration monitoring should this be necessary. No significant cumulative impacts are anticipated.

In addition another project of a similar nature in the vicinity which has received planning permission is given below

- **Royal Canal Greenway**

The proposed works comprise of an upgrade to the existing towpath along the Royal Canal from Maynooth to Leixlip. This involves resurfacing and widening of the existing towpath in sections along with the provision of new services and diversion of existing services where required. Sections of the proposed greenway will be surfaced in bituminous material while sections will be provided with a grit surface (in accordance with planning conditions). No significant cumulative impacts are anticipated.

Given the scale and nature of the proposed project and the fact that effects are not anticipated on any European site, the proposed cycleway project will not act in combination with these granted developments to create significant impacts.

NPWS site documents outline the main high threats and pressures on the European sites within the Zol of the proposed project as being from fertilisation, continuous urbanisation, modifying structures of inland water courses, removal of hedges and copses or scrub, silviculture, forestry, grazing, dispersed habitation, roads and motorways. It is considered unlikely that the proposed project will act in combination with the threats and pressures identified in the NPWS site documents to give rise to significant effects on the European sites within the Zol of the proposed project.

Thus, in summary, no proposed projects or plans were identified that would act in-combination with the proposed cycleway project to give rise to likely significant effects on any European sites.

## 5.6. Likelihood of Significant Effects on European Sites

Due to the scope and nature of the proposed project, it is considered that the proposed project, either alone or in combination with other plans or projects, will not result in likely significant effects on the conservation objectives of the Rye Water Valley/Carton SAC, or any other European site.

## 5.7. Consideration of Findings

This Screening for Appropriate Assessment report is based on the best available scientific information. It is concluded by the authors of this report that the proposed Meadowbrook Cycle Scheme, either alone or in combination with other plans or projects, will not result in likely significant effects on the conservation objectives of the Rye Water Valley/Carton SAC, or any other European site.

Thus, it is recommended that it is not necessary for the proposed project to proceed to Appropriate Assessment.

Should the scope of the proposed project change in nature or scale, a new Screening for Appropriate Assessment will be required.

## 6. Appropriate Assessment Screening Matrix

**Table 6-1 Screening Matrix.**

<b>1. Description of the project or plan</b>	
Location	Rye Water Valley/Carton SAC
Distance from designated site	Ca. 2km
Brief Description of the project or plan	See Section 1.1
Is the plan directly connected with or necessary to the site management for nature conservation?	No

<b>2. Brief Description of the European site(s)</b>	
Name	Rye Water Valley/Carton
Site designation status	SAC
Qualifying interests	See Table 4-1
Unit size	70.4826ha (0% Marine)

<b>3. Assessment Criteria</b>	
Other plans or projects which may have a cumulative impact	There are no impacts arising from the proposed works on the European sites and there are no other plans or projects ongoing at the same time that would contribute to a cumulative impact on the European sites. Therefore, cumulative impacts with other projects will not occur.
Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the European sites.	See Section 1.1 & 1.2 for description of the proposed project.
Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the European site by virtue of: Size and scale Land-take Distance from European site or key features of the site Resource requirements	The location, nature and scale of the proposed project is such that direct or indirect impacts will not occur.

3. Assessment Criteria	
<p>Emissions</p> <p>Excavation requirements</p> <p>Transportation requirements</p> <p>Duration of construction, operation etc.</p> <p>Others</p>	
<p>Describe any likely changes to the site arising as a result of:</p> <p>Reduction of habitat area</p> <p>Disturbance of key species</p> <p>Habitat or species fragmentation</p> <p>Reduction in species density</p> <p>Changes in key indicators of conservation value</p> <p>Climate change</p>	<p>There shall be no changes to the site as a result of the proposed works.</p> <p>There shall be no reduction of habitat area within European sites as a result of the proposed project.</p> <p>There shall be no habitat or species fragmentation or reduction in species density as a result of the works.</p>
<p>Describe any likely impacts on the European site as a whole in terms of:</p> <p>Interference with the key relationships that define the structure of the site</p> <p>Interference with key relationships that define the function of the site.</p>	<p>There are no changes to the site as a result of the proposed project works with respect to the key relationships that define the structure or function of the SAC.</p>
<p>Provide indicators of significance as a result of the identification of effects set out above in terms of:</p> <p>Loss</p> <p>Fragmentation</p> <p>Disruption</p> <p>Disturbance</p> <p>Change to key elements of the site</p>	<p>There is no potential for impact to qualifying interests of the SAC given the location, nature and scale of the works.</p>
<p>Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale of magnitude of impacts is not known.</p>	<p>No significant impacts will occur as a result of the proposed works.</p>

Data collected to carry out the assessment			
Who carried out the assessment	Sources of data	Level of assessment completed	Where can the full results of the assessments be accessed and viewed?
Atkins 150 Airside Business Park Swords Co. Dublin	Desktop data derived from the NPWS – Natura 2000 form, site synopsis, SAC/SPA reports etc. National Biodiversity Data Centre online data. EPA Envision Mapping system; Google maps; Bing Maps etc. Kildare County Council Planning Enquiry System	Screening	Atkins 150 Airside Business Park Swords Co. Dublin

## 7. References

- CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Chartered Institute of Ecology and Environmental Management, Winchester.
- Department of the Environment, Heritage and Local Government (2009). *Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities*.
- EPA Mapviewer; <https://gis.epa.ie/EPAMaps/>
- European Commission (2018). *Managing Natura 2000 sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*.
- European Commission (2001). *Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC*.
- European Commission (2007). *Guidance document on Article 6(4) of the 'Habitats Directive' 92/49/EEC; clarification of the concepts of: Alternative solutions, Imperative reasons of overriding public interest, Compensatory Measures, Overall Coherence, Opinion of the Commission*.
- Fossitt, J. (2000). *A Guide to Habitats in Ireland*. The Heritage Council.
- GSI Mapviewer;  
<https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef>
- Kildare County Council Planning Department – Online Planning System;  
<http://webgeo.kildarecoco.ie/planningenquiry>.
- Kildare County Council (2017). *Kildare County Development Plan 2017-2023*.
- Kildare County Council (2017). *Kildare County Development Plan 2017-2023 – Appropriate Assessment, Natura Impact Report*, CAAS Ltd, 2016.
- NPWS (2021). *Conservation Objectives: Rye Water Valley/Carton SAC 0001398*. Version 8. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
- NPWS (2019). *Natura 2000 – Standard Data Form (2019). Rye Water Valley/Carton SAC, Site Code IE0001398*.
- NPWS (2013). *Site Synopsis. Rye Water Valley/Carton (SAC 0001398) Rev 13*. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- Scott Wilson and Levett-Therivel, (2006). *Appropriate Assessment of Plans*. Scott Wilson, Levett-Therivel



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