

AtkinsRéalis



N40 Junction 1 Improvement Scheme AA Screening

Transport Infrastructure Ireland & Cork City Council

01/10/2026

5207356DG1154

N40 JUNCTION 1 IMPROVEMENT SCHEME

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Document history

Document title: N40 Junction 1 Improvement Scheme AA Screening

Document reference: 5207356DG1154

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
0.0	For Issue	HR & CD	CD	POD	POD	19/06/2026
1.0	Part 8 Planning Issue	HR & CD	CD	POD	POD	20/08/2026
2.0	Part 8 Planning Issue (Amended)	HR & CD	CD	POD	POD	29/09/2026
3.0	Part 8 Planning Issue (Amended)	HR & CD	CD	POD	POD	01/10/2026

Client signoff

Client Transport Infrastructure Ireland & Cork City Council

Project N40 JUNCTION 1 IMPROVEMENT SCHEME

Job number 5207356

**Client
signature/date**



5207356DG1154_N40 Junction_AA
Screening rev 3.docx
5207356DG1154
3.0 | 01/10/2026

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1. Introduction

AtkinsRéalis was commissioned by Transport Infrastructure Ireland & Cork City Council (CCiC) to prepare an Appropriate Assessment (AA) Screening Report for proposed works at the N40 Poulavone Junction 1 Westbound Diverge (J01) (hereafter referred to as 'N40 Junction'), County Cork, hereafter referred to as the 'Proposed Works' or the 'Site'. These works fall under the Motorway Contracts Audit and Administration Services (MCAAS) contract; a four-year contract in which AtkinsRéalis support TII in the management of the motorway network in Ireland. The location of the N40 Junction 1 lies within the boundary of Cork City Council jurisdiction. Upgrades to the N40 Junction will be submitted under Part 8 of the Planning and Development Regulations 2001 (as amended) to Cork City Council.

This document comprises the AA Screening Report in respect of the proposed development and is intended to assist Cork City Council, as the competent authority in this case, by providing it with sufficient evidence to make an informed determination as to whether AA under article 6(3) of the Habitats Directive (92/43/EEC) is required in respect of the proposed development. This AA Screening has also been undertaken in accordance with Section 177U and other relevant provisions of Part XAB of the Planning and Development Act 2000 (as amended).

An Environmental Impact Assessment (EIA) Screening Report has also been prepared for the proposed works and accompanies this planning submission (see AtkinsRéalis document reference: 5207356DG1155).

1.1 Existing Conditions

The N40 Junction (J01) comprises an at-grade-separated dumbbell junction that connects the N40 and N22, it was constructed 2004. The Junction serves Ballincollig and connects directly to the N22, Curraheen Road and Carrigrohane.

The existing ramp types on the N40 Junction do not conform with TII's Guideline DN-GEO-03060 *Geometric Design of Junctions* (updated May 2023)¹. The absence of an auxiliary lane in the existing design causes abrupt lane changes as well as having limited space available for vehicles to adjust their speed before merging. In addition, there is reduced space available for queuing.

During peak traffic times, the westbound diverge movement spills beyond the diverge taper and into the existing 2.5m hard shoulder, an issue that is dangerous for diverge and through traffic and that is anticipated to become more frequent as Ballincollig develops. The Site has been the location of a significant number of vehicular crashes in recent years; the Road Safety Authority's collision analysis 2018-2020³ reported 22 no. collisions.

¹ <https://www.tiipublications.ie/document/?id=3253>

³ https://www.rsa.ie/docs/default-source/road-safety/r2---statistics/road-collision-annual-reports/five-year-trend-analysis-of-fatalities-and-serious-injuries-2018-2022b8cf0b0e-ff0e-4638-bfa9-0f125aa0888d.pdf?Status=Master&sfvrsn=87daeacc_3



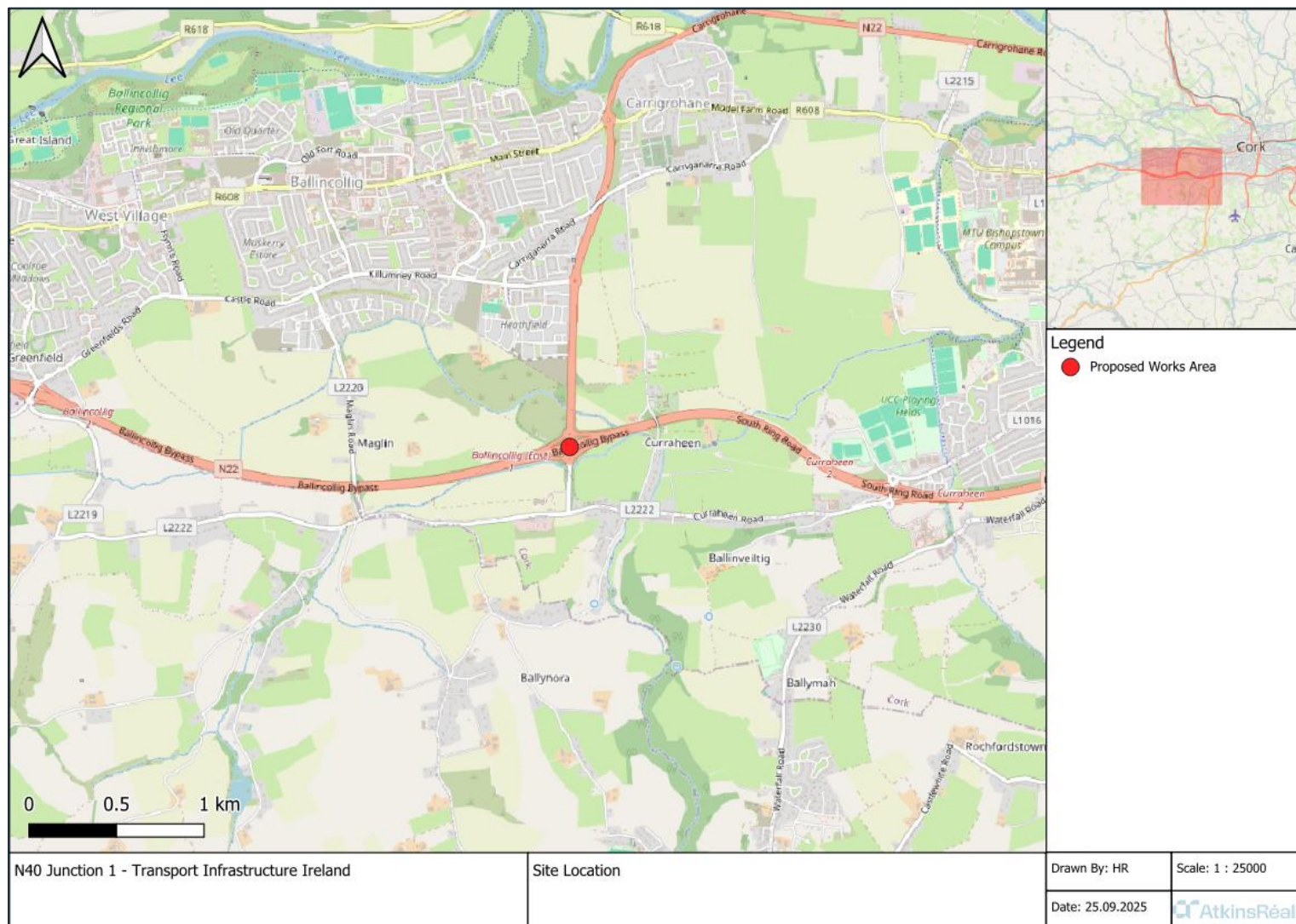


Figure 1-1 - The location of the Proposed Works and the N40 Junction (J01).

1.2 Project Description & Scope of Works

As noted in Section 1.1 above, the N40 Poulavone Junction (J01) is an at-grade-separated dumbbell junction linking the N40 and N22, serving Ballincollig and connecting to Curraheen Road and Carrigrohane. During the PM peak, westbound traffic exiting the N40 queues back onto the mainline, creating a safety risk that is expected to worsen with future development.

The proposed solution retains the existing dumbbell layout but introduces single-lane teardrop roundabouts at each ramp working in tandem across the overbridge and prevent U-turn movements around the circulatory roadway. This will reduce conflict points and preventing U-turns. Traffic signals will be added on the southbound overbridge and westbound exit ramp to further contributing to safer, more regular traffic flows. This context-sensitive design will improve operations and safety by reducing crash severity and delay. Unlike traditional roundabouts, a teardrop roundabout doesn't allow vehicles to travel completely around the circulatory roadway to make a U-turn, a driver wishing to make a U-turn in a teardrop roundabout will need to navigate between both roundabouts.

The tear drop layout optimises the performance of the junction by controlling the flow of traffic around the roundabout and prioritising the uninterrupted free flow of the traffic from the exit ramp when signals are operating. This minimises congestion and queuing on the exit ramp and reduces the risk of rear-end collision on the N40 mainline.

Overall, the scheme aims to improve safety, reduce queuing on the exit ramp, and enhance junction performance by prioritising westbound diverging traffic and minimising congestion on the N40. The Proposed Works site is illustrated in Figure 1-2 below. The full set of drawings is located within the Planning Pack accompanying this submission.





Figure 1-2 - The Proposed Works site at the N40 Junction 1 (J01).

1.3 Description of Proposed Works

At present, no contractor has been appointed to undertake the proposed works, and therefore detailed construction methodologies are not yet available. The scope of works will be fully defined following appointment, at which point the contractor will assume responsibility for preparing and submitting all required documentation prior to commencement. This will include a comprehensive Risk Assessment and Method Statement (RAMS), which will outline the approach to each activity, identify potential hazards, and specify mitigation measures to ensure safety and compliance.

In addition, the successful contractor will be required to prepare a Construction Environmental Management Plan (CEMP) and a Resource Waste Management Plan (RWMP). The contractor will be obligated to implement the CEMP and RWMP throughout the duration of the works and to ensure that all personnel are trained and competent in their application. This approach provides assurance that, while specific methodologies cannot be confirmed at this stage, the necessary frameworks and responsibilities are in place to guarantee that the works will be carried out in a controlled, environmentally responsible, and legally compliant manner once the contractor is appointed. The following description of proposed works is informed by the set of design drawings within the Planning Pack and through discussions with the design team and the client, in this case Transport Infrastructure Ireland. The successful contractor will take onboard all works as described in the AA Screening and incorporate these into the RAMS, CEMP and RWMP where relevant.

The total site area is 1.552 hectare; this encompasses both existing roundabouts at the N40 Junction as well as the approaches from N40, L2222 and the N22 roads.

The works are contained completely in the existing footprint of the existing roads (N40, L2222, and N22) and do not require instream works or works over water. There is no requirement for clearance of scrub or tree vegetation (apart from minor excavation on grassy verge for services installation).

1.3.1 Working Hours

Construction works will be undertaken at night with an anticipated construction duration over 5 no. to 10 no. nights from 21:00 to 05:00. The junction will be closed to traffic and traffic diverted to next junction to allow works to proceed.

1.3.2 Site Compound

All proposed works are contained within the existing road boundaries. No creation of a site compound is required to facilitate the proposed works. Plant and vehicles will be contained within the existing road boundary for the duration of works and moved-off site to a Cork City Council depot during daylight hours when works are paused. Removal, movement or replacement of existing safety barriers within the site is not proposed.

1.3.3 Site Clearance & Waste Management

Proposed site clearance works involves the breaking out of the existing pavement where the proposed teardrop roundabout is to be installed, removal of signage at multiple locations within the proposed works site. Where road signs are noted to be set aside for reuse, this refers to the sign faces(s) only. The post(s) and foundations shall be taken down or up and removed to tip unless noted otherwise. Any waste will be disposed of to a licenced



tip. Pavement waste will be recycled (moved to Roadstone⁴ batch plant to be reused). Aluminium and steel of old signage will be recycled.

1.3.4 Pavements & Excavations

The proposed works will involve excavation of existing pavement at the proposed teardrop arrangement, induction loop installation locations and associated ducting and service connections. Excavations are also required along grass verge locations for laying of power and communications ducting.

1.3.4.1 Planing (Milling) of Existing Pavement

The removal of the existing pavement layer to a depth of 50mm will be carried out by cold milling (planing). This process involves mechanically removing the asphalt layer without disturbing the underlying sub-base using a Self-propelled Cold Milling Machine (Road Planer).

Volume of excavation is calculated to be 30m³ (585m² x 50mm) at the northern roundabout and 27m³ (530m² x 50mm) at the southern roundabout.

1.3.4.2 Excavation for Traffic Island Teardrop Arrangement

The excavation depth will match the total thickness of the proposed island thickness (200mm) of which 125mm is below ground and 75mm of the kerb remains above the existing road level; this ensures the finished traffic island sits correctly, relative to the surrounding carriageway.

Excavation equipment anticipated to be required for these works includes mini-excavators (1.5 ton to 5 ton) for small areas and hydraulic breaker. The volume of excavation is calculated to be 17m³ (130m² x 125mm) at the northern roundabout and 15m³ (120m² x 125mm) at the southern roundabout.

1.3.4.3 Excavation for Traffic Signal Infrastructure

Excavation works for installation of traffic signal infrastructure will include the formation of trench excavations for traffic signal ducts and cabling. Trenches will be a maximum of 625m x 400mm x 600mm (length x width x depth) with a calculated volume of 150m³. Localised excavations are required for the installation of induction loops within the existing carriageway at 13 no. locations. Loop cables will be placed via a saw-cut or narrow slot/trench within the 3m x 2m loop area, which require the minor excavation of an anticipated 0.025m³ of material per loop installed. The calculated excavation volume in total for all 13 no. loop locations is 0.4/0.5m³.

Signal pole and CCTV camera foundations and controller bases require 7 no. areas of excavation (each area 1m² x 1m, therefore a total excavation volume of 7m³).

Concrete bases for signal pole and CCTV camera will be constructed using localised excavations to the required dimensions, with formwork (shuttering) installed as needed to achieve the specific foundation profile. Concrete will be delivered either by direct discharge or small-scale pumping and poured into the shuttered excavation, then compacted and finished in situ. The approximate volume of both the CCTV camera base and each signal pole base is 1m³. The specifics on concrete works will be detailed by the appointed contractor in the RAMS and CEMP and will follow good practice guidelines from TII.

⁴ <https://www.roadstone.ie/>



1.3.4.4 Excavation Equipment and Plant

Equipment and plant listed below is anticipated to be required given the works proposed. The appointed Contractor will be cognisant of this list when completing RAMS, CEMP and RWMP documents. Minor variations in plant and equipment may occur; the appointed contractor will determine the final equipment list. Anticipated equipment and plant to be used in excavations includes: -

1. Carriageway slot cutting (for induction loop installation)
 - a. Road saw
 - b. Hand-held disc cutters for precision areas
2. Trench excavations (for ducting and services)
 - a. Mini excavators (1.5 ton to 5 ton) for urban/restricted areas.

1.3.4.5 Pavement Design

Designs for pavements ('pavement' in the case of the proposed works refers to road surface) and kerbs, footpaths and paved areas are demonstrated within Figure 1-2. The existing northern and southern traffic islands are to be retained, and several areas of existing kerb to be retained. Transition kerb will be installed in between the existing roundabout island to facilitate the installation of the new teardrop shape (kerb type C (75mm upstand) (CC-SCD-01101)⁵ will be used). These steps will be repeated across both roundabout islands where teardrop shape is to be installed. The new teardrop shape will be an extension of the existing roundabout islands with a new geometry which will require planing of existing pavement, to be replaced with 50mm Stone Mastic Asphalt (SMA) 10 on regulating course (15-40mm). These works relate only to the extended area of the teardrop location where Treatment T1 is proposed.

The new teardrop shape will be finished with 60mm red block paving, on 40mm ST4 concrete to clause 1106, on 100mm subbase granular material to clause 804 (subbase used only if level difference is more than 50mm) which will match the existing circular islands within the existing roundabouts (which are red blocked paved).

Resurfacing works will occur only within the areas adjacent to the new teardrop shapes as identified in Figure 1-2 above.

1.3.4.5.1 Pavement Installation

Pavement installation shall be undertaken as per the following steps:-

1. The contractor shall undertake a visual condition survey of the substrate following cold milling in accordance with Appendix 7/1 of the specification⁶.
2. The extent of all pavement works shall be agreed on site in advance with the employer's representative.
3. Regulation shall be used to ensure a smooth surface is achieved in accordance with clause 2.2 of series 900 of the TII specification for road works.

⁵ <https://cdn.tii.ie/publications/CC-SCD-01101-02.pdf>

⁶ <https://cdn.tii.ie/publications/CC-SPW-00700-04.pdf>



4. Regulation shall be constructed so as to ensure that the designated nominal thickness and regularity of the subsequent layer is achieved.
5. Provision of pavement to be in accordance with the requirements of Appendix 7/1 – permitted pavement options.

1.3.5 Machinery

As noted above, the following list is anticipated to be required given the works proposed. Minor variations in plant and equipment may occur; the appointed contractor will determine the final equipment list. Anticipated equipment and plant to be used in excavations includes: -

1. Mini excavators (1.5 ton to 5 ton)
2. Hydraulic breaker
3. Road saw (floor saw)
4. Hand-held disc cutters
5. Skid steer
6. Concrete mixer
7. Roller compactor
8. Asphalt paver

1.3.6 Landscaping

Topsoil and reseeding at areas where additional ducting is provided for the proposed traffic signals will be required.

The current landscaping within the existing roundabout islands will remain as it is (no tree or vegetation removal proposed), while the extended teardrop portion will act as a traffic island with red block paving (no additional landscaping proposed here).

1.3.7 Drainage

As is outlined in sections below, there is no additional connectivity to watercourses due to proposed works as there will be no increase in impermeable surface area and the existing drainage network is to be use. The only modifications to the drainage network involve the relocation of existing gully pits within the roadway to align with the new teardrop configuration, along with adjustments to the pipe network to accommodate these changes.

1.3.7.1 Northern Roundabout

There will be no impact on the existing drainage system as a result of the proposed teardrop island. The location of the proposed island does not interfere with any existing gullies or manholes. The introduction of the teardrop island will not increase the extent of impermeable area; therefore, there will be no increase in run-off entering the existing drainage system. For clarity, the existing drainage layout has been reproduced in the drainage



drawings based on the available topographical survey data⁷ and as-built records; this is provided in the drawings within the Planning Pack accompanying this submission.

1.3.7.2 Southern Roundabout

There will be minor impact of the proposed teardrop island on the southern roundabout on the existing drainage system; this is limited to existing twin gullies which will require removal or abandonment. As a result of this modification, run-off from the teardrop island will be redirected along the kerb lines to the north and south. To accommodate this revised flow path, 4 no. new gullies are proposed to collect surface water. All proposed gullies will connect to the existing underground drainage network,. There will be no increase in the impermeable area, such that the overall volume of run-off entering the drainage system will remain as existing following the proposed works.

1.3.8 Waste Management

Any waste will be disposed of to a licenced tip. Pavement waste will be recycled (moved to Roadstone⁸ batch plant to be reused). Aluminium and steel of old signage will be recycled.

1.3.9 Signage & Road Markings

New signage will be installed where required throughout the proposed works area in particular at areas of new traffic lighting. Old signage will be reinstalled post works were required on new posts and foundation. Several old signs will be relocated where required. All signage will be contained within the red line boundary of the proposed works area.

New road marking will be painted at several locations including in conjunction with new traffic lights and at the roundabouts where two lanes of the N22 become one singular land to cross the existing bridge. Road marking will be painted in accordance with specifications⁹.

1.3.10 Site Photos

Site photos were provided by AtkinsRéalis engineers from a site visit on the 13th October 2025.

⁷ Topographical survey dated 24th July 2025

⁸ <https://www.roadstone.ie/>

⁹ <https://cdn.tii.ie/publications/CC-SPW-01200-04.pdf>





Plate 1-1 - From the N40 facing up the ramp to south roundabout of junction J01.



Plate 1-2 - Facing north from the south roundabout of J01.



Plate 1-3 - View facing northeast from southern roundabout showing existing bridge.



Plate 1-4 - Northern roundabout facing north from existing bridge at J01.



Plate 1-5 - Facing southwest from northern roundabout showing existing layout.



Plate 1-6 - South roundabout off ramp facing west.



Plate 1-7 - Off ramp to the northern roundabout from the eastbound carriageway of the N40.

2. Scope of Study

2.1 Legislative Context

2.1.1 Natura 2000

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (“the Habitats Directive”) is a legislative instrument of the European Union (EU) which provides legal protection for habitats and species of Community interest. Article 2 of the Directive requires the maintenance or restoration of such habitats and species at a favourable conservation status, while Articles 3 to 9, inclusive, provide for the establishment and conservation of an EU-wide network of special areas of conservation (SACs), known as Natura 2000, which also includes special protection areas (SPAs) designated under Article 4 of Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (“the Birds Directive”). Both SACs and SPAs are commonly referred to as “European sites” or “Natura 2000 sites”.

SACs are selected for natural habitat types listed on Annex I to the Habitats Directive and the habitats of species listed on Annex II to the Habitats Directive. SPAs are selected for species listed on Annex I to the Birds Directive, other regularly occurring migratory species and other species of special conservation interest. The habitats and species for which a Natura 2000 site is selected are referred to as the “qualifying interests” of that site and each is assigned a “conservation objective” aimed at maintaining or restoring its “favourable conservation condition” at the site, which contributes to the maintenance or restoration of its “favourable conservation status” at national and European levels.

2.1.2 Appropriate Assessment

Article 6 of the Habitats Directive deals with the management and protection of Natura 2000 sites. Articles 6(3) and (4) set out the decision-making process, known as “Appropriate Assessment” (AA), for plans or projects in relation to Natura 2000 sites. Article 6(3) 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 first sentence of Article 6(3) provides a basis for determining which plans and projects require AA, i.e., those “not directly connected with or necessary to the management of [one or more Natura 2000 sites] but likely to have a significant effect thereon, either individually or in combination with other plans or projects”. In Waddenzee (C-127/02), the Court of Justice of the European Union (CJEU) ruled that significant effects must be considered “likely” if “it cannot be excluded, on the basis of objective information”, that they would occur. This clearly sets a low threshold, such that AA is required wherever there is a reasonable possibility of significant effects on a Natura 2000 site. In the same judgment, the CJEU established that the test of significance relates specifically to the conservation objectives of the site concerned, i.e., “significant effects” are those which, “in the light, inter alia, of the characteristics and specific environmental conditions of the site”, could undermine the site’s conservation objectives. In addition to the effects of the plan or project on its own, the combined effects

arising from the plan or project under consideration and other plans and projects must also be assessed (see Section 7 for more details).

The last part of the first sentence of Article 6(3) defines AA as an assessment of the “*implications [of the plan or project] for the site in view of the site's conservation objectives*”. In the second sentence, Article 6(3) requires that, prior to agreeing to a plan or project, the competent authority must “ascertain” that “*it will not adversely affect the integrity of the site concerned*”. In *Sweetman v. An Bord Pleanála* (C-258/11), the CJEU ruled that a plan or project “*will adversely affect the integrity of that site if it is liable to prevent the lasting preservation of the constitutive characteristics of the site that are connected to the presence of a priority natural habitat whose conservation was the objective justifying the designation of the site in the list of sites*”. On that basis, EC (2018) described the “integrity of the site” as “*the coherent sum of the site's ecological structure, function and ecological processes, across its whole area, which enables it to sustain the habitats, complex of habitats and/or populations of species for which the site is designated*”. As such, the “integrity” of a specific site is defined by its conservation objectives and is “adversely affected” when those objectives are undermined. In *Waddenzee*, the CJEU ruled that the absence of adverse effects can only be ascertained “*where no reasonable scientific doubt remains*”.

The “*precautionary principle*” applies to all the legal tests in AA, i.e., in the absence of objective information to demonstrate otherwise, the worst-case scenario is assumed. Where the tests established by Article 6(3) cannot be satisfied, Article 6(4) applies (see explanation in Section 2.2, below).

2.1.3 Competent Authority

The requirements of Articles 6(3) and (4) are transposed into Irish law by, inter alia, Part 5 of the European Communities (Birds and Natura Habitats) Regulations, 2011 (as amended) (“the Habitats Regulations”) and Part XAB of the Planning and Development Act, 2000 (as amended) (“the Planning and Development Act”).¹⁰ As per the second sentence of Article 6(3), it is the “competent national authorities” who are responsible for carrying out AA and, by extension, for determining which plans and projects require AA. The competent authority in each case is the body responsible for authorising a plan or project, e.g. local or other public authorities, An Coimisiún Pleanála, the Environmental Protection Agency (EPA) or a Government Minister. In all cases, it is the competent authority who is responsible for determining whether a plan or project requires AA and for carrying out the AA, where required.

2.2 Appropriate Assessment Process

The AA process can be described as being made up of three distinct stages, as described below, the need to progress to each stage being determined by the outcome of the preceding stage.

Stage 1: Screening – This stage involves a determination by the competent authority as to whether a given plan or project required AA. As explained in Section 2.1, AA is required in respect of any plan or project not directly connected with or necessary to the management of a Natura 2000 site, but for which the possibility of likely significant effects on one or more Natura 2000 sites cannot be excluded. The CJEU’s Judgment on *Eco Advocacy v. An Bord Pleanála* (C-721/21) and the Opinion of Advocate General Kokott in the same case set out the principles for identifying any aspects of a plan or project which may constitute what the CJEU termed in *People Over Wind* (C-323/17) “*measures intended to avoid or minimise harmful effects on a Natura 2000 site*”

¹⁰ The Planning and Development Act, 2024 (as amended) repeals and replaces the Act of 2000. The provisions of Article 6(3) and (4) of the Habitats Directive are transposed by Part 6, Chapter 3 of the 2024 Act. However, this part has not yet been commenced.

and, as such, cannot be taken into account in making an AA Screening determination. Consideration of the potential for in-combination effects is also required at this stage.

Stage 2: Appropriate Assessment – This stage involves a detailed assessment of the implications of the plan or project, individually and in combination with other plans and projects, for the integrity of the Natura 2000 site(s) concerned. This stage also involves the development of appropriate mitigation to address any adverse effects and an assessment of the significance of any residual impacts following the inclusion of mitigation. In *Kelly v. An Bord Pleanála* (IEHC 400), the High Court ruled that a lawful AA must contain complete, precise, and definitive findings based on examination and analysis, and conclusions and a final determination based on an evaluation of the findings. In the same judgment, the High Court stressed that, in order for the findings to be complete, precise, and definitive, the AA must be carried out in light of best scientific knowledge in the field and cannot have gaps or lacunae. In *Holohan v. An Bord Pleanála* (C-461/17), the CJEU clarified that AA must “*catalogue the entirety of habitat types and species for which a site is protected*” (i.e. the qualifying interests of the site) and assess the implications of the plan or project for the qualifying interests, both within and outside the site boundaries, and other, non-qualifying interest habitats and species, whether inside or outside the site boundaries, “provided that those implications are liable to affect the conservation objectives of the site”. The proposer of a plan or project requiring AA is furnishes the competent authority with the scientific evidence upon which to base its AA by way of a Natura Impact Statement (NIS) or Natura Impact Report (NIR). If it is not possible to ascertain that the plan or project will not adversely affect one or more Natura 2000 sites, authorisation can only be granted subject to Article 6(4).

Stage 3: Article 6(4) – If a plan or project does not pass the legal test at Stage 2, alternative solutions to achieve its aims must be considered and themselves subject to Article 6(3). If no feasible alternatives exist, authorisation can only be granted where it can be demonstrated that there are imperative reasons of overriding public interest (IROPI) justifying its implementation. Where this is the case, all compensatory measures must be taken to protect the overall coherence of Natura 2000.

The three stages described above are illustrated in Figure 2-1 below.



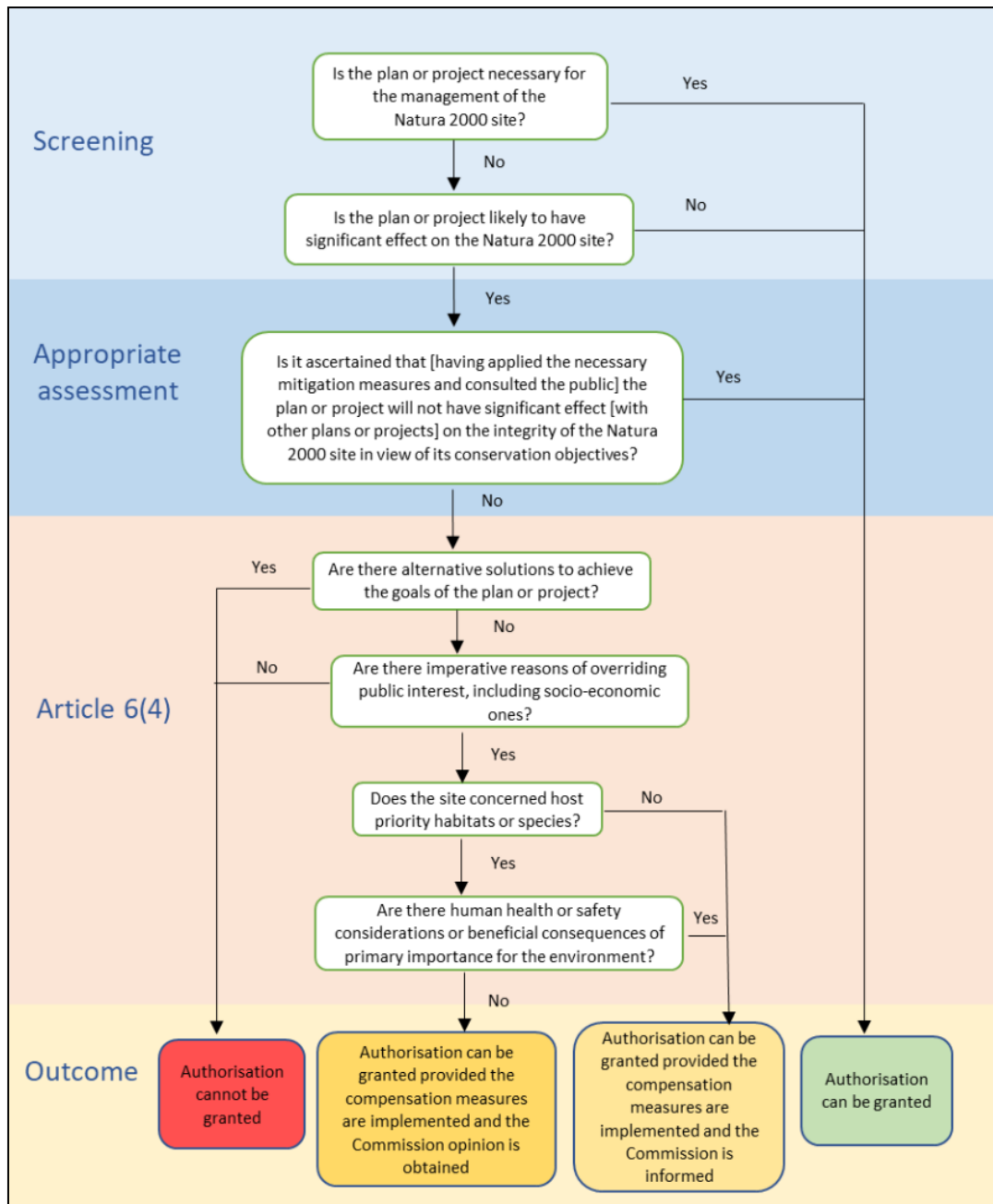


Figure 2-1 - Stages of the Appropriate Assessment process (EC, 2021a).

3. Methodology

3.1 Legislative Guidance

This report was prepared with due regard to the relevant European and Irish legislation, case law and guidance, 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. *Official Journal of the European Communities* L 206/7-50.
- Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds. *Official Journal of the European Union* L 20/7-25.
- European Communities (Birds and Natural Habitats) Regulations, 2011. *S.I. No. 477/2011* (as amended) (“the Habitats Regulations”).
- Planning and Development Act, 2000. *No. 30 of 2000* (as amended) (“the Planning and Development Act”).
- Planning and Development Act, 2024. *No. 34 of 2024* (as amended) (“the 2024 Act”).
- Planning and Development Regulations, 2001. *S.I. No. 600/2001* (as amended) (“the Planning Regulations”).
- EC (2019). *Managing Natura 2000 sites – The provisions of Article 6 of the Habitats Directive 92/43/EEC*. European Commission, Brussels. *Official Journal of the European Union* C 33/1-62.
- EC (2021a). *Assessment of plans and projects in relation to Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC*. European Commission, Brussels. *Official Journal of the European Union* C 437/1-107.
- EC (2021b). *Guidance document on the strict protection of animal species of Community interest under the Habitats Directive. C (2021) 7301*. European Commission, Brussels.
- DG Env (2022). *Guidance document on assessment of plans and projects in relation to Natura 2000 sites – A summary*. Directorate-General for Environment, European Commission, Brussels. Publications Office of the European Union, Luxembourg.
- DEHLG (2010a). *Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Revised 11/02/2010*. Department of the Environment, Heritage and Local Government, Dublin.
- DEHLG (2010b). *Circular NPW 1/10 & PSSP 2/10. Dated 11/03/2010*. Department of the Environment, Heritage and Local Government, Dublin.
- NPWS (2021). *Guidance on the Strict Protection of Certain Animal and Plant Species under the Habitats Directive in Ireland. National Parks & Wildlife Service Guidance Series 1*, Department of Housing, Local Government and Heritage, Dublin.
- Mullen, E., Marnell, F. and Nelson, B. (2021). *Strict Protection of Animal Species – Guidance for Public authorities on the Application of Articles 12 and 16 of the EU Habitats Directive to development/works*



undertaken by or on behalf of a Public Authority. *National Parks & Wildlife Service Guidance Series 2*, Department of Housing, Local Government and Heritage, Dublin.

- OPR (2021). *Appropriate Assessment Screening for Development Management. OPR Practice Note PN01*. Office of the Planning Regulator, Dublin.
- Applications for Approval for Local Authority Developments made to An Coimisiún Pleanála under 177AE of the Planning and Development Act, 2000, as amended (Appropriate Assessment) – Guidelines for Local Authorities <<https://www.pleanala.ie/getmedia/0f385f48-7e84-43e3-b405-1201e490740a/Applications-for-approval-for-LA-Developments-S177AE-EN.pdf>>. An Coimisiún Pleanála, Dublin.
- Case law, including *Waddenzee* (C-127/02), *Sweetman v. An Bord Pleanála* (C-258/11), *Kelly v. An Bord Pleanála* (IEHC 400), *Commission v. Germany* (C-142/16), *People Over Wind* (C-323/17), *Holohan v. An Bord Pleanála* (C-461/17), *Eoin Kelly v. An Bord Pleanála* (IEHC 84), *Heather Hill* (IEHC 450) and *Eco Advocacy v. An Bord Pleanála* (C-721/21).
- Sundseth, K. and Roth, P. (2014). *Article 6 of the Habitats Directive – Rulings of the European Court of Justice*. Ecosystems LTD (N2K Group), Brussels.

3.2 Desk Study

Baseline data regarding the receiving environment, including Natura 2000 sites, was gathered through a thorough desk study (websites last accessed 16th June 2026).

The boundaries of Natura 2000 sites were downloaded from NPWS: Maps and Data (<https://www.npws.ie/maps-and-data>). Information on sites, including their overall structures and functions, qualifying interests, conservation objectives and threats/pressures and activities therein, was found in the Site Synopsis, Natura 2000 Standard Data Form, Conservation Objectives and supporting documents for each site. Spatial data for site-specific conservation objectives of Natura 2000 sites, and boundary data for other designated sites, such as Natural Heritage Areas, was also retrieved from NPWS: Maps and Data. Reporting under Article 17 of the Habitats Directive (NPWS, 2019a-c; Article 17 web tool) and Article 12 of the Birds Directive (Article 12 web tool) provided further information on the habitats and species concerned at the national level.

Recent and historical records of species were obtained from the National Biodiversity Data Centre (NBDC) Biodiversity Maps (<https://maps.biodiversityireland.ie/Map>). Records for threatened and protected species were also received from the National Parks & Wildlife Service (NPWS) following a formal data request.

The Environmental Protection Agency (EPA) map viewer EPA Maps: Water (<https://gis.epa.ie/EPAMaps/Water>) and spatial data for river, lake, canal, transitional and coastal waterbodies downloaded from the EPA Geoportal (<https://gis.epa.ie/GetData/Download>) was used to identify any hydrological connection between the proposed works and Natura 2000 sites or connected features. Satellite and aerial imagery from Google Earth, Bing Maps and Tailte Éireann was reviewed to identify hedgerows, treelines and other potential ecological features.

Google Street View was utilised to gain understanding of the site, including land use of the surrounding area (most recent imagery from 2021).



3.3 Statement of Authority

This report was prepared by Hugh Rowlands, Ecologist, with support from Caroline Downey, Assistant Ecologist. This report was reviewed and authorised by Paul O'Donoghue, Associate Director (Ecology).

Hugh Rowlands is an Ecologist who has a BA (Hons) in Zoology, a MSc in Biodiversity and Conservation and a PgDip in GIS & Remote Sensing. Hugh has written and contributed to numerous Ecological Impact Assessment, Appropriate Assessment Screening and Natura Impact Statement reports. He has experience conducting bat, bird, mammal and habitat surveys of terrestrial ecosystems. Hugh has considerable experience regarding GIS and mapping of ecological constraints and processes.

Caroline Downey is an Assistant Ecologist at AtkinsRéalis holding a BSc (Hons) in Ecology and Environmental Biology from University College Cork. Caroline has worked in ecological consultancy since 2023, with a broad knowledge of Appropriate Assessment, Natura Impact Statements, Ecological Impact Statements and ecological theory and legislation, resultant of her BSc. A focus of Caroline's work to date has been assisting Appropriate Assessment Screenings and supporting the preparation of AA Screening Reports and NIS.

Paul O'Donoghue is an Associate Director at AtkinsRéalis. Paul holds a BSc (Zoology), MSc (Behavioural Ecology) and a PhD (Avian Ecology and Genetics). Paul is a Chartered member of the Society for the Environment (CEnv) and a Full Member of the Chartered Institute of Ecology and Environmental Management (MCIEEM). Paul has over 18 years' experience in ecology; including extensive experience in the preparation of Habitat Directive Assessments / Natura Impact Statements (i.e., Appropriate Assessment under Article 6(3) of the EU Habitats Directive).



4. Existing Environment

4.1 General Context and Land Use

The Site is situated on the N40 Junction in the townland of Curraheen (E.D. Inishkenny), in Curraheen, Co. Cork. The Site is located at the junction between the N40, N22 and L2222 (Curraheen) roads. Land use within the site is predominantly heavily utilised road, with small areas of landscaping within the existing roundabouts and at the road edges. The wider area includes the N40 national road, with surrounding lands dominated by agricultural fields subject to intensive grazing with areas of scrub throughout. To the south of the Site (outside of the red line boundary), several standalone residential houses and farm buildings occur along the Curraheen Road; the closest of these to the Site is c. 200m over land. The Site on the N22 and L2222 roads travels over 2 no. watercourses, one to the south and one to the north. To the south of the Site lies the Dreiheennaleveal watercourse, which is heavily modified, having been realigned during works when the N40 road was initially being built. To the north lies the Maglin River; both watercourses are culverted under the road and landscape planting from when the N40 road was initially being built provides an effective screen between the riparian channels and busy roads.

4.2 Hydrology and Hydrogeology

The Site is situated in the Lee, Cork Harbour and Youghal Bay catchment and the Glasheen [Corkcity]_SC_010 sub-catchment. According to the EPA, The Site crosses the EPA named Dreiheennaleveal watercourse to the south (flows under the L2222), a tributary of the Grange Hill watercourse. The Grange Hill watercourse (as according to EPA mapping; locally identified as the Maglin River) is located to the immediate north of the Site, flowing in an easterly direction under the N22 before connecting with the Curragheen River c. 600m downstream from where the Site is located. The Curragheen River watercourse flows downstream in a predominantly northeasterly direction for c. 6.6km where it joins the River Lee (South Channel). The River Lee (South Channel) flows for c. 3.5km in an easterly direction through Cork City before it joins the main channel of the River Lee which further discharges into the Lough Mahon transitional waterbody (as according to the EPA) and wider Cork Harbour area. The River Lee (South Channel) is further broken into transitional waterbody areas, namely the Lee (Cork) Estuary Upper, and the Lee (Cork) Estuary Lower.

As according to the EPA, the Site is located above the Ballinhassig East (IE_SW_G_004) and Ballincollig (IE_SW_G_002) groundwater bodies and the groundwater vulnerability to contamination under the Site is classified as 'Moderate'. The bedrock aquifer underlying the Site is a combination of 'Locally Important Aquifer – Bedrock which is Moderately Productive only in Local Zones' and 'Regionally Important Aquifer – Karstified (diffuse)'.

Table 4-1 below, highlights the latest status and risk of each of these waterbodies. The relevant hydrology is illustrated in Figure 4-1.

Table 4-1 - Waterbodies relevant to the Site (see overleaf).



Name and Downstream Distance from Site	Waterbody Type	EU Code	Latest WFD Status	Risk Status	Relevance to the Site	Comment
Surface Waterbodies						
Drehideenaleveal watercourse (flows under the L2222 local road, underneath the Site)	River	IE_SW_19C120740	Moderate	At Risk	Within Site boundary	Watercourse is identified as CURRAGHEEN (Cork City) _010 according to the WFD
Grange Hill watercourse (flows under the N22 national road underneath the Site)	River	IE_SW_19C120740	Moderate	At risk	Within the Site boundary	Watercourse is identified as CURRAGHEEN (Cork City) _010 according to the WFD
Curragheen River (600m downstream from the Site)	River	IE_SW_19C120740			600m d/s from the Site	Watercourse is identified as CURRAGHEEN (Cork City) _010 according to the WFD
Transitional Waterbodies						
Lee (Cork) Estuary Upper	Transitional	IE_SW_060_0950	Moderate	At risk	Depositing point of Curragheen River	Contained within River Lee (South Channel according to the EPA)
Lee (Cork) Estuary Lower	Transitional	IE_SW_060_0900	Moderate	At risk	Depositing point of Lee (Cork) Estuary Upper	Contained within River Lee (South Channel according to the EPA)
Lough Mahon	Transitional	IE_SW_060_0750	Moderate	At risk	Depositing point of Lee (Cork) Estuary Lower	
Sub-catchments						



Name and Downstream Distance from Site	Waterbody Type	EU Code	Latest WFD Status	Risk Status	Relevance to the Site	Comment
Glasheen [Corkcity]_SC_010	Sub-catchment	19_17	N/A	N/A	Underlying sub-catchment	
Catchments						
Lee, Cork Harbour and Youghal Bay	Catchment	19	N/A	N/A	Underlying catchment	
Ground Waterbodies						
Ballinhassig East	Groundwater	IE_SW_G_004	Good	At risk	Underlying ground waterbody	
Ballincollig	Groundwater	IE_SW_G_002	Good	Review	Underlying ground waterbody	



4.3 Designated Sites

Natural Heritage Area (NHA) is the basic designation for wildlife sites. These sites are considered to represent important habitats for species of plants and animals whose habitat needs protection¹¹. These sites are protected under the Wildlife Amendment Act (2000)¹².

Additionally, proposed Natural Heritage Areas (pNHA) are those which have been published on a non-statutory basis, and have yet to be statutorily designated. These sites are of significance to flora, fauna, and their respective habitats. These sites will be designated on a phased basis over the coming years. Prior to designation pNHAs are subject to limited protection.

There are no NHAs in proximity of the Site (the closest, Sovereign Islands NHA (000105) is over 23km away). There are 14 pNHAs within a 15km buffer of the Site. The nearest is over 1.7km away (Ballinacollig Cave (001249)) with only an upstream hydrological connection (direct land/air pathways can be safely ruled out at such distances). The nearest pNHA with a downstream hydrological connection is over 13km downstream (Douglas River Estuary (001046)). The designated sites are illustrated in Figure 4-2, below.

4.3.1 National Nature Reserves/National Parks

There are no nature reserves or national parks in the environs of the Site, nor are there any in the downstream waters. Therefore, the Site has no ecological or hydrological connectivity to any National Park or Nature Reserve.

¹¹ <https://www.npws.ie/protected-sites/nha>

¹² <https://www.npws.ie/legislation/irish-law/wildlife-amendment-act-2000>



4.4 Habitats

4.4.1 Annex I Habitats

Annex I habitats were reviewed in the context of the Site and Proposed Works. These are habitats listed on Annex I to the Habitats Directive and for which Member States must designate SACs. The overall objective of the Habitats Directive is to achieve and maintain favourable conservation status for all habitats and species of community interest; and to contribute towards maintaining biodiversity of natural habitats and of wild flora and fauna in member states. To this end, EU member states are obliged to monitor the conservation status of habitats and species. As all habitats (as listed in Annex I) and species of community interest are included, the monitoring requirements obliged to be undertaken by member states is not restricted to European sites (SACs and SPAs) but encompasses the total national resource of each habitat. Consequently, data on Annex I habitat must be collected both within and outside the Natura 2000 network. In addition, member states are obliged, as detailed in Article 17 of the Habitats Directive, to report to the EU commission every six years on the implementation of measures taken towards meeting the objectives of the directive. Annex I habitats are categorised into the following general habitat categories: -

- Bogs, mires and fens
- Coastal habitats
- Dune habitats
- Forests
- Freshwater habitats
- Grasslands
- Heath and scrub
- Rocky habitats

A review of NPWS Article 17 datasets¹³ (last accessed 16th June 2026) identified no Annex I habitats within or adjacent to the Site. It is noted that these datasets are incomplete in their available spatial data in terms of the totality of Annex I habitats in Ireland and also that these datasets do not account for potential Annex I habitats. Taking this into consideration, a review of the Site using aerial mapping and Google Street View highlighted no areas in proximity to the Site with the potential to support any Annex I habitat.

4.4.2 Wetlands

A review of Wetland Survey Ireland (WSI)¹⁴ identified the Carrigrohane Wetland Ponds approximately 1.2km downstream from the Site. However, these ponds drain into the Curragheen River downstream of the works area and thus do not have hydrological connectivity with the Site.

¹³ <https://www.npws.ie/maps-and-data/habitat-and-species-data/article-17> - It is acknowledged that this is not a definitive list as the NPWS datasets are incomplete

¹⁴ <https://www.wetlandsurveys.ie>



There are no sites designated under the Convention of Wetlands (i.e. Ramsar sites) within the environs of the Site.

4.5 Protected and Threatened Species

The National Biodiversity Centre Database (NBDC) was consulted for the presence of protected and/or threatened species within the Site. The Proposed Works are contained within the 2km W66E grid square which was analysed for species records. Only species records from the last 15 years were included for relevance (since 2011).

Mammals recorded within the 2km grid square include Badger (*Meles meles*), Hedgehog (*Erinaceus europaeus*), Irish Stoat (*Mustela erminea* subsp. *hibernica*), and Red Squirrel (*Sciurus vulgaris*); all species which are protected under the Wildlife Acts 1976 (as amended) in Ireland. Records for non-protected mammals, Fox (*Vulpes vulpes*) and Rabbit (*Oryctolagus cuniculus*) also occur. No mammals listed on the EU Habitats Directive have been recorded in the area. There is no suitable habitat for Red Squirrel within or close to the works area. While other species, such as fox and rabbit, are likely to occur in the surrounding agricultural lands, the works area is located within / immediately adjoining the active road corridor and associated landscaping.

Given the land use around the Site which is dominated by agricultural fields with scrub and hedgerows, records for mammals align with the habitats present in terms of potential for foraging, commuting and breeding areas.

Bird records within W66E include those for BoCCI¹⁵ 2020-2026 red listed species Curlew (*Numenius arquata*), Grey Wagtail (*Motacilla cinerea*), and Kestrel (*Falco tinnunculus*). Amber listed species recorded include Swallow (*Hirundo rustica*), Mallard (*Anas platyrhynchos*), House Sparrow (*Passer domesticus*), and House Martin (*Delichon urbicum*). The riparian corridor of watercourses close to the Site provide habitat for birds such as Grey Wagtail while feeding opportunities for waders and waterbirds such as Curlew and Mallard exist within agricultural fields in the wider vicinity of the Site. No breeding or feeding opportunities exist within the Proposed Works red line boundary, which as noted is located within / immediately adjoining the active road corridor and associated landscaping.

370 no. results were returned for invertebrates from the W66E 2km grid square, a single species of which is listed as Vulnerable (Allen *et al*, 2016) as according to Irelands Red List No. 9; the Minor Shoulder-knot (*Brachylomia viminalis*). This species favours damp woodland, heath and fens – this habitat is not present on site.

No flora species as protected under the Flora Protection Order 2022¹⁶ or listed as more than Least Concern on Ireland Red List No. 10 (Wyse Jackson *et al*, 2016) have been recorded within the Site. Records for non-native High-impact (O'Flynn *et al*, 2014) legally restricted species (under Regulation 49 of the Birds & Natural Habitats Regulations (SI 477 of 2011) occur for Japanese Knotweed (*Fallopia japonica*) to the west of the Site (c. 400m over land). This invasive flora species does not occur within the Proposed Works red line boundary as according to NBDC records and from review of Street View images.

¹⁵ <https://birdwatchireland.ie/publications/birds-of-conservation-concern-in-ireland-bocci4-2020-2026/>

¹⁶ <https://www.npws.ie/legislation/irish-law/flora-protection-order-1999>

5. Connectivity to Natura 2000 Sites

5.1 Zone of Influence (Zol)

The “*Zone of Influence*” of a plan, project or development is the area which may experience ecological effects as a result of its implementation, including any ancillary activities. The various impacts of a plan or project will each have their own characteristics, e.g. nature, extent, magnitude, duration etc. Accordingly, the area subject to each impact (“zone of impact”) will vary depending on characteristics of the impact and the presence of pathways for its propagation. Ecological features within or connected to one or more zones of impact could, depending on their sensitivities, be affected by the plan or project under consideration. The area containing such features may be regarded as the Zone of Influence. As such, in establishing the Zone of Influence for a plan, project or development, regard must be had to the characteristics of its potential impacts, potential pathways for impacts and the sensitivities of ecological features in the receiving environment.

In its guidance on selecting which Natura 2000 sites to include in the AA Screening, *Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities* (DEHLG, 2010a) recommends inclusion of sites in the following three categories: -

- Any Natura 2000 sites within or adjacent to the plan or project area,
- Any Natura 2000 sites within the Zone of Influence of the plan or project (generally within 15 km for plans, to be established on a case-by-case basis for projects, having regard to the nature, scale and location of the project, the sensitivities of the ecological receptors and the potential for in-combination effects), and
- Following the precautionary principle, any other Natura 2000 sites for which the possibility of significant effects cannot be excluded, e.g. for a project with hydrological impacts, it may be necessary to check the full extent of the catchment for Natura 2000 sites with water-dependent qualifying interests.

In addition, *Assessment of plans and projects in relation to Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC* (EC, 2021) recommends consideration of Natura 2000 sites hosting fauna which could move to the project area or its zone(s) of impact, and the potential for the project to sever ecological connectivity within or between Natura 2000 sites. *Appropriate Assessment Screening for Development Management* (OPR, 2021) emphasises the importance of employing the source-pathway-receptor model (rather than arbitrary distances) when selecting Natura 2000 sites for inclusion in the AA Screening.

Based on the above considerations, the Zone of Influence for the Proposed Works was defined as the combination of the following zones of impact: -

- For direct impacts, all areas within and immediately joining the works area.
- For temporary disturbance to birds and mobile species such as otter and other fauna, as well as effects associated with the spread of invasive alien species, all areas within a precautionary buffer of 500m from the works area.
- For water quality impacts, the EU code IE_SW_19C120740 watercourse, within and downstream of the works area, and subsequently the River Lee and Lough Mahon.



- For indirect effects, all other areas with potential ecological connectivity to the above zones of impact, i.e. upstream and downstream of the proposed works on the EU code IE_SW_19C120740 watercourse (this includes Drehideenaleveal, Grange Hill, and Curragheen watercourses).

5.2 Identification of Sites

5.2.1 Direct Impacts

The Proposed Works on the N40 are not located within or in close proximity to any Natura 2000 site (c. 14.6km downstream to Cork Harbour SPA (closest Natura 2000 site)). Therefore, there will be no direct impacts on any Natura 2000 sites such as habitat loss or fragmentations, degradation, pollution or disturbance of habitats or species which are qualifying interests of Natura 2000 sites, due to construction activities, plant, human disturbance or impacts to water quality as a result of Proposed Works.

5.2.2 Disturbance and Invasive Alien Species

Disturbance impacts include noise, visual, and other forms of disturbance to animal species. The extent of such impacts is highly dependent on their magnitude and the sensitivity of the receptors. In the case of the Proposed Works, a precautionary distance of 500m from the Site was used. No Natura 2000 sites occur within this 500m disturbance buffer; the closest Natura 2000 site (Cork Harbour SPA which is designated for a range of waterbird species) lies c. 14.6km downstream (or c. 12km over land). The Great Island Channel SAC which is designated for Annex I habitats only (no faunal qualifying interests), further lies c. 16km over land within the Lough Mahon transitional waterbody. Therefore, there is no potential for disturbance impacts to the qualifying interest Cork Harbour SPA or any additional Natura 2000 site as a result of the Proposed Works.

Given the uncertainty and complexity of effects relating to the spread of invasive alien species, it is not possible to define a zone of impact. For example, species such as Japanese Knotweed (*Fallopia japonica*) are considered to pose a threat to the integrity of riparian habitat and fringing riparian habitats along river systems. However, in this instance works are occurring within the existing footprint of the N40, N22, and L2222 roads where there will be little to no vegetation clearance to facilitate works (vegetation removal limited to landscaped areas within the existing roundabouts). No works will occur within or adjacent to existing watercourses (works are restricted to areas on the road above culverted watercourses on the existing carriageway). No records for legally restricted invasive alien species or species of concern have been recorded within the footprint or in relevant proximity to the Site. Given the nature of works and the Site, and the large geographic distance downstream to the closest Natura 2000 site (Cork Harbour SPA c. 14.6km downstream) there is no potential for the spread of invasive species to Natura 2000 sites and sensitive qualifying interest species and habitats as a result of the Proposed Works.

5.2.3 Water-related Impacts

Water quality impacts include pollutions of surface waters and groundwater by sediment, hydrocarbons (e.g. diesel, hydraulic oils and lubricating oils), concrete and other cementitious materials, and other deleterious matter arising during construction and operation. In the case of Proposed Works, water quality impacts could include dust, materials arising from resurfacing works and concrete pouring, fuels and other hydrocarbons from vehicles, and surface water run-off during operation. The zone of impact for water quality covers the EU code IE_SW_19C120740 watercourse and downstream within the River Lee, and through wider connectivity, Lough Mahon. Cork Harbour SPA and the Great Island Channel SAC occur within this zone of impact and are designated for aquatic habitats and species (waterbirds and wetlands [A999] in the case of Cork Harbour SPA, and mudflats and sandflats [1140] and Atlantic salt meadows [1330] in the case of the Great Island Channel SAC) sensitive to water-quality impacts.



5.2.4 Indirect and Uncertain Effects

Apart from Cork Harbour SPA and the Great Island Channel SAC, there are no additional Natura 2000 sites within or intersecting the Zone of Influence for indirect impacts, i.e. the wider Cork Harbour area or upstream of the EU code IE_SW_19C120740 watercourse. Thus, there are no Natura 2000 sites for which indirect or uncertain effects need to be considered.

5.2.5 Summary

Based on the above examination of the zone of impact for water quality impacts and hydrological connectivity from the Proposed Works to the River Lee, Lough Mahon and subsequently Cork Harbour SPA (004030) and the Great Island Channel SAC (001058), these 2 no. Natura 2000 sites have been selected for inclusion within this AA Screening assessment.

European sites in relation to the Proposed Works is illustrated in Figure 5-1 below.



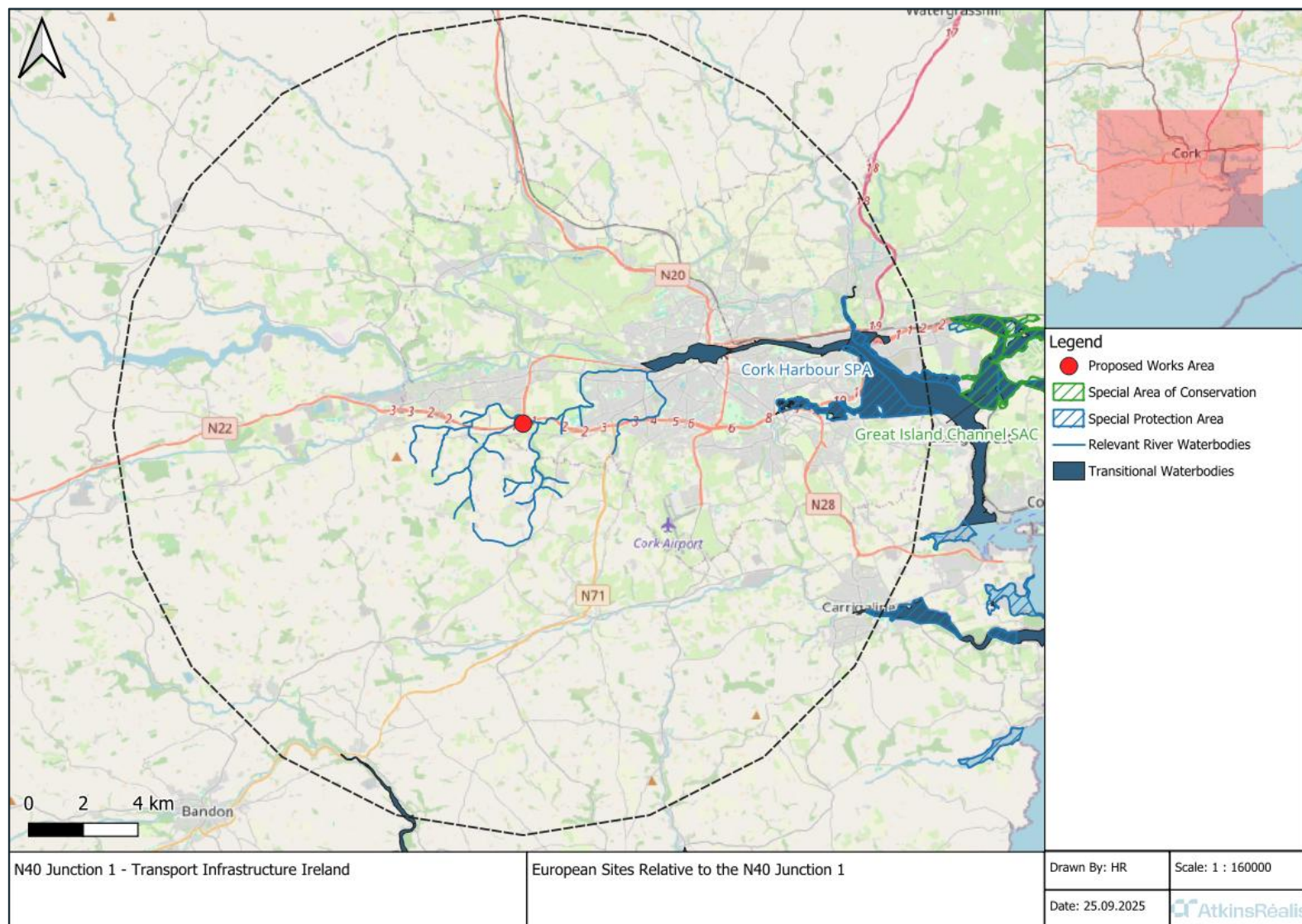


Figure 5-1 - European sites relative to the Proposed Works.



5.3 Description of Natura 2000 Sites

The description of the Natura 2000 sites presented in this section are based on the Site Synopsis, Conservation Objectives and Natura 2000 Standard Data Form documents for the sites concerned, augmented by information from the supporting documents available on the site-specific pages of the NPWS website.

Annex I habitat types marked with an asterisk (*) are “priority habitat types”, i.e., natural habitat types in danger of disappearing and for the conservation of which the EU has a particular responsibility given the proportion of their natural ranges falling within the European territory of Member States.

5.3.1 Cork Harbour SPA

Cork Harbour SPA is described as follows in the NPWS site synopsis (NPWS, 2015): -

“Cork Harbour is a large, sheltered bay system, with several river estuaries - principally those of the Rivers Lee, Douglas, Owenboy and Owennacurra. The SPA site comprises most of the main intertidal areas of Cork Harbour, including all of the North Channel, the Douglas River Estuary, inner Lough Mahon, Monkstown Creek, Lough Beg, the Owenboy River Estuary, Whitegate Bay, Ringabella Creek and the Rostellan and Poul nabibe inlets.

*Owing to the sheltered conditions, the intertidal flats are often muddy in character. These muds support a range of macro-invertebrates, notably *Macoma balthica*, *Scrobicularia plana*, *Hydrobia ulvae*, *Nephtys hombergi*, *Nereis diversicolor* and *Corophium volutator*. Green algae species occur on the flats, especially *Ulva* spp. Cordgrass (*Spartina* spp.) has colonised the intertidal flats in places, especially where good shelter exists, such as at Rossleague and Belvelly in the North Channel. Salt marshes are scattered through the site and these provide high tide roosts for the birds. Some shallow bay water is included in the site. Rostellan Lake is a small brackish lake that is used by swans throughout the winter. The site also includes some marginal wet grassland areas used by feeding and roosting birds.*

Cork Harbour is of major ornithological significance, being of international importance both for the total numbers of wintering birds (i.e. > 20,000) and also for its populations of Black-tailed Godwit and Redshank. In addition, it supports nationally important wintering populations of 22 species, as well as a nationally important breeding colony of Common Tern. Several of the species which occur regularly are listed on Annex I of the E.U. Birds Directive, i.e. Whooper Swan, Little Egret, Golden Plover, Bar-tailed Godwit, Ruff, Mediterranean Gull and Common Tern. The site provides both feeding and roosting sites for the various bird species that use it. Cork Harbour is also a Ramsar Convention site and part of Cork Harbour SPA is a Wildfowl Sanctuary.”

5.3.1.1 Conservation Objectives

The Conservation Objectives for Cork Harbour SPA are to maintain the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (NPWS, 2014a) (last accessed 16/06/2026).

The favourable conservation status of a species is achieved when: -

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats.



- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future.
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

The conservation objective for non-breeding birds Special Conservation Interests of Cork Harbour SPA (NPWS, 2014a) are summarised in Table 5-1.

Table 5-1 - Conservation Objectives of Cork Harbour SPA.

Objective 1: To maintain the favourable conservation condition of the waterbird Special Conservation Interest species listed for Cork Harbour SPA, which is defined by the following list of attributes and targets:			
Parameter	Attribute	Measure	Target
Population	Population Trend	Percentage change as per population trend assessment using waterbird count data collected through the Irish Wetland Bird Survey and other surveys	The long-term population trend should be stable or increasing
Range	Distribution	Range, timing or intensity of use of areas used by waterbirds, as determined by regular low tide and other waterbird surveys	There should be no significant decrease in the range, timing or intensity of use of areas by the waterbird species of Special Conservation Interest other than that occurring from natural patterns of variation.
Area	Wetland habitat	Area (Ha)	The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,587 Ha, other than that occurring from natural patterns of variation.

5.3.1.2 Potential Threats

The threats, pressures and activities¹⁷ with impact on Cork Harbour SPA are itemised in Table 5-2.

Table 5-2 - Threats, pressures and activities with impacts on the SPA.

Rank	Threats and pressures (code)	Threats and pressures (type)	Inside/outside/both (i/o/b)
M	F02.03	Leisure fishing	i
H	E02	Industrial or commercial areas	o
M	G01.01	Nautical sports	i
M	D03.02	Shipping lanes	i
M	G01.02	Walking, horse riding and non-motorised vehicles	i
H	D01.02	Roads, motorways	o
H	E01	Urbanised areas, human habitation	o
L	E01.03	Dispersed habitation	o
H	F01	Marine and Freshwater Aquaculture	i
M	G01.06	Skiing, off-piste	i
M	A08	Fertilisation	o
H	D03.01	Port areas	o

5.3.2 Great Island Channel SAC

A synopsis of the SAC, as detailed by NPWS, is summarised as follows (NPWS, 2013): -

“The Great Island Channel stretches from Little Island to Midleton, with its southern boundary being formed by Great Island. It is an integral part of Cork Harbour which contains several other sites of conservation interest. Geologically, Cork Harbour consists of two large areas of open water in a limestone basin, separated from each other and the open sea by ridges of Old Red Sandstone. Within this system, Great Island Channel forms the eastern stretch of the river basin and, compared to the rest of Cork Harbour, is relatively undisturbed. Within the site is the estuary of the Owennacurra and Dungourney Rivers. These rivers, which flow through Midleton, provide the main source of freshwater to the North Channel.

The main habitats of conservation interest in Great Island Channel SAC are the sheltered tidal sand and mudflats and the Atlantic salt meadows. Owing to the sheltered conditions, the intertidal flats are composed mainly of soft muds. These muds support a range of macro-invertebrates,

¹⁷ <https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF004030.pdf>

notably *Macoma balthica*, *Scrobicularia plana*, *Hydrobia ulvae*, *Nephtys hombergi*, *Nereis diversicolor* and *Corophium volutator*.

The saltmarshes are scattered through the site and are all of the estuarine type on mud substrate. Species present include Sea Purslane (Halimione portulacoides), Sea Aster (Aster tripolium), Thrift (Armeria maritima), Common Saltmarsh-grass (Puccinellia maritima), Sea Plantain (Plantago maritima), Greater Sea-spurrey (Spergularia media), Lax-flowered Sea-lavender (Limonium humile), Sea Arrowgrass (Triglochin maritimum), Sea Mayweed (Matricaria maritima) and Red Fescue (Festuca rubra).

The site is extremely important for wintering waterfowl and is considered to contain three of the top five areas within Cork Harbour, namely North Channel, Harper's Island and Belvelly-Marino Point. Shelduck is the most frequent duck species with 800-1,000 birds centred on the Fota/Marino Point area. There are also large flocks of Teal and Wigeon, especially at the eastern end. Waders occur in the greatest density north of Rosslare, with Dunlin, Godwit, Curlew and Golden Plover the commonest species. A population of about 80 Grey Plover is a notable feature of the area. All the mudflats support feeding birds; the main roost sites are at Weir Island and Brown Island, and to the north of Fota at Killacloyne and Harper's Island. Ahanesck supports a roost also but is subject to disturbance. The numbers of Grey Plover and Shelduck, as given above, are of national importance.

The site is an integral part of Cork Harbour which is a wetland of international importance for the birds it supports. Overall, Cork Harbour regularly holds over 20,000 waterfowl and contains internationally important numbers of Black-tailed Godwit (1,181) and Redshank (1,896), along with nationally important numbers of nineteen other species. Furthermore, it contains large Dunlin (12,019) and Lapwing (12,528) flocks. All counts are average peaks, 1994/95 – 1996/97. Much of the site falls within Cork Harbour Special Protection Area, an important bird area designated under the E.U. Birds Directive.

The site is of major importance for the two habitats listed on Annex I of the E.U. Habitats Directive, as well as for its important numbers of wintering waders and wildfowl. It also supports a good invertebrate fauna."

5.3.2.1 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.
- 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.
- The conservation status of its typical species is favourable.



The favourable conservation status of a species is achieved when: -

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats.
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future.
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

The conservation objectives for Great Island Channel SAC, to maintain or restore the favourable conservation condition for each of the qualifying interests of the site, were published by NPWS (2014b) Version 1.0; 06/06/2014, and are as follows: -

- To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in Great Island Channel SAC.
- To restore the favourable conservation condition of Atlantic salt meadows in Great Island Channel SAC.

5.3.2.2 Potential Threats

The site synopsis for the Great Island Channel SAC describes the land use and threats to the SAC as follows; *'While the main land use within the site is aquaculture (oyster farming), the greatest threats to its conservation significance come from road works, infilling, sewage outflows and possible marina developments.'*

The threats, pressures and activities with impacts on the SAC (NPWS, 2019)¹⁸ are itemised in Table 5-3.

Table 5-3 - Threats, pressures and activities with impacts on the SAC.

Rank	Threats and pressures (code)	Threats and pressure (type)	Inside/outside/both (i/o/b)
M	A08	Fertilisation	o
H	F01	Marine and freshwater aquaculture	i
H	J02.01.02	Suppression of natural fires	i
H	D01.02	Roads and motorways	i
H	E01	Urbanised areas and human habitation	o
M	I01	Invasive non-native species	i
M	A04	Grazing	i
M	K02.03	Eutrophication (natural)	i

¹⁸ <https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF001058.pdf>

6. Likely Significant Effects

6.1 Identification of potential impacts

The identification of potential impacts in this section, uses the “source-pathway-receptor” model. According to this model, for an impact to exist, all three of the following criteria must be met: -

- Some aspect of the plan or project must act as a source of an impact.
- There must be a pathway capable of conveying the impact to a receptor.
- The receptor must be sensitive to the impact.

The types of impacts likely to arise from the proposed works and their specific sources are described in Section 5.2 above and the potential receptors of qualifying interests of the Natura 2000 sites concerned are described in Section 5.3. Given that the sources and the receptors are already known, the following sections focus on the identification of potential pathways between those sources and receptors.

6.1.1 Cork Harbour SPA

Table 6-1 below identifies the pathways for impacts and thus the potential impact of the Proposed Works on Cork Harbour SPA.

Table 6-1 - Identification of potential impacts on Cork Harbour SPA.

Qualifying Interest	Description and Pathways for Impacts	Potential Impact
Little Grebe (<i>Tachybaptus ruficollis</i>) [A004] Great Crested Grebe (<i>Podiceps cristatus</i>) [A005] Cormorant (<i>Phalacrocorax carbo</i>) [A017] Grey Heron (<i>Ardea cinerea</i>) [A028] Shelduck (<i>Tadorna tadorna</i>) [A048] Teal (<i>Anas crecca</i>) [A052] Pintail (<i>Anas acuta</i>) [A054] Red-breasted Merganser (<i>Mergus serrator</i>) [A069] Oystercatcher (<i>Haematopus ostralegus</i>) [A130] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Grey Plover (<i>Pluvialis squatarola</i>) [A141] Lapwing (<i>Vanellus vanellus</i>) [A142] Dunlin (<i>Calidris alpina</i>) [A149] Black-tailed Godwit (<i>Limosa limosa</i>) [A156]	A range of waterbird species which utilise the habitats such as mudflats, saltmarsh and wetlands within the Cork Harbour area for foraging and breeding purposes, including wintering bird populations. At the closest point, Cork Harbour SPA lies c. 14.6km downstream from the Site. There is no suitable breeding or foraging habitat within the construction footprint of the Proposed Works with the potential to support any of the qualifying interest bird species of Cork Harbour SPA; habitat within the Site is predominantly built land with small elements of planted landscaping. The Site is remote from the SPA and is subject to a high level of regular disturbance from traffic due to its function as a major junction off the N40 road such that Proposed Works will not increase disturbance above baseline levels and thus no aspect of the works will act as a source of impact for disturbance to any qualifying interest bird species of Cork Harbour SPA. As such, given the lack of a source, there is not a complete source-pathway-receptor chain for impacts from the Proposed Works to these qualifying interest species. Therefore, potential impact can be ruled out at this stage.	No



Qualifying Interest	Description and Pathways for Impacts	Potential Impact
Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Curlew (<i>Numenius arquata</i>) [A160] Redshank (<i>Tringa totanus</i>) [A162] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Common Gull (<i>Larus canus</i>) [A182] Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183] Common Tern (<i>Sterna hirundo</i>) [A193] Wigeon (<i>Mareca penelope</i>) [A855] Shoveler (<i>Spatula clypeata</i>) [A857]		
Wetlands and waterbirds [A999]	Wetland habitat is integral to the health and function of Cork Harbour SPA as it provides vital foraging and breeding habitat for the qualifying interests wintering and waterbird species of the SPA (as listed above). According to Ireland Wetland Surveys ¹⁹ , the closest known example of a wetland to the Proposed Works is in Atlantic Pond, adjacent to the main channel of the River Lee c. 13km downstream; this wetland habitat example is isolated from the main channel of	No

¹⁹ www.wetlandsurveys.ie



Qualifying Interest	Description and Pathways for Impacts	Potential Impact
	the River Lee and there is no hydrological connectivity with this wetland example and the Site. Further downstream, examples of wetland habitat occur throughout the Lough Mahon and wider Cork Harbour area. Proposed works are limited to shallow excavation of short duration and limited use of concrete – with none of the works close to a watercourse. Discharge of pollutants to the existing network is not anticipated – as needed connections to the drainage network can be blocked during works. The existing N40 road carriageway includes existing discharges to the Maglin / Curraheen river, within the catchment of the River Lee. While elements of the drainage network are to be relocated no other changes to the network design or discharges to this catchment are proposed. With respect to operational surface water runoff, while much of the surface water run-off drains to ground by infiltration, links to surface water in Cork Harbour via the Maglin / Curraheen / Lee catchment does occur, but the connection is extremely remote, with extensive dilution within harbour waters. As such, given the location, type and duration works, with the extremely remote hydrological connection, impacts from the Proposed Works to this qualifying interest habitat are not anticipated. Therefore, potential impact can be ruled out at this stage.	



6.1.2 Great Island Channel SAC

Table 6-2 below identifies the pathways for impacts and thus the potential impact of the Proposed Works on the Great Island Channel SAC.

Table 6-2 - Identification of potential impacts on the Great Island Channel SAC.

Qualifying Interest	Description and Pathways for Impacts	Potential Impact
Mudflats and sandflats not covered by seawater at low tide [1140]	This coastal habitat type covers intertidal mudflats and sandflats which are submerged at high tide and exposed at low tide²⁰, occurring as a major component of estuary and large shallow bay habitats. The physical structure of the intertidal flats range from mobile, coarse-sand beaches on wave-exposed coasts to stable, fine-sediment mudflats in estuaries and other marine inlets. Within the Cork Harbour wider area, the closest known example (according to the NPWS available Article 17 data²¹ and Map 3 of the Conservation Objectives document (NPWS, 2014b)) of this habitat is limited to the north-eastern section of Lough Mahon within the coastal areas adjacent to Little Island, Carrigtwohill and Ballinacurra. These locations lie c. 16km over land from the Proposed Works (c. 20.5km downstream via connected waterbodies including the River Lee). Although a coastal habitat with which there is some degree of hydrological connectivity (given that examples of this habitat type occur within the Lough Mahon transitional waterbody to which the River Lee discharges), the large geographical distance from Proposed Works and dilution factor of the River Lee and Lough Mahon represent a break in the pathway between the Proposed Works and any known example of this habitat type. As such, given the lack of a pathway, there is not a complete source-pathway-receptor chain for impacts from the Proposed Works to this qualifying interest habitat. Therefore, potential impact can be ruled out at this stage.	No
Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]	This coastal habitat type develops when halophytic vegetation colonises soft intertidal sediments of mud and sand in areas protected to strong wave action²², forming the middle and upper reaches of salt marshes where tidal inundation still occurs with a decreased frequency and duration. Within the Cork Harbour	No

²⁰ <https://sac.jncc.gov.uk/habitat/H1140/>

²¹ <https://www.npws.ie/maps-and-data/habitat-and-species-data/article-17/2019>

²² <https://sac.jncc.gov.uk/habitat/H1330/>



Qualifying Interest	Description and Pathways for Impacts	Potential Impact
	wider area, the closest known example (according to the NPWS available Article 17 data and Map 5 of the Conservation Objectives document (NPWS, 2014b)) of this habitat is limited to areas within the Great Island Channel section of the Lough Mahon transitional waterbody, within coastal areas adjacent to Glounthaune, Fota Island, Ballintubber West and up to Ballinacurra and Midleton. The closest known of these habitat locations lies 17.3km over land from the Proposed Works (c. 21km downstream via connected waterbodies including the River Lee). Although a coastal habitat with which there is some degree of hydrological connectivity (given that examples of this habitat type occur within the Lough Mahon transitional waterbody to which the River Lee discharges), the large geographical distance from Proposed Works and dilution factor of the River Lee and Lough Mahon represent a break in the pathway between the Proposed Works and any known example of this habitat type. As such, given the lack of a pathway, there is not a complete source-pathway-receptor chain for impacts from the Proposed Works to this qualifying interest habitat. Therefore, potential impact can be ruled out at this stage.	

6.1.3 Summary

In Table 6-1 and Table 6-2 above it has been possible at this stage to rule out all impacts and/or adverse effects resultant of the Proposed Works on all qualifying interest species and habitats of both the Great Island Channel SAC and Cork Harbour SPA.



7. In-combination Effects

7.1 Requirement for Assessment

The requirement for AA arising out of Article 6(3) of the Habitats Directive covers plans and projects that, “*either individually or in combination with other plans or projects*”, are likely to have a significant effect on one or more Natura 2000 sites. This means that AA is required for any plan or project that, in combination with other plans or projects, would have a significant effect on one or more Natura 2000 sites, irrespective of the presence or absence of such effects from that plan or project on its own. Therefore, regardless of the significance of the effects of the plan or project individually, the potential for significant effects in combination with other plans and projects must be considered in all cases.

7.2 Approach and Methodology

The objective of this requirement is to capture significant effects potentially arising from the cumulation or other interaction of non-significant effects from multiple plans and projects. Consequently, the assessment of potential in-combination effects is not a pair-wise assessment, rather, it considers the totality of the effects arising from all plans and projects affecting the Natura 2000 site(s) in question. In identifying the plans and projects to be included in this assessment, it is important to define an appropriate geographical scope and timescale over which potential in-combination effects are to be considered and the sources of information to be consulted, as described below. It is also important to consider the nature of the interactions between effects, which may be additive, antagonistic, synergistic or complex.

7.2.1 Geographical Scope

In defining the geographical scope for identifying potential in-combination effects, it is important to remember that effects are evaluated in view of the conservation objectives of the Natura 2000 site(s) concerned. As such, two or more effects relating to the same conservation objective for a given Natura 2000 site would combine even if their geographical extents did not overlap. For example, the loss of a small area of an Annex I habitat type listed as a qualifying interest of a Natura 2000 site would combine with the loss of an entirely unconnected area of the same habitat type from a remote part of the same site to produce an in-combination effect, the significance of which would need to be evaluated in view of the relevant conservation objective. On that basis, the scope of the assessment of in-combination effects extends to all plans and projects affecting the same conservation objectives as the plan or project under consideration, irrespective of whether those effects are significant or not.

In this case, however, given the scale of the Proposed Works and sensitivities of the Natura 2000 sites in its ZoI, it was deemed most appropriate to include areas near the Proposed Works and their ZoI (as described in Section 5.1) within the geographical scope for identifying potential in-combination effects. As such, planning applications within 1km of the Site have been assessed.

7.2.2 Timescale

The timescale over which potential in-combination effects were considered in this case covered plans and projects from 5 years ago (i.e. 2021) to the present and all reasonably foreseeable future plans and projects, i.e. published draft plans and projects which are already in the planning system or have received planning permission.



7.2.3 Sources of Information

The following sources of information were consulted to gather information on other plans and projects: -

- Cork City Council Planning Viewer
<<https://www.corkcity.ie/en/council-services/services/planning/search-for-a-planning-application/>>
- Cork County Council Planning Data accessed via GIS;
<<https://services.arcgis.com/NzIPQPKn5QF9v2US/arcgis/rest/services/IrishPlanningApplications/FeatureServer/1>>
- An Coimisiún Pleanála Planning Applications accessed via GIS;
<https://services.arcgis.com/NzIPQPKn5QF9v2US/ArcGIS/rest/services/IrishPlanningApplications_FVLay er/FeatureServer>
- Cork City Development Plan 2022 - 2028²³
- Transport Infrastructure Ireland²⁴
- Irish Water²⁵
- EIA Portal <<https://www.gov.ie/en/department-of-housing-local-government-and-heritage/services/eia-portal/#view-the-eia-portal>>

7.3 Assessment

Cork City Development Plan 2022-2028 sets out policies and objectives for the development of the county. The Plan aims to promote the sustainable development and improvement of the economic, environmental, cultural and social aspects of Cork City. The Plan also requires that any developments must be subject to AA process and that permitted developments comply with the requirements of the WFD, the relevant River Basin Management Plans and the Habitats Directive. A Strategic Environmental Assessment (SEA) was prepared for the Plan, and it went through the AA process. The findings of which were integrated into the objectives of the Plan resulting in a plan that affords high levels of protection to the environment and Natura 2000 sites.

A review of Transport Infrastructure Ireland (TII) publicly available planned projects²⁶ returned the planned construction of the Cork Luas²⁷. However, this project has yet to undergo its preliminary design phases and the proposed works to the N40 Junction will be completed long before the Cork Luas. As such no in-combination effects are envisaged.

A review of Uisce Éireann (Irish Water) projects²⁸ did not identify any water projects in the vicinity of the Proposed Works.

²³ <https://www.corkcity.ie/en/cork-city-development-plan/>

²⁴ <https://www.tii.ie/projects/>

²⁵ <https://www.water.ie/projects/>

²⁶ <https://www.tii.ie/public-transport/projects-and-improvements/>

²⁷ <https://www.tii.ie/en/public-transport/projects-and-improvements/luas-cork/>

²⁸ <https://www.water.ie/projects/?map=our-projects&id=627>

A review of the EIA Portal identified several developments where Environmental Impact Assessment Reports were submitted. These developments are included in Table 7-1 below.

A search of Cork County Council planning, Cork City Council planning and An Coimisiún Pleanála planning applications has been undertaken for applications submitted within the last 5 years in the vicinity the Proposed Works (last accessed 24/09/2026). Near the proposed works, projects that have been granted planning permission include retention of existing developments, typical extensions to domestic dwellings or the construction of new domestic dwellings. Regarding potential impacts to water quality, these projects will have to comply with the EPA's *Code of Practice for Domestic Wastewater Treatment Systems* (EPA, 2021). These developments have conditions attached to their planning permission relating to sustainable development, foul surface water and effluent drainage facilities, and clean surface water run-off drainage facilities. Therefore, it is not anticipated that the developments that have been granted permission will have any significant effects in combination with the Proposed Works.

Key developments which shall be considered are large-scale developments in the region of the Proposed Works. Relevant developments are listed in Table 7-1.

Table 7-1 - Relevant planning applications in proximity to the N40 junction.

Source	Planning Reference	Planning Authority	Development Description
EIA Portal / Cork City Council Planning	2544222	Cork City Council	<i>"For a 10-year permission for the following Large Scale Residential Development (LRD) comprising the demolition of the existing farmhouse and associated outbuildings on site, the construction of 1,150 no. residential units to include 638 no. dwelling houses (comprising a mix of 2, 3 and 4 bed detached, semi-detached and townhouse units) and 512 no. apartments/duplex units (including a mix of 1, 2 and 3 bed units in 9 no. blocks ranging in height from 3 to 5 storeys; and the restoration and refurbishment of Maglin House and the existing gate lodge to provide 3 no. apartments), 1 no. creche, 3 no. retail units, a section of the Maglin Urban Expansion Area Sustainable Access Corridor (which includes cycle lanes, footpaths, bus lanes, and road carriageway), and all associated ancillary development works including vehicular and pedestrian access, drainage, footpaths & cycle lanes, landscaping, amenity and open space areas, boundary treatments (including landscaped berm and acoustic fence on the southern boundary adjoining the N22), bicycle and car parking, bin storage, the undergrounding of the existing 38kv overhead line currently traversing the site, public lighting and all other ancillary development at Maglin, Carrigrohane and Ballynora (townlands), Ballincollig, Cork. An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) has been submitted to the planning authority with the application. The Environmental Impact Assessment Report and</i>



Source	Planning Reference	Planning Authority	Development Description
			<i>Natura Impact Statement will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy during office hours at the offices of the Local Authority. The application may be inspected online at the following website set up by the applicant: www.maglinlrd.com</i>
EIA Portal / Cork City Council Planning	26/44718	Cork City Council	<i>"Large-Scale Residential Development (LRD) consist of the demolition of existing agricultural buildings and the construction of 300 no. residential units, creche and all ancillary site development works."</i>
EIA Portal / Cork City Council Planning	2544048	Cork City Council	<i>"Large-Scale Residential Development for the construction of a mixed-use residential development of 544 no. residential units a two storey creche facility, commercial/retail unit and all ancillary site development works."</i>
Cork City Council Planning	2241644	Cork City Council	<i>"Permission for the construction of a residential development of 99 no. residential units and all ancillary site works. The proposed development includes the construction of 75 no. dwelling houses comprising 3 no. 4 bedroom detached dwellings, 30 no. 4 bedroom semi-detached dwellings, 18 no. 3 bedroom semi-detached dwellings, 12 no. 3 bedroom townhouses and 12 no. 2 bedroom townhouses. The proposed development also includes the construction of 2 no. 3 storey buildings containing 1 no. 3 bedroom duplex unit, 12 no. 2 bedroom duplex/apartment units and 11 no. 1 bedroom apartment units with ancillary bicycle racks. Vehicular access to the proposed development will be via the existing junction from the Killumney Road serving the Heathfield residential development and the internal road network of the development permitted by Cork City Council Planning Reference 19/38923. The proposed development also provides for a shared pedestrian and cycle path to the site from the Killumney Road. The proposed development also comprises minor amendments from that previously permitted by planning reference 19/38923 to the east of site."</i>
Potential for in-combination: No – the AA Screening concludes that there is no requirement for Stage Two, as no impacts to European sites are envisaged. The above 4 no. developments requiring EIA also undertook Natura Impact Assessments, both of which include specific mitigation measures to negate impacts relating to water quality,			



Source	Planning Reference	Planning Authority	Development Description
noise and lighting, as well as to biodiversity. The development identified on Cork City Council Planning website was subject to an Ecological Impact Assessment (EclA) which further included specific mitigation measures to negate impacts relating to water quality, noise and lighting, as well as to biodiversity for this development. Given that all identified developments have undergone individual and in-combination assessment against their impact on relevant Natura 2000 sites and general biodiversity, and the small scale of the proposed works at the N40 Junction (no instream works or works over water, contained within the existing road footprint), in-combination effects with other plans or projects on Natura 2000 sites can be ruled out.			

Thus, it is considered that there are no An Coimisiún Pleanála, Cork County Council or Cork City Council approved developments or projects that will act in combination with the Proposed Works to give rise to significant in-combination effects on any European sites.

7.4 Likelihood of Significant Effects on Natura 2000 Sites

The Proposed Works does not lie directly within, or adjacent to, any European Sites, and as such no direct impacts to European Sites are envisaged.

Indirect hydrological and hydrogeological impacts via the Curraheen River and Lee Estuary are ruled out due to the significant (>13km) downstream geographic distance to any European Sites, and as such indirect impacts are not envisaged.

8. Consideration of Findings

This Appropriate Assessment Screening Report has examined the details of the proposed N40 Junction 1 Improvement, Curraheen Co. Cork, and the Natura 2000 sites within its Zone of Influence. It has analysed the potential impacts of the Proposed Works on the receiving environment and evaluated their effects, both individually and in combination with other plans and projects in view of the conservation objectives of the relevant Natura 2000 sites. This report has been prepared in line with the Habitats Directive, as transposed into Irish Law by the European Communities (Birds and Natural Habitats) Regulations, 2011 (as amended), relevant case law and guidance from the European Commission, the Department of the Environment, Heritage and Local Government and the Office of the Planning Regulator, on the basis of objective information and adhering to the precautionary principle. Following the assessment detailed in this report, it can be concluded beyond reasonable scientific doubt that the proposed works will not, either individually or in combination with other plans or projects, give rise to any impacts which would constitute significant effects on any Natura 2000 site, in view of its conservation objectives.

Therefore, it is the recommendation of the authors of this report that Cork City Council, as the competent authority in this case, may determine that Appropriate Assessment is not required in respect of the Proposed Works. Should the scope of the Proposed Works change, a new Appropriate Assessment Screening Report and final determination will be required.



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