ATKINS

Member of the SNC-Lavalin Group

Extension to N40 (South Ring Road) off-ramp at westbound approach to Mahon, J10

EIA Screening Report

Cork City Council

March 2023

Notice

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Document history

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Client signoff

Client	Cork City Council
Project	Extension to N40 (South Ring Road) off-ramp at westbound approach to Mahon, J10
Job number	5215575

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1. Introduction

Cork City Council (CCC) have appointed Atkins to prepare an Environmental Impact Assessment (EIA) Screening Report for the construction and operation of a proposed extension to N40 (South Ring Road) off-ramp at westbound approach to Mahon, J10. The EIA Screening report will be submitted as part of the Part 8 planning documents for the proposed project.

The N40 in Cork City has 11 junctions along its length. It extends from the Poulavone Interchange to the Jack Lynch Tunnel, Westbound. The Mahon Junction (J10) provides connectivity to Blackrock, Mahon and Jacob's Island. Current seven-day average traffic on this section of the N40 comprises of 36,460 (4.7% HGV) for Eastbound movement and 37,760 (4.7% HGV) for Westbound movement.

The current westbound (coming from Jack Lynch Tunnel) off-ramp at Mahon Junction (J10) is relatively short and has limited capacity to accommodate vehicles queueing to access the Mahon area. There are times when the off-ramp traffic (heading to Mahon) spills beyond the existing off-ramp/auxiliary lane and into the hard shoulder, an issue that may become more frequent after the Dunkettle Interchange is fully operational.

It is proposed to address this stacking issue (or traffic queuing issue) by fully utilising the existing N40 road width (or road footprint area) to increase the length of the off-ramp. This will provide an enhanced off-ramp layout thereby improving the safety and functionality of the off-ramp layout to Mahon.

1.1. Proposed Project

The proposed works will use the westbound nearside road channel (Kerb) and will reconfigure the existing layout to provide a hard strip, auxiliary lane, two through lanes and an offside lane measuring 12.5m kerb-to-kerb. The works will extend into the existing wide central median and will replace the existing barrier with a compliant restraint barrier. Figure 1-1 illustrates the proposed cross-section of the N40 Works.

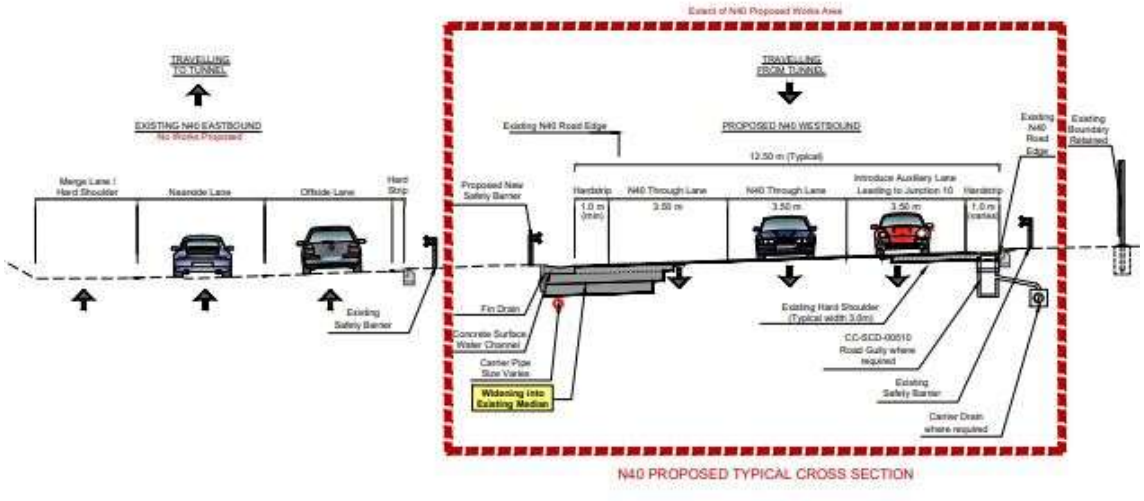

Figure 1-1 Proposed Extension to N40 (South Ring Road) - Cross Section

1.1.1. Construction Methodology

Two lanes will be maintained under temporary traffic speed restrictions while works are undertaken in the central median. Access and egress to the works area will be controlled through designated entry points along the westbound carriageway.

The works will commence with the establishment of the traffic management system, agreed with the Contracting Authority.

Utilities and services will be identified and protected; works will then commence with the removal of the existing safety barrier that falls within the works zone. Excavation works will then be undertaken for the widened road box to formation level (assume 1.2m deep) and this will be stepped into the existing bound/unbound carriageway.

Drainage, kerbing, safety barrier and utility work will be undertaken concurrently with a new surface course and inlay course which will extend across the entire road platform. Works will conclude with new road markings that define the new auxiliary lane and associated through lanes.

The proposed works are anticipated to take approximately four months to complete.

1.1.2. Summary of Works

The location and extent of the proposed project are presented in Figure 1-2 and Figure 1-3. The works which will commence directly east of Mahon Junction (J10), will maintain the southern channel and then transition northwards into the existing N40 central median to form a three-lane platform that comprises of two N40 through lanes and an extended auxiliary lane.

The new westbound cross-section will comprise of 3 lanes (2 x through lanes and 1 x auxiliary lane) and will extend east from the tip of the off-ramp for 0.75km. This arrangement utilises fully the existing 3.0m wide hard shoulder to provide an extended auxiliary lane measuring 600m.

The build-out into the central median measures approximately 1.7m and extends the overall road platform from 10.8m to 12.5m.

Excavation into the central median is approximately 4,264m3. The excavated material will comprise of Class U1, there will be no hazardous material excavated in the works. Planed material comprises the removal for the pavement surface course (45mm of Hot Rolled Asphalt) (area of planning is ca. 8,240m^2).

Both nearside and offside construction will comprise of road builds, including bound and unbound pavements and sealed (surface and sub-soil) drainage system that connects into the existing drainage system and outfalls to existing drainage outfalls to Lough Mahon.

The auxiliary works will tie into the existing off-ramp ramp and in the offside channel it will transition into the existing N40 as per TII Publications.

The N40 Auxiliary Project will include:

- Temporary Traffic Management
- Earthworks excavation and road planning. The excavated material is extracted from the central median and is required to facilitate the construction of the road box extension; Volume of excavation is 4,264m^3.
- Excavation of channel drains manholes.
- Installation of a sealed drainage system that utilises the existing sealed drainage system and will upgrade the existing sealed drainage system where necessary. It is not planned to provide new outfalls, but instead to fully utilise the existing N40 outfalls.
- Installation of geomembranes. This consists of the replacement of existing geomembrane liners which will be replaced along the median.
- Installation of capping material and unbound subbase.
- Bound pavement layers (base layer, binder course and surface course) to step and match into existing pavement structure. A new wearing course is proposed along the extent of the works, this will replace the existing surface course which has exceeded its design life.
- Construction of slip-form concrete surface water channel along the offside hard strip and kerb and gully along the nearside hard strip.
- Provide an upgraded safety barrier in the median.
- Construction of a new gantry off-ramp sign.
- Landscape/Profile verge and median to match into existing.
- Provide road markings similar to existing and compliant with TSM Chapter 7[1].
- Associated Works.

[1] https://www.trafficsigns.ie/_files/ugd/971679_914c75a55daf403482f34c68d35d3894.pdf

1.1.2.1. Site Compound

It will be the responsibility of the Contractor to determine a suitable location for the site compound within the proposed project area, but away from any identified environmental sensitive receptors (watercourses, designated sites etc) so as to avoid potential impacts to the environment and the general public. It is planned that existing Local Authority (Cork City Council) depots in the locality, will be utilised during the construction phase to store similarly inert materials for incorporation in the proposed project. Materials will be brought to site on a periodic basis as required directly from suppliers. Parking for operatives will be at the main compound only. Operatives will be transported from the compound to the works area. No parking will be allowed within the temporary works area or on the N40.

1.1.2.2. Planned material volumes

The planned waste material will comprise of:

- Pavement surface course (45mm of Hot Rolled Asphalt) spanning an area of approximately 8,240m2.
- Excavated material from the central median for the purpose of construction of the roadbox extension. The total expected volume of excavation is 4,262 m3.

Additionally, the following materials will be brought in for the construction of the bound pavement layers:

- Base Layer (AC 32 Dense Base 40/60): 706m3
- Binder Course (AC 20 Dense Bin 40/60): 283m3
- Surface Course (SMA 14 surf PMB 65/105-60): 431m3

1.1.3. Drainage

The design of the proposed N40 surface water drainage system is based on the following operational requirements and sensitive environmental considerations:

- To enhance and upgrade the existing drainage surface drainage system to avoid surface flooding on the road which could result in traffic delays or accidents. The proposed surface drainage system will be designed to accommodate a one-year storm in-bore without surcharge. The design will be checked against a five-year storm intensity to ensure that surcharge levels do not exceed the levels of chamber covers,
- Provide adequate subsurface drainage, to lower the water table in areas where the road is in cut, to prevent structural damage of the road pavement,
- Dispose of surface water run-off at the two existing outfalls at Chainage 10,700 and 11,040, having regard to the impact of the stormwater on the receiving waters,
- Selection of suitable collection and conveyance techniques - suitable type and capacity to collect run-off from the proposed road,
- Minimise the potential impact of the road and indeed of the surface water drainage system itself on the hydrological conditions of the surrounding area and on the receiving watercourses,
- Consideration of potential for overland flow from surrounding areas (median and verge) towards the road,
- Consideration of water quality and pollution requirements,
- Presence of sensitive and protected habitat types adjoining the N40, and
- Implications of climate change.

1.1.3.1. Proposed Surface Water Drainage

In response to the above design parameters, the proposed surface water drainage system has been designed iteratively using the requirements set out in TII publication 'Drainage Systems for National Roads' (DN-DNG-03022). The drainage system has been designed to provide a system which treats run-off from the proposed road while also conveying flow to existing outfalls. The existing road alignment and its surface water collection and drainage system is divided into 2 No. drainage catchments (Catchment 1 and Catchment 2). The proposed surface water drainage network utilises these same catchment zones and will comprise of:

- 0.7 km of new surface water channel offside and Kerb & gully nearside to enhance and serve the proposed works.
- 2 No. existing outfall balancing chamber systems to existing outfalls.
- Pollution control where there is a net increase in catchment.

A surface water channel (SWC) system is being proposed for carrying the catchment volume of water while reducing the need of extensive network of carrier pipes. This system will provide an economical alternative to edge channels for positive drainage. In the central reserve, the level of the back of channel is set below the carriageway allowing flooding to occur within width of the central reserve. This safeguards against flows from the surcharged channel overtopping the central reserve and flowing into the carriageway.

The following section includes a brief description of each N40 catchment, its location along the proposed works and the proposed outfall location.

Catchment 1

Catchment 1 is located at the western end of the proposed project from Ch. 10.300 to 10,750. The existing catchment covers an area of approximately 4,792m2 and the proposed works is 5,956m2, an increase of 24%.

As a result of the net area increase in the reconfigured Catchment 1, this will result in an increase in pollution load and risk of spillage; therefore, a pollution control system is required. A Class 1 By-Pass Hydrocarbon Interceptor Klargester NSBE075 Hydrocarbon Interceptor which typically measures 5.8m x 2m will be installed within Cork City Council owned lands between the N40 and 10,700 outfall.

Catchment 2

Catchment 2 is located at the eastern end of the proposed project from Ch. 10.750 to 11,025. The existing catchment covers an area of approximately 3,792 m2 and the proposed works is 3,392 m2, a decrease of -12%.

Catchment 2 discharges to the existing outfall at 11,040, the reconfigured network results in a total catchment reduction of -12%; therefore, because there is a reduction in catchment area which also results in a reduction in pollution load and risk of spillage, a pollution control measure is not required.

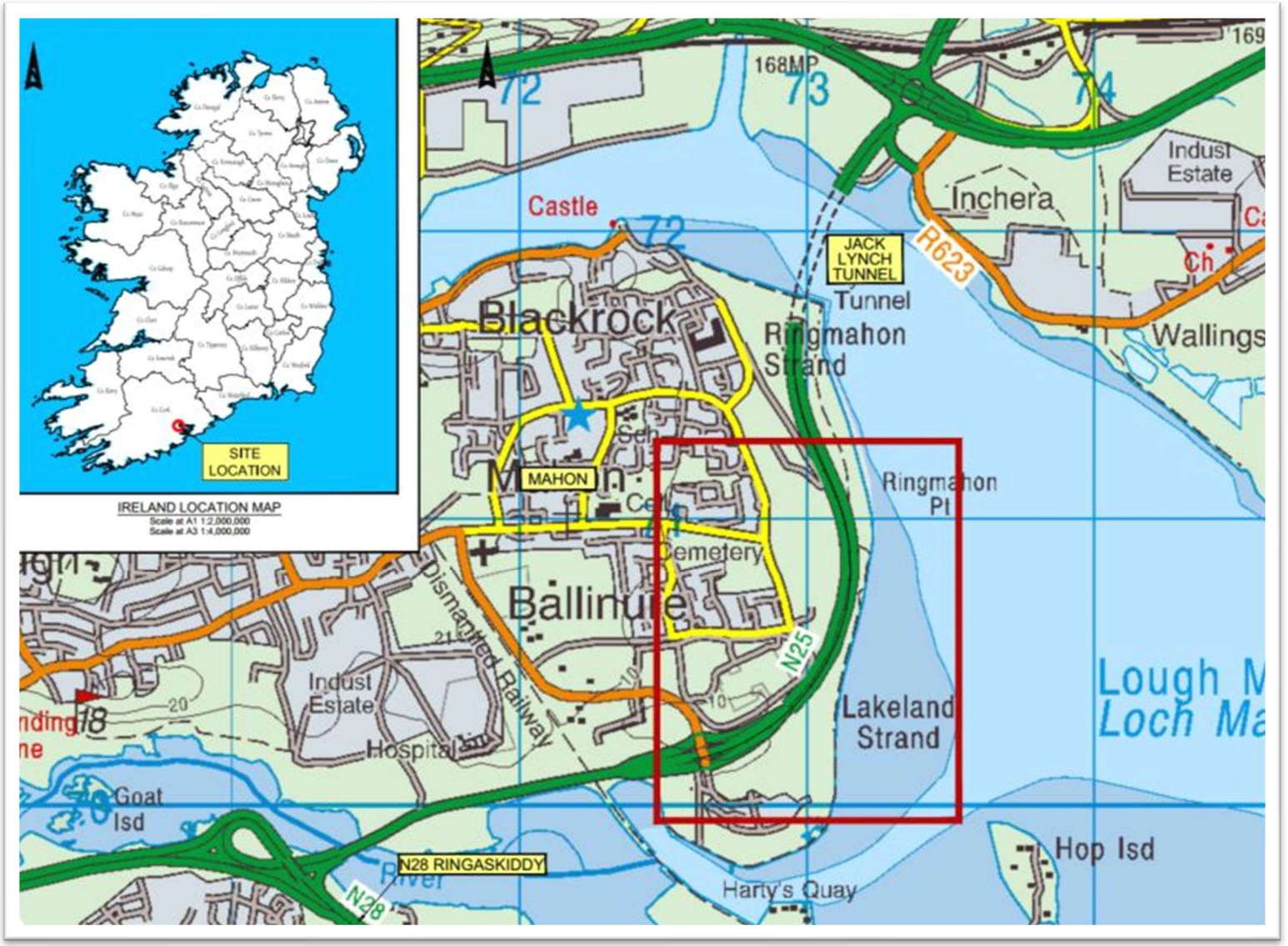

Figure 1-2 Site Location Map

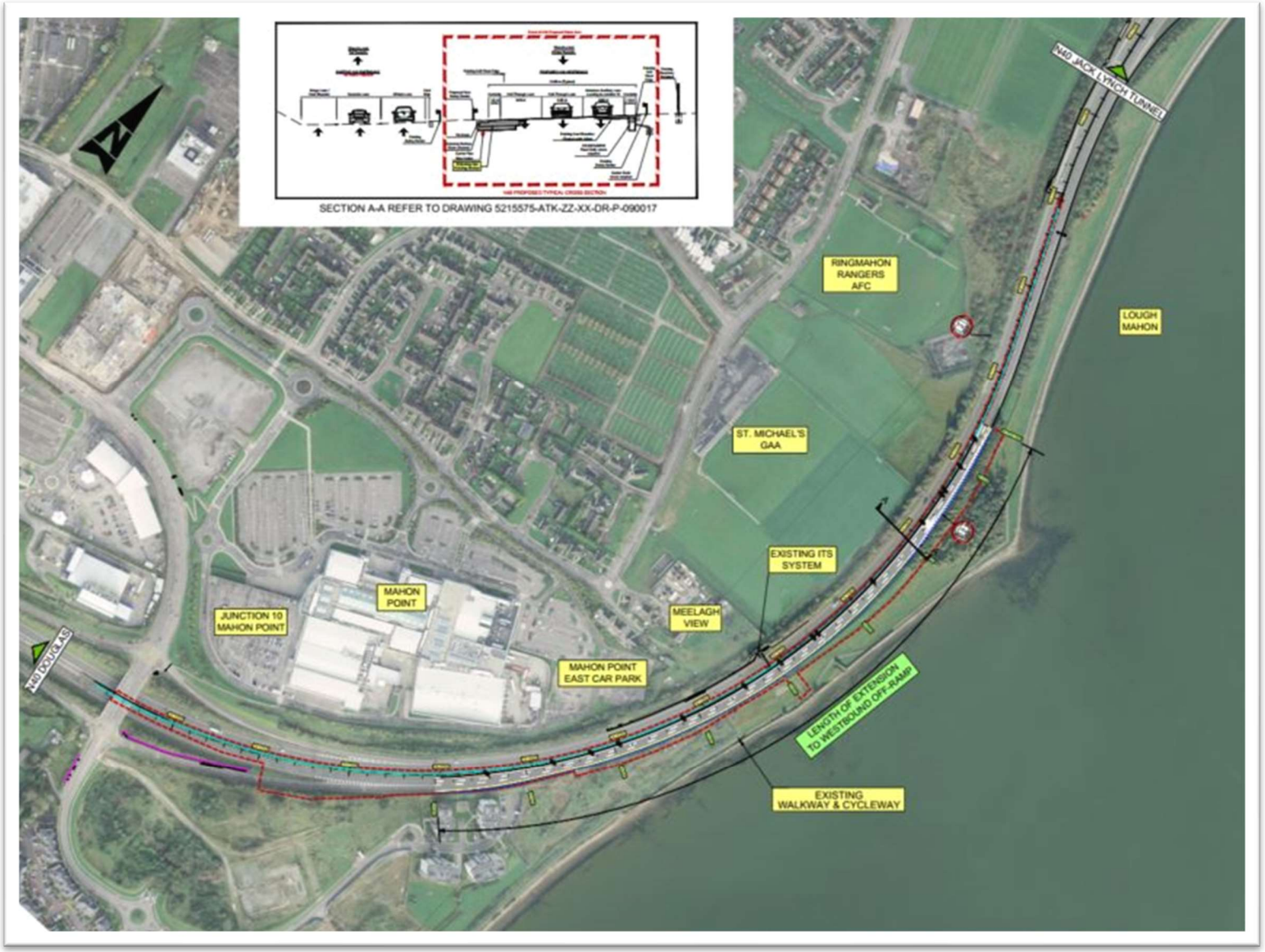

Figure 1-3 Plan Layout

1.2. Purpose of this Report

The purpose of this report is to determine whether the project requires the preparation of an Environmental Impact Assessment Report (EIAR). The project has been screened to generate a summarised overview of potential significant impacts on the receiving environment, and in the context of relevant statutory requirements.

A Stage 1 Screening for Appropriate Assessment has been prepared for the proposed project (Atkins, 2023). The project has been assessed with regards to the likely significant effects of the project on European sites within the zone of influence of the proposed project. The Screening for AA concluded that

'beyond reasonable scientific doubt that the proposed development will not, either individually or in combination with other plans or projects, give rise to any impacts which would constitute significant effects on Cork Harbour SPA (site code: 004030), Great Island Channel SAC (site code: 001058) or any other Natura 2000 site, in view of their 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.'

2. Methodology

This project has been screened in accordance with Section 3.2 of the '*Guidelines on the information to be contained in Environmental Impact Assessment Reports* (EPA, 2023), the Environmental Impact Directive (85/337/EEC) and all subsequent relevant amendments, Planning and Development regulations (2001-2022), including S.I. No. 296 of 2018 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, which came into operation on 1st September 2018. The project has been screened in accordance with the Roads Act, 1993-2021 and the European Union (Roads Act 1993) (Environmental Impact Assessment) (Amendment) Regulation 2019 S.I. No. 279 of 2019.

As set out under the relevant legislation (detailed further in Section 2.1 of this report), the following steps are involved when carrying out EIA screening for a particular project:

- **Step 1** is to determine if the proposed infrastructure works represent a project as understood by the Directive and if a mandatory EIAR is required. Such projects are defined in Article 4 of the EIA Directive and set out in Annexes I and II. Projects requiring a mandatory EIAR are included under Section 50 of the Roads Act (1993-2021), S.I. No. 279 of 2019 amendments and the prescribed projects listed in Section 8 of the Roads Regulations,1994 (S.I. No. 119 of 1994).
- **Step 2** is to determine if the project is likely to have significant effects on the receiving environment. Section 50 (1)(b) of the Roads Act (1993-2021) states that *'if An Bord Pleanála considers that any road development proposed (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment it shall direct that the development be subject to an environmental impact assessment.'*

  Section 50 (1)(c) of the Roads Act (1993-2021) states that '*where a road authority or, as the case may be, the Authority considers that a road development that it proposes (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment, it shall inform An Bord Pleanála in writing prior to making any application to the Bord for an approval referred to in section 51(1) in respect of the development.'*

  Section 50 (1)(e) of the Roads Act (1993-2021) states '*where a decision is being made pursuant to this subsection on whether a road development that is proposed would or would not be likely to have significant effects on the environment, An Bord Pleanála, or the road authority or the Authority concerned (as the case may be), shall take into account the relevant selection criteria specified in Annex III.'* Annex III as has been transposed into Irish Legislation via Schedule 7 of the Planning and Development Regulations 2001-2022.

  There are no exacting rules as to what constitutes "significant" in terms of environmental impacts. The responsibility is on Planning Authorities to carefully examine every aspect of a development in the context of characterisation of the project, location of the project and type and characteristics of potential impacts. It is generally not necessary to provide specialist studies or technical reports to complete this screening process, rather to investigate where further studies may be required, and where risks, if any, to the integrity of the receiving environment may lie.

For the purposes of screening sub-threshold development for EIA, all the relevant information as presented within EIA Planning and Development Regulations 2018 (Schedule 7A) has been provided on behalf of the applicant, Cork City Council. The potential for the project to pose a significant impact to the receiving environment has also been evaluated in accordance with criteria listed in the Planning & Development Regulations, 2001 - 2022 (Schedule 7).

The findings of the EIA screening assessment prepared for the project has informed our professional opinion as to whether an EIAR is warranted for the proposed project, with due regard to all relevant statutory requirements and technical guidance. However ultimately it is the responsibility of the relevant planning authority to make a determination as to whether an EIAR is required for a particular project, based on screening conducted by the planning authority.

2.1. Relevant Legislation

The Environmental Impact Directive (85/337/EEC) was brought into force in 1985. Subsequent amendments were made with the following pieces of legislation - 97/11/EC, 2003/35/EC, 2009/31/EC, 2011/92/EU and 2014/52/EU. The Directive was originally transposed into Irish Law by the European Communities (Environmental

Impact Assessment) Regulations, 1989 (S.I. No. 349/1989). This amended the Local Government (Planning and Development Act) 1963 and introduced the requirement for an Environmental Impact Assessment in certain specified circumstances. The most recent amendment to the Directive is focused on clarifying and simplifying the process of EIA. The screening criteria have been updated, and Member States have a mandate to simplify their assessment procedures. EIA reports are to be made more readily understandable to members of the general public. Section 50 of the Roads Acts 1993 and the 2021 amended Regulation outlines certain categories of roads projects which require an EIAR.

EIA Regulations ((Planning and Development) Environmental Impact Assessment) Regulations 2018 (S.I No. 296 of 2018)) transposing the 2014 EIA Directive came into operation on 1st September 2018. These regulations amend the Planning and Development Regulations 2001 (S.I. No.600 of 2001); they seek to transpose EIA Directive 2014/52/EU and to give further effect to the 2011 Directive.

Criteria to evaluate whether significant impacts on the receiving environment will arise from a proposed project are listed under Schedule 7 of the relevant Planning & Development Regulations (2001-2022). A list of the relevant information to be provided by the applicant or developer for the purposes of sub-threshold EIA screening is presented in Schedule 7A of the Regulations, and summarised below;

1. A description of the proposed project, including in particular:
    a. a description of the physical characteristics of the whole proposed project and, where relevant, of demolition works; and,
    b. a description of the location of the proposed project, with particular regard to the environmental sensitivity of geographical areas likely to be affected.
2. A description of the aspects of the environment likely to be significantly affected by the proposed project.
3. A description of any likely significant effects, to the extent of the information available on such effects, of the proposed project on the environment resulting from:
    a. the expected residues and emissions and the production of waste, where relevant: and,
    b. the use of natural resources, in particular soil, land, water and biodiversity.
4. The compilation of the information at paragraphs 1 to 3 shall take into account, where relevant, the criteria set out in Schedule 7.

3. Environmental Impact Assessment Screening

3.1. Step 1 - Mandatory Screening for EIA

The scheme has been screened against the criteria outlined in Section 50(1)(a) of the Roads Act 1993-2021[2] and Article 8 of S.I. No. 119/1994- Roads Regulations, 1994[3]. This project does not fall within any category of development requiring a mandatory EIA; hence the preparation of an EIAR is not required under Section 50 (1)(a).

3.1.1. Sub-threshold Development Likely to Have Significant Effects on the Environment

The scheme has been screened against the criteria outlined in Section 50(1)(b) and 50(1)(c) of the Roads Act 1993-2021, as follows;

> Section 50(1)(b) – *'If An Bord Pleanála considers that any road development proposed (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment it shall direct that the development be subject to an environmental impact assessment.'*
>
> Section 50(1)(c) – '*Where a road authority or, as the case may be, the Authority considers that a road development that it proposes (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment, it shall inform An Bord Pleanála in writing prior to making any application to the Bord for an approval referred to in section 51(1) in respect of the development.'*

Therefore, it is considered that the scheme should undergo an EIA screening to determine if an EIAR would be required in accordance with Section 50(1)(b) and 50(1)(c) of the Roads Act 1993-2021.

3.2. Step 2- Determining if the project is likely to have significant effect on the receiving environment.[4]

All relevant information as required under Schedule 7A has been provided on behalf of Cork City Council and is presented within this screening report. The potential for this project to pose a significant impact to the receiving environment has also been evaluated in accordance with criteria listed in the Planning & Development Regulations, 2001-2022 (Schedule 7), as presented within this screening report.

3.2.1. Description of the Proposed Project (Schedule 7A (1))

A description of the Physical Characteristics of the Whole Proposed Project and Where Relevant of Demolition Works (Schedule 7A (1) (a))

The proposed project is located along the N40 between Junction 11 and 10 on the west bound lane and along the inner road verge. The land use zonings designated to the neighbouring lands are as follows:

- ZO 07. District Centre;
- ZO 11. Retail Warehousing;
- ZO 04. Mixed Use Development;
- ZO 15. Public Open Space; and,
- ZO 16. Sports Grounds and Facilities.

Hydrology and Designated Sites

The proposed project is located within the Lee, Cork Harbour and Youghal Bay Water Framework Directive (WFD) catchment area and Glasheen (Cork city) sub-catchment area. There are 4no. number watercourses

[2] http://www.irishstatutebook.ie/eli/2021/si/12/made/en/print
[3] http://www.irishstatutebook.ie/eli/1994/si/119/made/en/print
[4] Pursuant to Schedule 7(A) of the Planning and Development Regulations as amended 2001-2021

within the general area of the project location as detailed in Table 3-1; the closest watercourse to the project location is the River Lee.

Table 3-1 - Details of waterbodies

Approximate Distance	Watercourse	Code	Name	Designation	River Q Values
287m	River Lee	IE_SW_19L030800	LEE (Cork)	Good	4-5
588m	Tramore River	IE_SW_19M300900	MONEYGURNEY_10	Good	N/A
994m	Tributary of River Lee	IE_SW_19T250870	TIBBOTSTOWN_101	Good	N/A
1.14km	Glashaboy River	IE_SW_19G010600	GLASHABOY (Lough Mahon) _30	Good	4-5

There are 2no. European sites within the potential zone of influence of the proposed project as follows:

- Cork Harbour SPA (site code: 004030)
- Great Island Channel SAC (site code: 001058).

The proposed project lies ca. 0.03km from the boundary of Cork Harbour SPA and ca. 3.6km from the boundary of the Great Island Channel SAC. The project site is not within the boundaries of these sites.

The Cork Harbour SPA is a site of international conservation status for its importance in hosting the following birds; Little Grebe *(Tachybaptus rufi collis),* Great Crested Grebe *(Podicepts crisatus),* Cormorant *(Phalacro corax carbo),* Grey Heron *(Ardea cinerea),* Shelduck *(Tadorna tadorna),* Wigeon *(Anas penelope),* Teal *(Anas crecca),* Pintail *(Anas acuta),* Shoveler *(Anas clypeata),* Red-breasted Merganser *(Mergus serrator),* Oystercatcher *(Haematopus ostraleagus),* Dunlin *(Calidris alpina),* Black-tailed Godwit *(Limosa limosa),* Bar-tailed Godwit *(Limosa lapponica),* Curlew *(Numenius arquata),* Redshank *(Tringa tetanus),* Black-headed Gull *(Chroicocephalus ridibundus),* Common Gull *(Larus canus),* Lesser Black-backed Gull *(Lavus fuscus),* and Common Tern *(Sterna hirundo).*

The Great Island Channel SAC is designated as a site of international importance for the conservation of natural habitats; Mudflats and sandflats not covered by sea water at low tides, and Atlantic salt meadows *(Glauco-Puccinellietalia maritimae).*

There is 1no. proposed Natural Heritage Area (NHA) and no NHA's within the proposed project area. There are 23no. pNHA's within 15km of the project location, as summarised below in Table 3-2.

Table 3-2 – Nearest NHA's and pNHA's within 15km of the project area

Site Name & Code	Approximate distance from site the nearest site
Douglas River Estuary pNHA (001046)	Intersected by the proposed project
Dunkettle Shore pNHA (001082)	0.4km
Glanmire Wood pNHA (001054)	1.4km
Cork Lough pNHA (001081)	6.2km

Monkstown Creek pNHA (001919)	5.7km
Lough Beg (Cork) pNHA (001066)	8km
Whitegate Bay pNHA (001084)	5.74km
Rockfarm Quarry, Little Island pNHA (001074)	2.4km
Great Island Channel pNHA (001058)	2.9km
Owenboy River pNHA (001990)	7.7km
Fountainstown Swamp pNHA (000371)	12.6km
Minane Bridge Marsh pNHA (001966)	13.7km
Ballincollig Cave pNHA (001249)	14km
Lee Valley pNHA (000094)	8.8km
Shournagh Valley pNHA (000103)	13.6km
Blarney lake pNHA (001798)	12.3km
Blarney Bog pNHA (001557)	10.3km
Blarney Castle Woods pNHA (001039)	12.3km
Ardamadane Wood pNHA (001799)	12.2km
Leamlara Wood pNHA (001064)	11.4km
Cuskinny Marsh pNHA (001987)	8.3km
Rostella Lough, Aghada Shore and Poulnabibe Inlet pNHA (001076)	12.3km
Ballynaclashy House, North of Midleton pNHA (000099)	13.6km

Biodiversity / Ecology

There are a total of 4no. wetland habitats located within 1.5km of the proposed Extension to N40 (South Ring Road) off-ramp at westbound approach to Mahon, J10. The proposed project is wholly contained within the boundaries of the N40 roadway. Refer to the table below for a complete list of wetlands.

Table 3-3 - Wetlands along area of works

Site Code	Site Name	Main Wetland Type
WMI_CO308	Monfieldstown Ponds	Artificial pond, reed swamp, marsh, wet grassland, scrub
WMI_CO280	Wallingstown Ponds	Artificial pond, wet grassland, scrub
WMI_CO309	Bessborough Pond Blackrock	Lagoon and saline lake, scrub
WMI_CO86	Dunkettle Shore – Cork harbour SPA	Tidal river, salt marsh, scrub

There are no nature reserves or National Parks located within 15km of the proposed project site.

A search of NBDC records was carried out for the Ordinance Survey Ireland (OSI); based on a polygon that extends approximately 1km east/west from N40 roadway. Several amphibian and mammal species which have been designated for protection under the Wildlife Acts and European Birds Directive have been identified within the polygon area since 2011 i.e., within the vicinity of the proposed project site as listed in Table 3-4.

Table 3-4 - Protected Species identified in the area

Species Name	Designation
Common Dolphin *(Delphinius delphis)*	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Pine Martin *(Martes martes)*	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex V Protected Species: Wildlife Acts
House Martin *(Delichon urbicum)*	Protected Species: Wildlife Acts Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern – Amber List
Little Egret *(Egretta garzetta)*	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species
Peregrine Falcon (*Falco peregrinus)*	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species
Common Tern *(Stema hirundo)*	Protected Species: Wildlife Acts Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern – Amber List

The NBDC report also indicates 2no. 'Threatened Species', Chives *(Allium schoenoprasum)* and Large Red Tailed Bumble Bee *(Bombus (Melanobombus) lapidarius)* have been reported in the area.

According to NBDC species records floral invasive species Japanese knotweed (*Fallopia japonica*), Sycamore (*Acer pseudoplatanus*), Butterfly-bush *(Buddleja davidii),* Evergreen Oak *(Quercus ilex)*, Himalayan Honeysuckle *(Leycesteria Formosa),* Japanese Rose *(Rosa rugosa),* Traveller's-joy *(Clematis vitalba),* Harlequin Ladybird *(Harmonica axyrids),* and *Rhododendron ponticum* have been recorded within the general area of the proposed project site.

No trees will be removed as part of the proposed project, with sections of hedgerows requiring management / cutting back to accommodate the placing of signs along the road verge.

Hydrogeology

The GSI (2023) groundwater wells and springs database does not identify any registered wells ca. within 100m of the proposed project. The nearest reported well is a borehole (GSI Ref. 1707SWW118) located ca.0.6km east of the proposed project site which is reported to a 2km locational accuracy.

The GSI (1999) provides a framework for the protection of groundwater source zones (i.e. zone of contribution to water supply bore holes). There are no public supplies with designated source protection areas within a 5km radius of the proposed project**.**

Groundwater vulnerability beneath the proposed project area has been designated by GSI as 'high', indicating potential for shallow groundwater.

The bedrock aquifer underlying the proposed project is a regionally important bedrock aquifer. There are no gravel aquifers located within the project location or the immediate vicinity. The closest reported gravel aquifer is located ca. 1.4km west of the project site.

The works are located within 1no. Ground Water Body (GWB); Ballincollig GWB. Ground water quality of this GWB is reported to be of 'Good' status for the 2016-2021 period and the Water Framework Directive (WFD) Risk Status is currently under review.

A key component of the groundwater classification is the assessment of the impact of pollution on the groundwater body. The groundwater status classification process accounts for the ecological needs of the relevant rivers, lakes and terrestrial ecosystems that depend on contributions from groundwater.

Geology

The bedrock geology (100k) is divided into 2no. lithologies (GSI, 2023); Waulsortian mudbank; pale-grey massive limestone in the North, and Limestone and calcareous shale in the South.

There are no identified karst features recorded within the vicinity of the project site (GSI, 2023). The closest karst feature is a cave (Ballinlough, Cork) located ca.2.8km west of the proposed project site.

There are no Geological Heritage Sites within the site boundary, however there are three heritage sites West of the site, as follows:

- Beaumont Quarry is ca. 2.7km from the site and described by GSI (2023) as 'a partially revegetated quarry of historical importance in the city, with accessible cave systems.'
- Blackrock Diamond Quarry is located ca. 3.6km from the site and described as a 'historical quarry, where amethyst was found, that has largely been built over, though some portions of quarry walls are still visible' (GSI, 2023).
- Ballinlough Fields is located ca. 4.02km from the site and described by GSI (2023) as an 'outcrop with signs of quarrying and karst features.'

There are no EPA licenced facilities within the site or its immediate environs (EPA, 2023). The closest licenced facility, Murphy Transport Limited (NWCPO-10-04734-04), is located ca. 2km west of the site.

Flooding

Given the location of watercourses from the project location, and the fact that all works will be along the roadway and verges there is limited potential for flooding impacts. During a very extreme flood event, there is low probability that there will be coastal flooding at the north of the site (OPW, 2023).

Archaeology and Cultural Heritage

There are numerous Sites and Monuments Records (SMR) and National Inventory of Architectural Heritage (NIAH) features within 2km of the project site. A non-exhaustive list of features nearest to the proposed project site is provided in Table 3-5.

Table 3-5 - Cultural Heritage Features near proposed project site

Cultural Heritage feature	Feature Type	Distance from site	Description
CO075-022	SMR	0.2km	A small pit (0.76m N-S; 0.65m E-W; D 0.24m) filled with charcoal-rich silty clay
CO074-130	SMR	0.6km	Hearth surrounded by 50 stake-holes. A shallow, truncated, linear feature (L c. 2.4m) was discovered c. 1.5m west of the hearth. A further 7 pits were found to the west – 3 of which were clustered and similarly sized (diameter 0.45-0.83m; D 0.22-0.3m)
CO074-053	SMR	0.6km	Three-storey gate tower (4.2m E-W; 2.8m N-S)
Ringmahon House reg no.: 20868110	NIHA	0.6km	Detached four bay two-storey over half basement house, built c.1820 with single storey flat roofed porch to North
CO074-052	SMR	0.7km	Circular tower (diameter c.10.5m), now surviving to two storeys
Blackrock Castle Observatory Reg no.: 20864028	NIAH	0.7km	Detached castellated fortification, reconstructed 1829
Reg no.: 20868107	NIAH	0.9km	Semi-detached two bay, two-storey with attic house, built c.1860
Reg no.: 20868079	NIAH	1.3km	Attached T-plan chapel built 1824-1825 with four-bay doubly-height nave and single-bay transept to East
CO074-100	SMR	1.3km	Country house built in c.1720
Reg no. 20868078	NIAH	1.3km	Detached fifteen-bay three-storey over basement former convent, built c. 1810, remodelled and extended c.1825
Reg no, 20868080	NIAH	1.3km	Free standing gable-fronted single cell chapel, built c.1810 with two-bay side elevation and diagonally placed buttresses to gable ends
CO074-121	SMR	1.3km	Railway bridge
Bessborough reg no. 20872007	NIAH	0.9km	Detached 3 bay, 2 storey stone folly, built c.1880, in ruinous condition
CO074-077	SMR	1.1km	Mid-18th Century 3-storey house

Note: * indicates that the site of works is with Zone of Notification for this SMR, in cases of NIAH the * indicates close proximity to site

Population and Human Health

There are 11no. Seveso (Control of Major Accident Hazards Regulations (COMAH)) establishments within 8km of the proposed project site, the closest being BASF Ireland Limited ca.0.9km east of the project site. Due to the distance of these Seveso sites from the proposed project site and the activity carried out at these sites (i.e., Chemical manufacturing at the closest site to the project), the proposed project is not located in a high-risk area

with respect to major accidents/ disasters. Due to the nature, scale and location of the proposed project, there will be no impact on any of these Seveso sites.

The proposed project site is located within an urban area with a number of sensitive receptors in terms of dust nuisances and noise and vibration nuisances located within the vicinity of the project including (but not limited to) residential houses.

Given the requirement for works within the confines of road corridors and associated verges, there is potential for impacts to traffic. The environmental sensitivity of geographical areas likely to be affected by the proposed project are evaluated further within Section 3.3.2 of this report ('*Location of proposed project - The environmental sensitivity of geographical areas likely to be affected by the proposed project'*) as required under Schedule 7 of the relevant regulations.

3.2.2. Description of Aspects of the Environment Likely to be Significantly affected by the Proposed Project (Schedule 7A (2)).

The proposed project is not being undertaken within the extents of or adjacent to any European site. There is no connectivity between the proposed project and any of the identified Special Areas of Conservation or Special Protection Areas for birds through physical means such as hedgerows and treelines. The proposed project does not lie within any Nature Reserves or National Parks but it does intersect with the Douglas River Estuary proposed Natural Heritage Area (detailed in Section 3.3.2 of this report). The AA Screening prepared for the proposed project (Atkins, 2023) states that:

'Following the assessment detailed in this report, it can be concluded beyond reasonable scientific doubt that the proposed development will not, either individually or in combination with other plans or projects, give rise to any impacts which would constitute significant effects on Cork Harbour SPA (site code: 004030), Great Island Channel SAC (site code: 001058) or any other Natura 2000 site, in view of their 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.'

The other relevant aspects of the environment (including human health), which could potentially be significantly affected by the proposed project are receiving groundwater environment, surface water environment, soils and geology, air quality environment, the receiving noise and vibration environment, and the receiving traffic environment, during the proposed project.

The project will involve excavations to a maximum depth of 1.2m below ground level (bgl) along the inner verge of the N40. Groundwater vulnerability along the N40 is classified as 'High' groundwater vulnerability indicating that groundwater is potentially shallow and vulnerable to potential contamination. Silt embankments and the geomembrane decrease the groundwater vulnerability in the subject area. If dewatering is required, all water will be transported offsite for disposal at a WWTP.

No refuelling of vehicles will occur at the proposed project location. All vehicles and equipment will be inspected on a daily basis for potential fuel leaks. All site vehicles and equipment will be supplied with spill kits. Due to the nature and scale of the project there will be no likely significant impact on groundwater.

There is potential for contamination associated with urban soils and made ground as part of the existing road. In the unlikely event that contaminated materials are encountered these will need to be segregated from all uncontaminated soils, temporarily stored (any stockpiles should be lined and covered by heavy duty 1000-gauge plastic), sampled and analysed for relevant parameters (Waste Acceptance Criteria suite e.g., Rilta Disposal Suite). Any contaminated soils must be characterised as per the requirements of the relevant Waste Acceptance Criteria (WAC) under the relevant European Communities Council Decision (EC) (92003/33/EC) and classified in accordance with the requirements of the EPA as set out in the following documents 'Waste Classification List of Waste & Determining if Waste is Hazardous or Non-hazardous' (EPA, 2018). Any contaminated soils must be transported by appropriately permitted hauliers and disposed of to an appropriate EPA licensed Waste Facility in accordance with all relevant waste management legislation. Due to the nature and scale of the proposed project there will be no likely significant impact on soils and geology.

The proposed surface water drainage has been designed to provide a system which treats run-off from the proposed road while also conveying flow to existing outfalls. The existing road alignment and its surface water collection and drainage system is divided into 2 No. drainage catchments (Catchment 1 and Catchment 2). The proposed surface water drainage network utilises these same catchment zones and will comprise of:

- 0.7 km of new surface water channel offside and Kerb & gully nearside to enhance and serve the proposed works.

- 2 No. existing outfall balancing chamber systems to existing outfalls.
- Pollution control where there is a net increase in catchment.

A surface water channel (SWC) system is being proposed for carrying the catchment volume of water while reducing the need of extensive network of carrier pipes. This system will provide an economical alternative to edge channels for positive drainage. In the central reserve, the level of the back of channel is set below the carriageway allowing flooding to occur within width of the central reserve. This safeguards against flows from the surcharged channel overtopping the central reserve and flowing into the carriageway.

Accordingly, no significant adverse impacts are anticipated with respect to surface quality, levels or flow.

The proposed project location lies within an urban area with sensitive receptors adjacent to a number of work locations i.e. residential properties. Dust may be generated during the construction phase. Construction will require the use of machinery such as dump trucks, mechanic excavators etc. The presence of such machines may result in a temporary increase in noise and dust. The air quality at the proposed project is *'Good'* (EPA, 2023). However, management of dust will be in line with relevant best practice measures such as those set out in *'Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes'* (NRA, 2011). Due to the nature and scale of the proposed project, no significant impact on air quality is anticipated.

Noise levels will not exceed the indicative levels of acceptability for construction noise in an urban environment as set out in the NRA guidance '*Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes'* (NRA, 2014). It is anticipated that the works will be scheduled during day-time hours. Construction contractors will be required to comply with the requirements of the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations, 1988 as amended in 1990 and 1996 (S.I. No. 320 of 1988, S.I. No. 297 of 1990 and S.I. No. 359 of 1996), and the Safety, Health and Welfare at Work (Control of Noise at Work) Regulations, 2006 (S.I. No. 371 of 2006). Due to the nature and scale of the project it is anticipated that the construction works, and operation of the proposed project will not have a significant impact on noise.

Due to the scale and nature of the project it is not anticipated that there will be impacts on traffic volumes during the construction phase of the project. Two lanes will be maintained under traffic speed restrictions throughout the works area to ensure that traffic is controlled and continues to flow during the construction phase. It is considered that there will be no significant negative impact on traffic during the construction and operational phase of the project.

3.2.3. A Description of Any Likely Significant Effects (To the Extent of The Information Available on Such Effects) of The Proposed Project on The Environment (Schedule 7A(3)).

The Expected Residues and Emissions and the Production of Waste where relevant (Schedule 7A (3)(a)).

The proposed project may give rise to air, noise, water emissions and waste. However, due to the nature and scale of the proposed project, potential impacts from such emissions be minimal. The Contractor will ensure that onsite storm water management during the construction phase is carried out in accordance with relevant best practice measures as set out in Construction Industry Research and Information Association (CIRIA) guidance *'C532 - Control of Water Pollution from Construction Sites'.*

Given the scale and nature of the proposed project any such waste is likely to be generated in very minor volumes. During the construction phase the following waste streams will be generated: construction and demolition (C&D) waste including footways and asphalt / road surface, mixed municipal waste (MMW), recyclables such as plastic wrapping, wooden pallets and paper. All waste will be removed offsite and disposed of by the Contractor to an appropriately licenced waste recovery or waste disposal facility. All waste generated will be disposed of by the Contactor in accordance with all relevant waste management legislation. The Contractor will be responsible for segregating each waste type as per the relevant List of Waste (LoW) (also referred to European Waste Catalogue (EWC) code). All waste materials must be removed offsite by a suitably permitted waste haulage contractor who holds a current valid waste collection permit issued by the National Waste Collection Permit Office (NWCPO).

The Contractor will be obliged to ensure all works are carried out in accordance with the relevant guidelines *'Best Practice Guidelines for the preparation of resource & waste management plans for construction & demolition projects'* prepared by the EPA (2021).

The Use of Any Natural Resources in particular soil, land, water and biodiversity (Schedule 7A (3)(b)).

The project works will be within the existing road network and inner road verge of the N40 and therefore a limited amount of natural resources in the area will be utilised for the proposed project. Trees and vegetation shall be protected as required in accordance with BS:5837:2012 during all works.

The proposed project involves an anticipated excavation depth of 1.2m bgl. All soil requiring disposal offsite will require waste classification in accordance with EPA requirements as set out in the documents 'Waste Classification List of Waste & Determining if Waste is Hazardous or Non-hazardous' (EPA, 2015), and 'Determining if waste is hazardous or non-hazardous' (EPA, 2018), and all relevant waste management legislation. In addition to screening against relevant WAC, the preparation of a waste classification tool (hazwaste online / EPA paper tool or similar etc.) will be required to be carried out in order to determine the relevant LoW / EWC code for the transport of any waste soils which require offsite removal and disposal.

Therefore, based on the environmental setting, and taking account of the nature, scale and location of the proposed project other than standard construction materials, the proposed project (during both construction and operational phases) will not have a significant impact on natural resources.

3.2.4. The Compilation of The Information at Paragraphs 1 To 3 Shall Take into Account, where Relevant, the Criteria set out in Schedule 7 (Schedule 7A(4)).

All relevant criteria set out in Schedule 7 of the Regulations is presented in Section 3.2 *('Criteria for Determining Whether Development Listed in Part 2 of Schedule 5 Should be subject to an EIA')* of this screening report.

During the preparation of Sections 3.3.1 to 3.3.3 (i.e. Schedule 7A (1) to (3)) all pertinent Schedule 7 information has been taken account of as required, with specific details presented in the following section of this report (Section 3.3 and 3.4).

3.3. Criteria for Determining Whether Development Listed in Part 2 of Schedule 5 Should be subject to an EIA

The size and design of the whole of the proposed project (Schedule 7(1)(a))

Refer to Section 3.2.1 under '*A description of the Physical Characteristics of the Whole Proposed Project and Where Relevant of Demolition Works (Schedule 7A (1) (a))*'.

Cumulation with other existing development and/or development the subject of a consent for proposed project for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment (Schedule 7(1)(b))

Committed Development

A search of Cork City Council Planning records has been undertaken for the applications submitted within the past 5 years in the vicinity of the proposed development (last reviewed 04/01/2023). Some of the granted applications have already been completed and of those which are no completed, most are generally small scale in nature (i.e., residential extension works, or property improvement works). Completed or granted applications of such small scale (such as residential improvements) have not been considered further in terms of potential for cumulative impacts.

There are 12no. projects/committed developments, which have not yet been built and have been further evaluated with respect to cumulative impacts with the proposed Extension to N40 (South Ring Road) off-ramp at westbound approach to Mahon, J10, listed in Table 3-5.

Table 3-5 – Committed developments within vicinity of the proposed project

Ref. No.	Location	Application	Status
2241568	Bessborough Ballinure, Blackrock	Permission for the construction of a residential development of 92 no. apartments and creche, to be provided in two buildings ranging in height from 5 to 8 storeys and all ancillary site works at Bessborough, Ballinure, Blackrock, Cork. The proposed development consists of the construction of 1 no. studio apartment, 43 no. 1-bedroom apartments, 30 no. 2-bedroom apartments and 18 no. 3-bedroom apartments. The proposed apartment buildings include ancillary communal resident amenity facilities, bicycle and bin stores, plant areas, switch room, rooftop plant and photovoltaic panels. The proposed development includes the provision of a new pedestrian and cyclist ramp access to the site from the Passage West Greenway to the east and vehicular access to the proposed development will be via an existing access road off the Bessboro Road. Ancillary site development works include an ESB substation, and the upgrade of existing foul sewer infrastructure to serve the	Decision Due 20/01/2023 (Refused) -Appealed

		development. Part of the proposed development is situated within the curtilage of Bessborough House which is a Protected Structure (Reference: RPS 490). A Natura Impact Statement (NIS) has been prepared and will be submitted to the Planning Authority with the application. The NIS will be available for inspection or purchase for a fee not exceeding the reasonable cost of making a copy.	
226358	Wallingstown, Little Island	2 no. data centre buildings on a site formerly occupied by Mitsui Denman. The proposed development provides for the construction of 2 no. data centre buildings as standalone units (to be built in phases) including ancillary offices with associated structures including a substation building, waste compound, telecoms cabinet (PoP Cabinet) new access off the R623 to provide for independent access, car park, external generator & transformer areas to the west of the proposed data centre and all ancillary works. The proposal will modify part of permission granted under 16/5011, for a data centre development changing the permitted data centre building DC3 from 1 permitted building to 2 no. buildings and associated works. Extension of Duration to Permission granted under Planning Ref. No. 17/5895	Decision Due 26/01/2023
2240809	Jacobs Island, Ballinure, Mahon	Permission for the construction of an office and hotel development to be provided in 2 no. buildings at Jacob's Island, Ballinure, Mahon, Co. Cork. The hotel will contain 165 no. bedrooms, meeting rooms, bar/restaurant, cafe and back of house facilities in a part-1 to part-10 no. storey over basement building. The office building (10,632 sqm GFA) will provide 8,361 sqm net office floor area and ancillary staff facilities over part-4 to part-7 no. storeys. The proposed development will also provide for: hard and soft landscaping; car parking; bicycle parking; storage; ESB substations; plant rooms; and all ancillary site development works above and below ground. A Natura Impact Statement (NIS) has been prepared and will be submitted to the Planning Authority with the application. The NIS will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy during office hours of the Planning Authority.	Granted 27/07/2022
2140196	Site adjacent to Telus International, Loughmahon, Ling Road, Mahon	Permission for a residential scheme on a site adjacent to Telus International, Loughmahon Link Road (R852), Mahon, Cork City. The proposed scheme will consist of the demolition of existing geodesic dome (66.1m2) and the construction of 204 apartments across three no. blocks ranging in height from 5-7 storeys in height comprising 98 no. 1 bed units, 63 no. 2 bed units and 43 no. 3 bed units. The proposed development also consists of the construction of a creche facility (217.2m2), communal amenity rooms, plant rooms, lobby areas, outdoor amenity spaces, 54 surface car parking spaces, 460 indoor bicycle parking spaces as well as associated bin storage. Access is proposed via the existing vehicular access onto the Loughmahon Link Road/R852 to the west, the southernmost vehicular access (existing) is proposed for removal. The proposed development also includes landscaping, drainage, roads, surface and boundary treatments, pedestrian crossing, and all associated site development works. The proposed development would be a material contravention of the Development Plan.	Granted 12/07/2022
216427	The Former Corden Pharmachem Site, Wallingstown, Little Island	The demolition of an existing structure and existing hardstanding areas, and the construction of a business park comprising 5no. single-storey light industry /warehousing/distribution/logistics buildings (B1-B5) ranging in size from c.2,600.7m2 to c.7,602.8m2 (total c. 23,534.2m2) each to include a 2-storey internal ancillary office area, apart from building B3 where the 2-storey ancillary office area is external; external yard areas; dock levellers; 3no. substations; single-storey security hut (to include rooftop solar PV	Granted 11/04/2022

		panels); car parking, cycle parking, motorcycle parking and truck parking; internal palisade fencing; tree protection fence; signage, including a stand-alone totem sign; 1no. new vehicular/pedestrian/cyclist access and 1no. new gated pedestrian and cycle access; closure of 2no. existing accesses; shared pedestrian/cycle path on the public road (L7078); and all site development, drainage, lighting, boundary treatment and landscaping works. A Natura Impact Statement will be submitted to the Planning Authority with the application.	
2140453	Bessboro, Mahon	Permission to alter and extend the previously granted Creche building granted under planning reference No. 18/37820 and An Bord Pleanala ABP-302784-18 to incorporate a larger ground floor Creche/Community facility and bin store. The application is also to include for the permission of 10. no. first and second floors apartments to consist of the following: 5 no. first floor apartments: 2 no. 1 bed and 3 no. 2 bed with communal storage and 5 no. second floor apartments: 2 no. 1 bed and 3 no. 2 bed with communal storage and all associated site works.	Granted 17/01/2022
2140146	Mahon Point Shopping Centre, Mahon Link Road	Permission for the development of a lengthened vehicle queueing lane and ancillary pedestrian/cycle infrastructure at Mahon Point Shopping Centre, Mahon Link Road, Cork. The proposed development includes a new section of pedestrian and cycle path, amendments to existing pedestrian crossings including the relocation of one no. existing pedestrian crossing, provision of two no. additional uncontrolled pedestrian crossings, additional road markings/signage, relocation of lighting and all associated and ancillary site development works	Granted 13/10/2021
2139911	Former Lakelands Tavern Avenue De Rennes, Mahon	Permission for a mixed-use scheme on the site of the Former Lakelands View Bar, Avenue De Rennes, Mahon, Cork City. The proposed scheme will consist of the demolition of the existing vacant public house (1012.6m2) and change of use from public house to retail on the ground floor to form 3 no. retail units (comprising 665m2), undercroft and bicycle storage area, and the construction of 39 no. residential units comprising 19 no. 2 bedroom apartments and 20 no. 1 bedroom apartments in a single block ranging in height from 3-5 storeys. Access to the scheme is off Avenue De Rennes to the south. The development also includes site clearance, drainage, landscaping and surface treatments including a pedestrian crossing, 76 no. bicycle parking spaces, bin storage, boundary treatments and all ancillary site development works.	Granted 28/09/2021
2139951	Ringmahon Rangers AFC, Ringmahon Road	Permission to construct an all-weather pitch including floodlighting (6no. 12.5m columns giving average illuminance of 263lux) and 5m high perimeter fencing with 2 access gates, located in existing sports grounds, as well as realignment of an existing stone access road to the Board Gais Energy station adjacent to the sports grounds and associated site works	Granted 20/09/2021
1938875	Blackrock Business Park, Bessboro Road, Mahon	Permission for the construction of 12,004 sq. metres (gross) of office floorspace comprising of a 4-storey office building with an option for internal sub-division to provide up to 16 no. office units, 174 no. surface car parking spaces and 66 no. undercroft /semi-basement car parking spaces and all associated ancillary development works including landscaping, drainage, plant and solar panels (provided at roof level), 1 no. smoking shelter, motorbike and bicycle parking and 1 no. switch room, electrical substation and bin stores.	Granted 11/03/2020
ABP-301991-18	Jacob's Island, Ballinure, Mahon, Cork	Construction of 413 no. apartments, neighbourhood centre, créche, road improvement works including upgrades to the Mahon Link Road (R852) to the North of the N40 interchange to incorporate a dedicated bus lane and all site development works.	Granted 03/10/2018

1837820	Bessboro Road, Mahon	Permission for the demolition and removal of the existing warehouse/distribution building and associated structures and the construction of 135 no. residential units comprising 24 no. dwelling houses, 64 no. duplex apartments and a three-storey apartment block (comprising 20 no. apartments) and a four-storey apartment block (comprising 27 no. apartments). 1 no. crèche, provision for the relocation of 2 no. utility buildings (gas and electricity) and all associated ancillary site development works including vehicular access, parking, footpaths, landscaping, drainage and amenity areas.	Granted 26/09/2018

It is considered that the proposed Extension to N40 (South Ring Road) off-ramp at westbound approach to Mahon (J10) individually, will not result in significant environmental impacts. Accordingly, there is no potential for other projects to act in conjunction with the proposed project to give rise to cumulative environmental effects.

3.3.1.1. The nature of any associated demolition works (Schedule 7(1)(c))

Refer to Section 3.2.1 under *'A description of the Physical Characteristics of the Whole Proposed Project and Where Relevant of Demolition Works (Schedule 7A (1) (a))'.* No demolition works are proposed as part of the proposed project.

3.3.1.2. The use of natural resources, in particular land, soil, water and biodiversity (Schedule 7(1)(d))

Refer to Section 3.2.3 under '*The Use of Any Natural Resources in particular soil, land, water and biodiversity (Schedule 7A (3)(b)).*

3.3.1.3. The production of waste (Schedule 7(1)(e))

Refer to Section 3.2.3 under '*The Expected Residues and Emissions and the Production of Waste where relevant (Schedule 7A (3)(a)).'* The proposed project is not likely to have a significant environmental effect with regard to the production of waste. All waste will be removed to an appropriately licenced/ permitted waste disposal/ recovery facility.

3.3.1.4. Pollution and nuisances (Schedule 7(1)(f))

Refer to Section 3.2.2 under 'Description of Aspects of the Environment Likely to be Significantly affected by the Proposed Project *(Schedule 7A (2))'.* The appointed contractor will be required to put in place site specific pollution control measures to protect local ecology and water quality. A Stage 1 Screening for Appropriate Assessment has also been prepared (Atkins, 2023). The project has been assessed with regards to the likely significant effects of the project on European sites within the zone of influence of the proposed project. The Screening for AA concluded that:

'Following the assessment detailed in this report, it can be concluded beyond reasonable scientific doubt that the proposed development will not, either individually or in combination with other plans or projects, give rise to any impacts which would constitute significant effects on Cork Harbour SPA (site code: 004030), Great Island Channel SAC (site code: 001058) or any other Natura 2000 site, in view of their 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.'

Biosecurity protocols will be implemented during the proposed project to prevent the introduction of invasive species listed on the third schedule of the EC (Birds and Natural Habitats) Regulations 2011, as amended, to site.

The proposed project may generate waste such as metals, asphalt, construction and demolition waste, plastic wrapping, wooden pallets or soil arisings. As outlined previously (under '*The production of waste (Schedule 7(1)(e)*)), appropriate robust waste management procedures will be implemented by the Contractor to ensure that any minimal volumes of waste which will be generated during the construction phase do not pose a pollution / nuisance risk to the receiving environment.

In the event that any excavated soils need to be disposed of offsite as part of the proposed project, such soils/waste material will require waste classification in accordance with EPA requirements as set out in the documents 'Waste Classification List of Waste & Determining if Waste is Hazardous or Non-hazardous' (EPA,

2015), and 'Determining if waste is hazardous or non-hazardous' (EPA, 2018), and all relevant waste management legislations. In addition to screening against relevant WAC, the preparation of a waste classification tool (hazwaste online / EPA paper tool or similar etc.) will be required to be carried out in order to determine the relevant LoW / EWC code for the transport of any waste soils/material which require offsite removal and disposal.

3.3.1.5. The risk of major accidents, and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge (Schedule 7(1)(g))

A search of the OPW floodmaps.ie (2023) indicated that the N40 is not crossed by any watercourses. Based on the nature of the proposed project along with the fact there are no watercourses within 280m of the work location, it is considered that the overall risk of major accidents and / or disasters associated with the proposed project is extremely low and does not warrant further consideration.

3.3.1.6. The risks to human health (for example, due to water contamination or air (Schedule 7(1)(h)) pollution)

Dust may be generated during the construction phase. However, management of dust will be in line with best practice such as that set out in '*Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes'* (NRA, 2011).

Noise levels during the proposed project, will not exceed the indicative levels of acceptability for construction noise in an urban environment as set out in the NRA guidance '*Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes*' (NRA, 2014). The Contractor will be required to comply with the requirements of the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations, 1988 as amended in 1990 and 1996 (S.I. No. 320 of 1988, S.I. No. 297 of 1990 and S.I. No. 359 of 1996), and the Safety, Health and Welfare at Work (Control of Noise at Work) Regulations, 2006 (S.I. No. 371 of 2006). No significant impact on human health due to noise pollution is anticipated to occur during the operational phase of the project.

There are no reported wells (GSI, 2023) within 100m of the proposed project site. Accordingly, there will be no significant impact on human health. The proposed project is underlain by Regionally Important (Rk) bedrock aquifer (GSI, 2023). Groundwater vulnerability along the N40 is 'High'. Such classification indicates that groundwater is shallow and vulnerable to potential contamination. It is noted that existing silt embankments and the geomembrane decrease the groundwater vulnerability in the subject area. If dewatering is required, all water will be transported offsite for disposal at a WWTP. Due to the nature and scale of the proposed project it is not anticipated to have a significant impact on groundwater quality, resources or flow.

Given the location, nature and scale of the proposed project, the overall risk to human health is low.

3.3.2. Location of proposed project - The environmental sensitivity of geographical areas likely to be affected by the proposed project (Schedule 7(2))

The existing and approved land use (Schedule 7(2)(a))

The project will be constructed within a urban setting. The location of the proposed project has been detailed previously in Section 3.3.1 under Schedule 7A (1)(a).

The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground (Schedule 7(2)(b))

Refer to Section 3.2.3 under *The Use of Any Natural Resources in particular soil, land, water and biodiversity (Schedule 7A (3)(b)).*

The absorption capacity of the natural environment, paying particular attention to the following areas (Schedule 7(2)(c)):

(i) Wetlands, riparian areas, river mouths

There are 4no. wetland habitats located within 1.5km of the proposed project area. The proposed project is wholly contained within the boundaries of the N40 roadway and are minimal in nature. There are no watercourses within the immediate vicinity of the project location, with the closest watercourse being 280m from the proposed project. No significant impacts on wetlands, riparian habitats or river mouths are anticipated.

(ii) Coastal zones and the marine environment

The proposed project is located ca.52m from transitional waters of Lough Mahon and ca. 7.3km from the Irish Sea. Therefore, it is not anticipated that it will have a significant impact on the coastal zone or marine environment.

(iii) Mountain and forest areas

There are no mountain or forest areas within 2km of the proposed project site and therefore no impacts on this habitat type.

(iv) Nature reserves and parks

There are no nature reserves or national parks located within 15km of the proposed project site.

(v) Areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive

The proposed project lies ca.0.03km from Cork Harbour SPA (004030) and ca.3.6km from Great Island Channel SAC (001058).

Based on the findings of the Stage 1 Appropriate Assessment Screening report (Atkins, 2023) there will be no potential significant adverse effects to European sites arising from the proposed project.

There are no NHA and 23no. pNHA's within 15km of the proposed project site, the closest of which is within the vicinity of the proposed project (Douglas River Estuary 001048). There is no anticipated potential for significant impact on areas classified or protected under legislation.

(vi) Areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure.

The proposed project lies within the Ballincollig GWB. This GWB has '*good*' water quality status for the period of 2016-2021 (EPA, 2023). Due to the nature and scale of the works it is not anticipated to significantly impact groundwater quality.

The proposed project is located within 1no. Water Framework Directive (WFD) catchment area; Lee, Cork Harbour and Youghal Bay catchment area and 1no. sub-catchment area; Glasheen [Cork City]_SC_010.

Air quality in the area is reported as '*good*' (EPA, 2023). Dust may be generated during the proposed project which has the potential to impact on human health. However, management of dust will be in line with best practice such as that set out in *'Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes'* (NRA, 2011). Due to the nature and scale of the works it is anticipated that there will be no significant impact on air quality.

It is anticipated that there may be a temporary increase in noise volumes. Noise levels shall not exceed the indicative levels of acceptability for construction noise in a rural environment as set out in the TII guidance '*Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes'* (TII, 2014).

It is considered that due to the nature and scale of the project there will be no significant impact on baseline air and water quality from the proposed project.

(vii) Densely populated areas

The proposed project is located within a suburban area of Cork City and is therefore within a densely populate area. However, based on the scale and nature of the project, there will be no significant impact on the local population.

(viii) Landscapes and sites of historical, cultural, or archaeological significance

Refer to 3.3.2 under '*A Description of the Location of the Proposed Project, with Particular Regard to the Environmental Sensitivity of Geographical Areas Likely to be Affected (Schedule 7A(1)(b)).'*

There are no Sites and Monuments Record (SMR) features or National Inventory of Architectural Heritage (NIAH) features within the immediate vicinity of the proposed project site.

The proposed project will be constructed predominantly within the footprint of the existing road network. There is a protected view (reference code LT22) from the Douglas Estuary/Ridge over the N40 as noted within the Cork City Development Plan 2015-2021 (Cork City Council 2015).

It is considered that due to the nature and scale of the project there will be no significant impact on landscapes and sites of historical, cultural or archaeological significance from the proposed project.

3.3.3. Types and characteristics of potential impacts (Schedule 7(3))

The likely significant effects on the environment of the proposed project has been evaluated taking into account the following specific criteria.

The magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected) (Schedule 7(3)(a))

The spatial extent of potential impacts is limited to the localised footprint of the proposed project site (refer to Figure 1-2). Based on the location, current site setting, and the nature of the proposed project, any potential impacts (during the construction and operational phases) are not likely to be significant in magnitude.

The nature of the impact (Schedule 7(3)(b))

There will be no significant impact on the receiving environment arising from the proposed project (during the construction or operational phases).

The transboundary nature of the impact (Schedule 7(3)(c))

There is no potential for transboundary impacts as a result of the proposed project (during the construction or operational phases).

The intensity and complexity of the impact (Schedule 7(3)(d))

There will be no significant impact on the receiving environment arising from the proposed project (during the construction or operational phases).

The probability of the impact (Schedule 7(3)(e))

The probability of impacts on the receiving environment is low given the following considerations:

- The receiving environment is not considered to be at risk of significant impact due to the nature and scale of the proposed project; and,
- The Contractor will be obliged to implement standard best practice procedures prior to commencement of the proposed project including all environmental control measures for the onsite management of any pollution / nuisance issues which could arise during the construction phase.

The expected onset, duration, frequency and reversibility of the impact (Schedule 7(3)(f))

The probability of impacts on the receiving environment is considered to be low, as previously outlined. Therefore, there shall be no requirement for the reversibility of the impacts caused by the proposed project (during the construction or operational phases).

The cumulation of the impact with the impact of other existing and/or development the subject of a consent for proposed project for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment (Schedule 7(3)(g))

As previously detailed no significant cumulative impacts associated with the project (during the construction or operational phases) have been identified, arising from other existing and/or approved projects. Refer to Section 3.3.1 under '*Cumulation with other existing development and/or development the subject of a consent for proposed development for the purposes of section 172(1A) (b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment (Schedule 7(1) (b)).*

The possibility of effectively reducing the impact (Schedule 7(3)(h))

Significant effects on the receiving environment are not anticipated as a result of the provision of the proposed project (during the construction or operational phases).

3.4. Potential for Significant Effects on the Receiving Environment

All relevant information as required under Schedule 7A has been provided on behalf of Cork City Council and is presented within Section 3.2 of this screening report. The potential for the proposed project to pose a significant impact to the receiving environment has also been evaluated in accordance with criteria listed Planning and Development Regulations (2001-2022) (Schedule 7), as presented within Section 3.2 of this screening report.

Based on the information provided within Section 3.2 and 3.3 of this report, and summarised below, it is considered that due to the size, nature, and characteristics of the proposed project, no significant effects on the receiving environment are expected; hence the preparation of a sub-threshold EIAR is not required.

3.5. Screening Conclusion

This EIA screening report has been carried out in accordance with the Planning and Development Regulations as amended 2001- 2022 (which give effect to the provisions of EU Directive 2014/52/EU), and the Roads Acts 1993-2021. The report assessed the impact of the Extension to N40 (South Ring Road) off-ramp at westbound approach to Mahon (J10) in conjunction with committed developments in the surrounding area.

Based on all available information, and taking account of the scale, nature and location of the proposed project it is our opinion that the preparation of an EIAR is not a mandatory requirement (under Section 50 of the Roads Acts 1993-2021). The proposed project is deemed a sub-threshold development; hence the potential for significant environmental effects arising as a result of the proposed project has been evaluated, in accordance with the requirements of Schedule 7A and Schedule 7 of the Planning and Development Acts 2001-2022.

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