ARUP

Dublin City Council

Point Junction Improvement Scheme

Appropriate Assessment Screening Report

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1. Introduction

1.1 Overview

This report contains information required for Dublin City Council (DCC) to undertake screening for Appropriate Assessment (AA) for the proposed Point Junction Improvement Scheme in Dublin City (hereafter referred to as the 'proposed development').

1.2 Background

The proposed development will improve the safety of pedestrians and cyclists facilities along East Wall Road within Dublin City.

1.3 Proposed Development Site Location

The proposed development is located within Dublin City (Figure 1). The 3 Arena is located to the west of the proposed development, while Dublin Port is located to the east. Figure 2 shows the proposed development boundary. The proposed works will be carried out along the East Wall Road (R131) from the southern edge of the Exo Building to the Point Roundabout located at North Wall Quay (R801)/East Wall Road and Tom Clarke Bridge (East Link Bridge). The proposed development extends from the Dublin Port gates west along the R801 for approximately 105m. The total area of the proposed development is approximately 0.4ha.

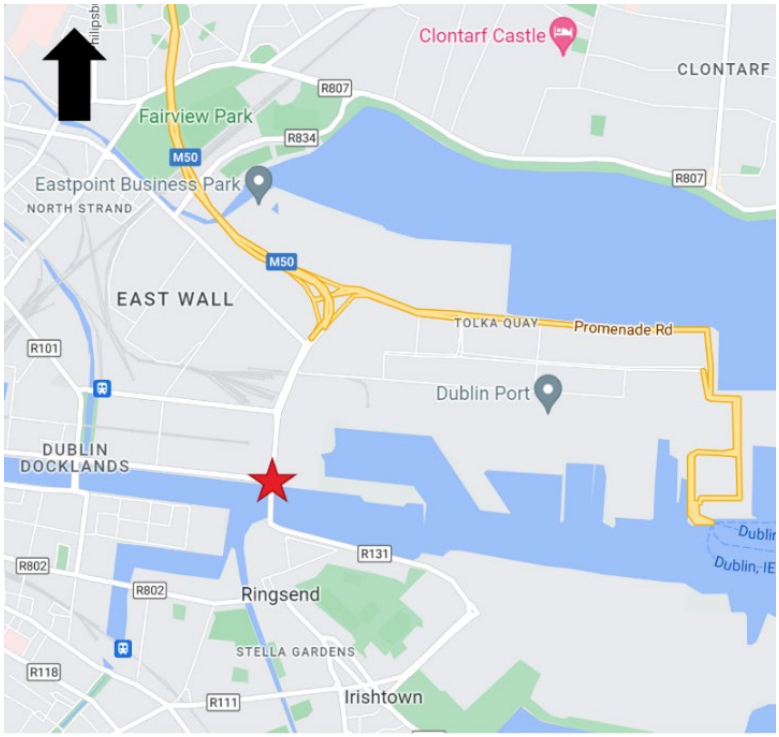

Figure 1: The Proposed Development in the Context of the Wider Dublin Area (indicated by red star) (Source: Google Maps)

Figure 2: Indicative Red Line Boundary of the Proposed Development | Not To Scale (Source: Google Earth)

1.4 Aims and Objectives

The aims of this report are to:

- provide information on, and assess the potential for the proposed development site to significantly impact on Natura 2000 sites (also known as European sites);
- determine whether the proposed development site is directly connected with, or necessary to, the conservation management of any Natura 2000 sites; and
- determine whether the proposed development, alone or in combination with other projects, is likely to have significant effects on Natura 2000 sites in view of their conservation objectives.

1.5 Competent Expert Evidence

Sinead Whyte is a chartered environmental scientist, with 22 years' experience in environmental consultancy. As Environmental Team Lead for Arup Ireland, Sinead has direct responsibility for both the environmental teams and the projects that the team undertakes. She has significant experience in the management and delivery of complex, multidisciplinary projects. She has specialist knowledge in the transport sector, having led a wide range of such projects throughout her career, in which she was involved from inception to completion. She has particular experience in the preparation of reports for EIA, SEA and Industrial Emissions Directive licensing. Her portfolio of projects includes College Green Plaza Project, Bus Connects Dublin, Bus Connects Galway, M20 Cork to Limerick Motorway, Irish Cement Alternative Fuels, Blanchardstown Regional Drainage Scheme and Shannon LNG Terminal. Sinead has presented expert witness evidence at numerous An Bord Pleanála oral hearings.

Fraser Maxwell (BSc, MSc, MCIEEM, CEnv) has reviewed and approved this report as a competent expert. Fraser is an Associate consultant at Arup, leading the Ecology team for Arup's North Region (Belfast, Glasgow, Edinburgh, and Newcastle offices) with over 22 years' experience carrying out Ecological Impact Assessments (EcIA) and over 15 years of undertaking AAs. He is an experienced leader of technical projects including high profile projects and has provided expertise internationally. Fraser is a member of the Scottish Chartered Institute of Ecology and Environmental Management (CIEEM) Committee.

Jessica Boath is a highly competent Ecologist with over 10 years' experience in the ecological consultancy sector. During this time, she has become adept at ecological survey and assessment, understanding the

legislative and policy requirements of different regions, and working to deliver beneficial outcomes for biodiversity. Jessica is an Associate Member of the Chartered Institute of Ecology and CIEEM and strives to instil best practice and high standards in all the work she does.

Amy Sproule is a graduate environmental consultant with Arup and has experience in Appropriate Assessment and HRA. Amy is a Qualifying Member of the CIEEM. She has experience in working across various regions and statutory requirements. She gained a BAgrSc (Hons) in Agri-Environmental Science from University College Dublin while volunteering as part of conservation groups such as Bat Conservation Ireland and RSPB.

1.6 Report Layout

This report contains information required for the competent authority, Dublin City Council, to undertake screening for Appropriate Assessment (AA) for the proposed development at East Wall Road.

This report is based on a desk study. The screening information presented in this report comprises:

- summary of the relevant legislation (Section 2);
- overview of the baseline information and the proposed development environment (Section 3 and 4);
- ecological overview (Section 5) and identification of relevant Natura 2000 sites (Section 6) within the zone of influence of the proposed development;
- consideration of any potential Likely Significant Effect (LSE) (Section 7)
- assessment of significant effects on Natura 2000 sites (Section 8); and
- conclusions and screening statement (Section 9).

1.7 Guidance and Data Sources

This report has been prepared with regard to the following guidance documents, where relevant:

- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 and PSSP 2/10;
- Department of Environment, Heritage and Local Government. Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (2010 revision);
- European Commission Environment Directorate-General [hereafter referred to as MN 2000], Managing Natura 2000 sites: The Provision of Article 6 of the Habitats Directive 92/43/EEC (2000);
- European Commission Environment Directorate-General. Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodical Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (2021);
- European Commission Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC (2007);
- European Commission. Communication from the Commission on the precautionary principle (2000);
- Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive (International Workshop on Assessment of Plans under the Habitats Directive, 2011); and
- Office of the Planning Regulator Practice Note PN01 – Appropriate Assessment Screening for Development Management (2021).

Sources of information that were used to collect data on the Natura 2000 network of sites and on the existing ecological environment comprise:

- Catchements.ie[1];
- Dublin City Council. Dublin City Development Plan 2016 - 2022;
- Dublin City Planning Application Map[2];
- Environmental Protection Agency (EPA) Online Map Viewer[3];
- Google aerial photography (viewed in October 2022);
- National Parks and Wildlife Service (NPSW) online data on designated sites[4];
- NPWS online data on protected flora and fauna[5].

Guidance which has assisted in determining whether impacts are likely to be significant include:

- Environmental Protection Agency. Guidelines on the Information to be Contained in Environmental Impact Statements (2022);
- Flood Maps IE: Layer - Past Flood Events. https://www.floodinfo.ie/map/floodmaps/ (Viewed 25 October 2022);
- Institute of Ecology and Environmental Assessment. Guidelines for Ecological Impact Assessment in the UK and Ireland, Terrestrial, Freshwater, Coastal and Marine (September 2018).

[1] Catchements.ie. Available on www.catchments.ie. Accessed October 2022

[2] Dublin City Council. Available https://mapzone.dublincity.ie/MapZonePlanning/MapZone.aspx?map=PlanningApplication&search=Plan_Ref&tooltip=Plan_Ref. Accessed October 2022.

[3] EPA. Information on environmental quality data. EPA Online Environmental Map Viewer. Available https://gis.epa.ie/EPAMaps/. Accessed October 2022

[4] NPSW. Designated site data. Available on https://www.npws.ie/maps-and-data/designated-site-data. Accessed October 2022.

[5] NPSW. Designated site data. Available on https://www.npws.ie/maps-and-data/habitat-and-species-data. Accessed October 2022.

2. Legislation

2.1 Legislative Background

Pursuant to either Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. 477 of 2011) or other such legislation as determined by DCC (the competent authority) applicable in the case of the proposed works, a screening for AA is required to be carried out on a project or plan that "*individually or in combination with other plans or projects is likely to have a significant effect on the European site"*. AA is a process required under Article 6(3) of the EU Habitats Directive. Article 6(3) is transposed in Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended, and by Part XAB of the Planning and Development Act, 2000, as amended.

All plans and projects which are not directly connected with or necessary to the management of a European site, but which either individually or in combination with other plans or projects, are likely to have a significant effect on "a European site," require an AA of these effects to determine if they will adversely affect the integrity of these sites. The proposed development is considered to fall under the requirements of AA as applied to all plans and projects.

The AA screening process scrutinises the plan or project to determine if there are LSEs either individually or in combination with other plans or projects, on a European site. European sites are part of the Natura 2000 network and include those designated as Special Areas of Conservation (SACs), Candidate SACs or Special Protection Areas (SPAs).

SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and all migratory birds and their habitats. The Annex habitats and species, for which each site is selected, are the *qualifying interests* (QI) for SACs and *special conservation interests* (SCI) for SPAs of each site. *Conservation objectives* for the site are defined for these QI.

A key requirement of the Habitats Directive is that the effects of any plan or project, which is not directly connected with or necessary to the management of a European site, but which alone, or in combination with, other plans or projects, are likely to have a significant effect on a European site, should be assessed before any decision is made to allow that plan or project to proceed. The obligation to undertake a screening for AA, and if necessary, an AA, derives from Article 6(3) of the Habitats Directive (92/43/EEC) and both involve a number of steps and tests that need to be applied in sequential order.

Article 6(3) is concerned with the strict protection of sites, while Article 6(4) is the procedure for allowing derogation from this strict protection in certain restricted circumstances.

Article 6(3) of the Habitats Directive states:

"*Any plan or project not directly connected with, or necessary to, the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans and 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 having ascertained that it will not adversely affect the integrity of the site concerned and if appropriate, after having obtained the opinion of the general public*".

Article 6(4) states:

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

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

2.2 Assessment Methodology

The competent authority is required to carry out a screening for AA, and if necessary, an AA as required by Article 6(3) of the Habitats Directive. If the competent authority determines that the plan or project will adversely affect the integrity of a European site, it may only authorise that plan or project by following the Article 6(4) procedure. The Article 6(3) and 6(4) procedures are outlined as follows:

Stage 1 – Screening for Appropriate Assessment – to assess, in view of best scientific knowledge, if the project or plan, individually or in combination with another plan or project is likely to have a significant effect on the Natura 2000 site.

Stage 2 – Appropriate Assessment – This is required if it cannot be excluded, on the basis of objective information, that the project or plan, individually or in combination with other plans or projects, will have a significant effect on a Natura 2000 site. The AA must include a final determination by the competent authority as to whether or not a proposed project would adversely affect the integrity of a Natura 2000 site. In order to reach a final determination, the competent authority must undertake examination, analysis and evaluation, followed by findings, conclusions and a final determination. The appropriate assessment must contain complete, precise and definitive findings and conclusions, and may not have lacunae or gaps.

Stage 3 – Assessment of alternative solutions – the process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site.

Stage 4 – Assessment where no alternative solutions exist and where adverse impacts remain – an assessment of compensatory measures were, in the light of an assessment of imperative reasons of overriding public interest (IROPI) it is deemed that the project or plan should proceed.

Each stage determines whether the next stage in the process is required. If, for example, it is concluded, with thorough reasoning and justification that, at the end of Stage 1 there will be no significant impacts on Natura 2000 sites, there is no requirement to proceed to Stage 2.

3. Baseline Conditions

3.1 Air Quality

The proposed development site is situated within an urban area with commercial, industrial and residential developments located in the immediate vicinity. The baseline environment is already well developed with a busy road network due to proximity of Dublin Port and the Dublin Port Tunnel.

The proposed development site is located within Zone A, Dublin Conurbation, as defined in the *Air Quality Standards Regulations, 2011*[6]. Background levels from 2021 provided by the EPA's yearly report; *Air Quality in Ireland* [7]outlined air quality monitoring results of NO_2, $PM_{2.5}$ and PM_{10} in Zone A which demonstrated good compliance with air quality standards. There were no exceedances in Zone A of limits set by the European Environment Agency as per the Air Quality Clean Air For Europe Directive (2008/50/EC) in 2021.

3.2 Land and Soils

3.2.1 Geology

A review of the Geological Survey of Ireland (GSI) Spatial Resources[8] indicates that the Lucan formation underlies the proposed development and the surrounding area. This bedrock consists of dark limestone and shale and ranges in thickness from 300m to 800m.

3.2.2 Soils

The soils at the proposed development and in the surrounding area are shown on the GSI database[9] to be entirely made ground (shown as 'urban'). The made ground is likely to have a variable permeability dependant on the proportions of course materials in it. GSI database states that there is a low groundwater subsoil permeability[10].

3.2.3 Lands

The land use across the area of the proposed development is classified as 'artificial surfaces' according to the EPA Coordination of Information on the Environment Land Cover classification (CORINE).

All of the land under the proposed development consists of hardstanding along East Wall Road consisting of mostly road surface, cycle track and footpath. The proposed development lies within an area which to the west is zoned as to '*provide for and improve mixed use facilities'* and to the east to '*provide for the protection and creation of industrial uses and facilitate opportunities for employment creation'*. There will be no change of land use within the proposed development.

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[6] Irish Statutory Book S.I. No. 180/2011 (2011) *Air Quality Standards Regulations 2011*.

[7] Environmental Protection Agency (EPA) (2021) *Air quality in Ireland 2021*

[8] Geological Survey Ireland (GSI) Spatial Resources. Layer: Bedrock Polygons 100k ITM 2018: Lucan Formation. Available on https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228. Accessed 10 October 2022.

[9] Geological Survey Ireland (GSI) Spatial Resources. Layer: Teagasc Soils. Available on https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228. Accessed 10 October 2022.

[10] Geological Survey Ireland (GSI) Spatial Resources. Layer: Groundwater Subsoil Permeability. Available on https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228. Accessed 10 October 2022.

3.3 Hydrology

3.3.1 Ground Water

The GSI data[11] shows the proposed development is located over the Liffey Gravel Aquifer. This is a locally important gravel aquifer, with one area included which may have high salinity. It is moderately productive only in local zones. The groundwater vulnerability of the site is classified as low. The groundwater recharge for the site is considered to be low. Groundwater flow and storage in the Lucan Formation is in the upper weathered zone of rock and within the bedrock fractures. Groundwater flow direction is likely to be to the east toward the Irish Sea. A mentioned in Section 3.2.2. the permeability is low.

The groundwater recharge for the site is considered to be low. According to GSI, there are no groundwater abstractions present on the proposed development and no drinking water protection areas in the surrounding area. There is one borehole location (unverified) located within 1.3km south-east of the proposed development.

3.3.2 Surface Water

The EPA Maps[12] were consulted with to review surface water baseline data. The River Liffey is located immediately south of the proposed development. The River Liffey flows into Dublin Bay approximately 5km to the east of the proposed development. The risk status of the Liffey Estuary Lower is classified as 'at risk' according to the Transitional Waterbodies Risk, while it has a 'good Transitional Waterbody WFD Status 2013-2018[13]. Dublin Bay is classified as having a 'good' Coastal Waterbody WFD Status 2013-2018 and a Waterbody Risk Status of 'not at risk'.

There is no history of flooding at the proposed development area according to Flood Maps[14]. According to a Site Specific Flood Risk Assessment carried out by O'Connor, Sutton, Cronin for the EXO Building in Dublin[15], which is currently under construction, the site is at negligible risk from fluvial, tidal, pluvial or groundwater sources.

3.3.3 Stormwater

The existing surface water currently drains into existing surface water drainage systems which is then diluted before entering the River Liffey.

3.4 Noise and Disturbance

The proposed development site is mapped as part of the DCC Dublin Agglomeration Strategic Noise Maps with L_{den} values range from 50 to 79dB[16]. The baseline noise emanating from the nearby roads and docklands surrounding the site is considered to be already quite high.

There are a high number of sensitive receptors within the locality. These receptors are already exposed to urban air quality consistent with the level of development. The Gibson Hotel is located immediately to the west of the proposed development area and a new student accommodation is located to the west of the Gibson Hotel.

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[11] Geological Survey Ireland (GSI) Spatial Resources. Layer: Groundwater resources (Aquifers), Groundwater drinking water protection areas, Groundwater recharge and groundwater vulnerability. Available on https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228. Accessed 10 October 2022.

[12] Environmental Protection Agency (EPA) Maps – Appropriate Assessment. Layer: Water Framework Directive (Transitional waterbodies at risk and Coastal waterbody WFD Status 2013-2018) Available on https://gis.epa.ie/EPAMaps/. Accessed on 10 October 2022.

[13] Catchments.ie. Waterbody: Liffey Estuary Lower. Available on https://www.catchments.ie/data/#/waterbody/IE_EA_090_0300?_k=kr1322. Accessed 25 October 2022.

[14] Flood Maps. Layer: past Flood Events. Available on https://www.floodinfo.ie/map/floodmaps/. Accessed 25 October 2022.

[15] OCSC Site Specific Flood Risk Assessment Project No. C705 The EXO Building (September 205). Available on https://webapps.dublincity.ie/AnitePublicDocs/00523995.pdf . Accessed 25 October 2022.

[16] Environmental Protection Agency (EPA) Maps – Appropriate Assessment. Noise. Available on https://gis.epa.ie/EPAMaps/. Accessed on 10 October 2022.

4. The Proposed Development

4.1 Summary of Works to Occur

The proposed development includes the following proposed works;

- a new pedestrian ramp to/from the Campshires;
- extension of existing two-way cycle track along Campshires to East Link Bridge (allowing for future connection with the Dublin Port Liffey Tolka project);
- introduction of new SuDS features on both sides of North Wall Quay;
- new pedestrian and cycle crossing of East Link Bridge
- new pedestrian crossing of North Wall Quay
- new public lighting;
- new toucan crossing of Port access
- provision of a traffic signalised junction on all arms, including the Port access;
- realignment of kerbs;
- removal existing traffic islands on approach to the junction; and
- removal of existing roundabout and air vent situated within roundabout.

Refer also to Drawing No T0100-01 of Appendix A.1 which shows the detail of the proposed development.

4.2 Construction

4.2.1 Construction Sequence

It is expected that construction will commence in Quarter 2/Quarter 3 of 2023, subject to planning approval. The expected duration of the construction works will be approximately three to four months.

The type of construction works proposed are not complex in nature, they are well understood, therefore significant environmental emissions are not predicted. An overview of the construction works, and phasing required for the proposed development is presented in Figure 3.

Phase 1

- This phase will consist of the removal of the existing traffic island at the northern and southern approaches to the junction, breaking out of kerbs and other general site clearance works.
- New asphalt will be laid in place of the removed islands.
- Along the eastern side of East Wall Road, a new kerb will be installed and asphalt laid to align with the new layout for southbound traffic.

Phase 2

- This phase will consist of the removal of the existing Point Roundabout and replacement with a signalised junction. This will require the removal of the roundabout central island structure, kerbs, footpaths and the demolition and removal of an existing air vent with a concrete foundation located in the roundabout central island.
- A new kerb line will be built tying into the East Link Bridge and North Wall Quay as well as new footpath. Similarly, a new kerb line will be built tying North Wall Quay with East Wall Road at the front of the Exo building.
- Asphalt will be milled out and re-laid as part of this phase along North Wall Quay. The two-way North Wall Quay cycle track will be extended to the junction and the new ramp between the Campshires and the junction will be constructed.
- Utility works will also take place during this phase which will include
  - Relocation of Eir ducts and infrastructure
  - Installation of new gullies and manholes
  - Relocation of watermains
  - Installation of new ducts and chambers associated with the traffic signal infrastructure
- During this phase North Wall Quay will be closed to traffic (movements for pedestrians and cyclists accommodated) and several traffic diversions will be in place. North-south traffic movements along East Wall Road and over Tom Clarke Bridge will be maintained, but turning movements will be diverted to use the junction of Sheriff St Upper/East Wall Road. Bus services will also be redirected during this time period.
- Additional traffic management will be required along East Wall Road for particular utility alteration works which require road crossings. This will involve trench excavation works, laying ducts or pipes, and backfilling/reinstatement.

Phase 3

- The final phase will consist of surfacing works along East Wall Road and alteration to road levels.
- Other finishing works will take place during this stage such as the completion of the 'SuDs' areas, installation of new public lighting and installation of traffic signal poles and electrical connections, and the installation of road markings and signage.
- A limited amount of night works is envisaged during this phase, depending on the element of works, to mitigate traffic impacts to along East Wall Road. North Wall Quay will be partially open to traffic during this stage (accommodating eastbound traffic only).

Figure 3: Overview of the Works at Various Construction Phases of the Proposed Development

4.2.2 Demolition and Excavation

During the construction phase, the breaking of kerbs and removal of the roundabout and island will be undertaken. Excavations are shallow (maximum of 1,150mm in depth), and dewatering is not envisaged. Aside from these activities, there are no demolition works required for the completion of the proposed development.

4.2.3 Land-Use Requirements

The proposed development is located within an industrial area which is currently dominated by high-rise developments and construction sites. All land take required for the proposed development site will be fulfilled by land within the red-line boundary (Figure 2). The proposed development site consists of consists of hardstanding along East Wall Road consisting of road surface, cycle track and footpath.

The habitat across the proposed development can be described as can be classified as Buildings and Artificial Surfaces (BL3) under Fossit Habitat Classification[17]. No habitat loss will occur within any Natura 2000 site during the construction phase.

It is envisaged that the construction compound and welfare facilities will be located in an area of existing hardstanding along the North Wall Quay.

4.2.4 Lighting

Construction lighting will be required, however due to the time of year (spring/summer) of construction and limited night working the use of light will be limited.

4.2.5 Noise and Vibration

Localised noise emissions may be generated during the construction phase from use of machinery. Majority of works will occur during the day. A limited amount of night works is envisaged (Figure 3).

Significant rock breaking is not envisaged, however if localised rock breaking is required and this will be managed appropriately. The main vibration source during the construction phase will be from the proposed excavation/milling works. A variety of potential vibration causing items of plant are likely to be used such as excavators, lifting equipment and dumper trucks.

Standard working hours of 0700-1800 Monday to Friday and 0800-1400 on Saturday will apply to works along North Wall Quay while it is closed and works in other areas which do no impact traffic movements. Works outside of these hours will apply for works such as trench road crossings along East Wall Road and resurfacing works along East Wall Road (up to 23:00 at night). Any other works outside of these hours would be by exception.

4.2.6 Resources and Waste Management

Construction and Demolition (C&D) Waste

Construction and Demolition (C&D) waste will be generated from the proposed development in the form of some asphalt and/or concrete.

Municipal Waste

If a construction compound and welfare facilities are required, municipal waste will also be generated on site during the construction phase.

Water

There may be some requirement for water usage at the site; for welfare facilities or indeed for dust prevention, in the event that there is any stockpiling of material on site. However, any water use on site is not expected to be significant and would not be outside what would usually be expected for works of this nature.

Underground Electrical Cables

Services will be diverted within the road as required with minimum disturbance to sensitive receptors.

4.2.7 Water Management

Construction Machinery

Some localised surface-water emissions may be generated during the construction phase from surface water run-off.

[17] Fossitt (2000) *A Guide To Habitats In Ireland*.

Construction Site Drainage

Surface water run-off will be managed on the construction site as is currently the norm. Any construction run-off that is generated will be minor and will enter the existing surface water drainage system and will be diluted before entering the River Liffey and diluting further.

The extent of the works (in a highly urbanised area) is relatively small, excavations are shallow (maximum of 1,150mm in depth), dewatering is not envisaged.

4.2.8 Traffic Management

East Wall Road is a heavily trafficked road and existing traffic will need to be facilitated during the works, the Contractor will be required to develop and implement a detailed Construction Traffic Management Plan (CTMP).

4.3 Operation

4.3.1 Air and Dust Management

During the operational phase, there will be no negative impact to air quality as the proposed development is located on a pre-existing road. The proposed development will serve to extend cycling and pedestrian facilities that will not emit dust or reduce air quality.

4.3.2 Land-Use Requirements

As mentioned in Section 4.2.3, all land take required for the proposed development site will be fulfilled by land within the red-line boundary (Figure 2). There will be no additional land required as part of the operational phase. The proposed development site will operate on already developed land and is immediately surrounded by other areas of hardstanding. No habitat loss will occur within any Natura 2000 site during the operational phase.

4.3.3 Lighting

The only structures which will be placed above ground as part of the proposed development will be a number of traffic lights and street columns. The proposed lighting will replicate the existing lighting in the area and these structures will be approx. 10m high. Both standard height (3m) and double height (5m) traffic signal poles will be installed. Both types of signal poles are already in place at existing junctions within the proposed development boundary.

4.3.4 Noise Management

The proposed development will improve cycling and pedestrian facilities to encourage active travel, potentially reducing noise from motorised vehicles.

4.3.5 Resources and Waste Management

During the operational phase, there will be no change to waste or resources as a result of the proposed development. No impacts on land use or material assets are predicted during the operation phases of the proposed development.

4.3.6 Water Management

Surface water run-off will be managed as is currently in place. Any surface run-off that is generated will be minor and will enter the existing surface water drainage system and will be diluted before entering the River Liffey and diluting further. Due to the implementation of Sustainable Urban Drainage Systems (SUDS), it is anticipated there will be a decrease in surface water runoff during operation.

5. Ecological Overview

5.1 Introduction

Online species records provide, when considered in combination with other available data, an indication of the general ecological baseline for the site. Whilst most of the habitat and species listed in Section 5.3 and Section 5.4 will not be qualifying interests of relevant sites, records of their presence does provide a picture of the ecological baseline and therefore whether there are any pathways for effects on a site or QI or the conditions that support the conservation objectives of a site.

5.2 General Landscape

The proposed development site is surrounded by a highly urbanised environment being situated in Dublin City Centre. The proposed development is currently dominated by high-rise developments and construction sites. There is one semi natural habitat in close proximity to the proposed development site. The River Liffey is located immediately adjacent to the proposed development boundary. The River Liffey flows 5km east into Dublin Bay. Ringsend park is a landscaped parkland with playfields and woodland. It is located approximately 5km south-east of the proposed development.

5.3 Habitats

The proposed development site is located on existing artificial surfaces in an urban environment (BL3). It consists of road, roundabout and footpaths. There are no watercourses on the proposed development site. However, as mentioned the River Liffey is immediately adjacent, bordering the site to the south.

There were no such habitat types located on the site or within the adjacent areas.

There will be no tree or scrub removal as part of the proposed development. Photograph 1 shows the small area of vegetation existing on Point Roundabout. Species that are present include ragwort (*Jacobaea vulgaris*) and buddleia. These are common species that frequently occur on road verges and waste ground. No other areas of vegetation to be removed as part of the proposed development.

Photograph 1 Vegetation present on Point Roundabout

5.4 Species

5.4.1 Desk Study

Species records from the National Biodiversity Data Centre (NBDC) were reviewed in October 2022. Any records over ten years old were omitted from analysis as these were not considered to reflect the current species assemblage of the proposed development site and surrounding area.

The proposed development is located within 1km grid square O1834 using the NBDC Web Viewer[18]. A report was generated to search for further records of mobile QI or SCI species. The full species list produced by NBDC can be found in Appendix B.1.

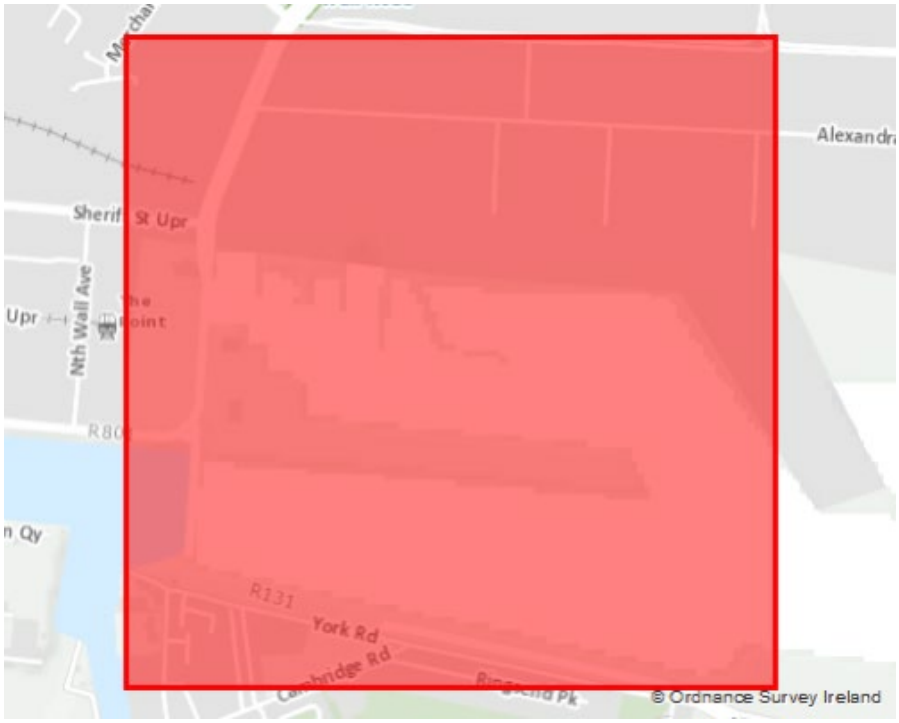


Figure 4: Grid Square O1834 (1km²)

Table 1: QIs and SCIs of Natura 2000 Sites within the Zone of Influence Recorded by the NBDC in Grid Square O1834

Species	Grid reference	Date of most recent record	Approximate distance to proposed development (km)
European otter (Lutra lutra)	O180342	2015	0.2
Marine mammal - Dolphin species possibly harbour porpoise (Phocoena phocoena)	O180342	2018	0.2

[18] National Biodiversity Data Centre Web Viewer Map

The desk study returned only two records of QIs from Natura 2000 sites within the Zone of Influence; European otter and a possible harbour porpoise (Table 1). European otter is a QI for Wicklow Mountains SAC. The conservation objectives[19] for the site state that otter will utilise freshwater habitats from estuary to headwaters. Otter require lying up areas throughout their territory where they are secure from disturbance. The diet road diet that varies locally and seasonally, but dominated by fish, in particular salmonids, eels and sticklebacks in freshwater.

The distance between the Wicklow Mountains SAC boundary and the location of the record is approximately 16km via the river network. Otter can travel up 20km in river habitat[20] but due to the level of disturbance and lack of quality foraging habitat, it is unlikely the otter population of the SAC to extend into Dublin City.

Despite the record not confirming the marine mammal as harbour porpoise, as a precaution this report assumes it was harbour porpoise. Rockabill to Dalkey Island SAC is designated for harbour porpoise[21]. Harbour porpoise is found in coastal waters. They frequently visit shallow bays, estuaries, tidal channels less than 200m in depth and have also been known to swim up rivers. However, the majority of sightings occur within 10km of land. Most harbour porpoise appear to have preferred habitat encompassing a broad area[22]. The River Liffey is a freshwater system and would lack the marine species that make up the diet of harbour porpoise. The harbour porpoise rely on sound to navigate and communicate. Noise from drilling and shipping can disrupt and confuse their navigation.

In summary, both records of QI species were singular records with no other sightings within the past ten years in O1834. Due to the level of disturbance in the River Liffey at this location, lack of quality habitat and distance from SACs it can be assumed that this species do not usually reside in this location or utilise the habitats.

Harlequin ladybird (*Harmonia axyridis*) were record twice in O1834. The most recent record is dated from 2021. The harlequin ladybird is listed on the Third Schedule list of the European Communities (Birds and Natural Habitats) Regulations 2011[23]. A non-native species originating from Asia, the harlequin ladybird is able to out-compete our native species for aphid-prey and will also eat other ladybirds' eggs and larvae. The species is prevalent in towns and gardens. The Harlequin Ladybird is a generalist species often found in a wide range of habitats. It is frequently found on deciduous trees, such as Lime or Sycamore, but can be found on a wide variety of other trees and herbaceous plants such as Nettle, thistles, Cow Parsley, Rosebay Willowherb and Fat-hen.

[19] NPWP (2017) Wicklow Mountains SAC Conservation Objectives Series. Available on https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002122.pdf. Accessed 26 October 2022.

[20] The Mammal Society Website: Species – Otter. Available on https://www.mammal.org.uk/species-hub/full-species-hub/discover-mammals/species-otter/. Accessed on 26 October 2022.

[21] NPWP (2013) Rockabill to Dalkey Island SAC Conservation Objectives Series. Available on https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO003000.pdf. Accessed 26 October 2022.

[22] Whale and Dolphin Conservation. Harbour Porpoise. Available on https://uk.whales.org/whales-dolphins/species-guide/harbour-porpoise/. Accessed 26 October 2022.

[23] Irish Statutory Book. Third Schedule list of the European Communities (Birds and Natural Habitats) Regulations. Available on S.I. No. 477/2011 - European Communities (Birds and Natural Habitats) Regulations 2011. (irishstatutebook.ie) Accessed 31 October 2022.

6. Identification of Natura 2000 Sites within the Potential Zone of Influence Associated with the Proposed Development

6.1 Identifying the Zone of Influence

This report started with an initial consideration of whether any Natura 2000 sites were within approximately 15km of the proposed development site. The distance from the site is precautionary and was determined by ecological and excavation effect features, such as species mobility, and distances at which air and hydrological pollution events could have a significant effect. There is no recommended zone of influence, and guidance from the National Parks and Wildlife Service (NPWS) recommends that the distance should be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in-combination effects (cumulative).

The zone of influence focusses on Natura 2000 sites with certain species where their foraging ranges, home ranges, nesting/roosting sites (and connections between same) may extend beyond the SAC/SPA site boundaries. It is independent of the absence of any hydrological or hydrogeological pathways between the Natura 2000 sites and site which could be subject to LSEs. These Natura 2000 sites would then have been considered in this report.

6.2 Source Pathway Receptor Model

Natura 2000 sites are only at risk from significant effects where a source-pathway-receptor link exists between a proposed development site and a Natura 2000 site(s). This can take the form of a direct impact (e.g., where the proposed development site and/or associated construction works are located within the boundary of the Natura 2000 site(s)) or an indirect impact where impacts outside of the Natura 2000 site(s) affect ecological receptors within (e.g., impacts to water quality which can affect riparian habitats at a distance from the impact source). Consideration is therefore given to the source-pathway-receptor linkage and associated risks between the proposed development site and Natura 2000 sites.

The identification of risk does not automatically mean that an effect will occur, nor that it will be significant. The identification of these risks means that there is a possibility of environmental or ecological damage occurring. The level and significance of the effect depends upon the nature of the consequence, likelihood of the risk and characteristics of the receptor.

The precautionary principle is applied for the purposes of screening to ensure that consideration and pre-emptive action is undertaken where there is a lack of scientific evidence.

There are a number of Natura 2000 sites in Dublin Bay. Table 2 highlights these sites within '*Potential Pathway*'), thus there is a theoretical hydrological link between the proposed development site and these designated sites. All drainage will connect into existing surface water drainage system before entering the River Liffey and subsequently, Dublin Bay.

As there is a theoretical pathway between the works and a Natura 2000 site, it is considered that the Zone of Influence should encompass those sites for which there is a hydrological link with the development site.

6.3 Natura 2000 Sites

A total of 18 Natura 2000 sites are considered within the zone of influence for the AA process, comprising 10 SACs and 8 SPAs. In order to identify those sites that could be potentially affected, it was necessary to describe the European sites in the context of why they have been designated i.e., their QIs. All Natura 2000 sites which fall within 15km of the project are detailed in Table 2 and shown in Appendix A.2

The simple presence of a Natura 2000 site within this area of search does not provide sufficient evidence to justify its scrutiny under subsequent stages of the AA as the characteristics of the site and the project with inevitably exert a strong influence on the outcome. The net result of Table 2 and benefit to the AA is that the list of issues and sites potentially affected can be reduced, making for a shorter and more focused Screening for AA than would otherwise be the case.

Table 2: Natura 2000 Sites within 15km of the Proposed Development

Site Name	QIs or SCIs	Approximate Distance from the Proposed Development at Nearest Point	Potential Pathway
South Dublin Bay SAC	Mudflats and sandflats not covered by seawater at low tide Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Embryonic shifting dunes	1.5km	There is a theoretical but weak and distant hydrological link between the surface water drainage network and South Dublin Bay SAC via the River Liffey Dublin Bay.
South Dublin Bay and River Tolka Estuary SPA	Light-bellied brent goose (Branta bernicla hrota) Oystercatcher (Haematopus ostralegus) Ringed plover (Charadrius hiaticula) Grey plover (Pluvialis squatarola) Knot (Calidris canutus) Sanderling (Calidris alba) Dunlin (Calidris alpina) Bar-tailed godwit (Limosa lapponica) Redshank (Tringa totanus) Black-headed gull (Chroicocephalus ridibundus) Roseate tern (Sterna dougallii) Common tern (Sterna hirundo) Arctic tern (Sterna paradisaea) Wetland and Waterbirds	1.5km	There is a theoretical but weak and distant hydrological link between the surface water drainage network and South Dublin Bay and River Tolka Estuary via the River Liffey Dublin Bay.
North Dublin Bay SAC	Mudflats and sandflats not covered by seawater at low tide Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	3.4km	There is a theoretical but weak and distant hydrological link between the surface water drainage network and North Dublin Bay SAC via the River Liffey Dublin Bay.

Site Name	QIs or SCIs	Approximate Distance from the Proposed Development at Nearest Point	Potential Pathway
	Mediterranean salt meadows (Juncetalia maritimi) Embryonic shifting dunes Shifting dunes along the shoreline with Ammophila arenaria (white dunes) Fixed coastal dunes with herbaceous vegetation (grey dunes) Humid dune slacks Petalwort (Petalophyllum ralfsii)		
North Bull Island SPA	Light-bellied brent goose Shelduck (Tadorna tadorna) Teal (Anas crecca) Pintail (Anas acuta) Shoveler (Anas clypeata) Oystercatcher Golden plover (Pluvialis apricaria) Grey plover Knot Sanderling Dunlin Black-tailed godwit (Limosa limosa) Bar-tailed godwit Curlew (Numenius arquata) Redshank Turnstone (Arenaria interpres) Black-headed gull Wetland and Waterbirds	3.4km	There is a theoretical but weak and distant hydrological link between the surface water drainage network North Bull Island SPA via the River Liffey Dublin Bay.
Baldoyle Bay SAC	Mudflats and sandflats not covered by seawater at low tide Salicornia and other annuals colonising mud and sand Atlantic salt meadows Mediterranean salt meadows	8.7km	There is a theoretical but weak and distant hydrological link between the surface water drainage network and Baldoyle Bay SAC via the River Liffey Dublin Bay.
Baldoyle Bay SPA	Light-bellied brent goose Shelduck Ringed plover Golden plover	8.7km	There is a theoretical but weak and distant hydrological link between the surface water drainage network and Baldoyle Bay SPA via the River Liffey Dublin Bay.

Site Name	QIs or SCIs	Approximate Distance from the Proposed Development at Nearest Point	Potential Pathway
	Grey plover Bar-tailed godwit Wetland and Waterbirds		
Rockabill to Dalkey Island SAC	Reefs Harbour porpoise	9km	There is a theoretical but weak and distant hydrological link between the surface water drainage network and Rockabill to Dalkey Island SAC via the River Liffey Dublin Bay.
Howth Head SAC	Vegetated sea cliffs of the Atlantic and Baltic coasts European dry heaths	9.1km	There is a theoretical but weak and distant hydrological link between the surface water drainage network and Howth Head SAC via the River Liffey Dublin Bay.
Howth Head Coast SPA	Kittiwake (Rissa tridactyla)	9.1km	There is a theoretical but weak and distant hydrological link between the surface water drainage network and Howth Head Coast SPA via the River Liffey Dublin Bay.
Dalkey Islands SPA	Roseate tern Common tern Arctic tern	11.6.km	There is a theoretical but weak and distant hydrological link between the surface water drainage network and Dalkey Islands SPA via the River Liffey Dublin Bay.
Ireland's Eye SAC	Perennial vegetation of stony banks Vegetated sea cliffs of the Atlantic and Baltic coasts	12.2km	There is a theoretical but weak and distant hydrological link between the surface water drainage network and Ireland's Eye SAC via the River Liffey Dublin Bay.
Ireland's Eye SPA	Cormorant (Phalacrocorax carbo) Herring gull (Larus argentatus) Kittiwake Guillemot (Uria aalge) Razorbill (Alca torda)	12.2km	There is a theoretical but weak and distant hydrological link between the surface water drainage network and Ireland's Eye SPA via the River Liffey Dublin Bay.
Malahide Estuary SAC	Mudflats and sandflats not covered by seawater at low tide Salicornia and other annuals colonising mud and sand Atlantic salt meadows Mediterranean salt meadows	12.5km	There is a theoretical but weak and distant hydrological link between the surface water drainage network and Malahide Estuary SAC via the River Liffey Dublin Bay.

Site Name	QIs or SCIs	Approximate Distance from the Proposed Development at Nearest Point	Potential Pathway
	Shifting dunes along the shoreline with Ammophila arenaria (white dunes) Fixed coastal dunes with herbaceous vegetation (grey dunes)		
Malahide Estuary SPA	Great crested grebe (Podiceps cristatus) Light-bellied brent goose Shelduck Pintail Goldeneye (Bucephala clangula) Red-breasted Merganser (Mergus serrator) Oystercatcher Golden plover Grey plover Knot Dunlin Black-tailed godwit Bar-tailed godwit Redshank Wetland and Waterbirds	12.5km	There is a theoretical but weak and distant hydrological link between the surface water drainage network and Malahide Estuary SPA via the River Liffey Dublin Bay.
Wicklow Mountains SAC	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) Natural dystrophic lakes and ponds Northern Atlantic wet heaths with Erica tetralix European dry heaths Alpine and Boreal heaths Calaminarian grasslands of the Violetalia calaminariae Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) Blanket bogs (* if active bog) Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	13km	No potential pathway (terrestrial of hydrological)

Site Name	QIs or SCIs	Approximate Distance from the Proposed Development at Nearest Point	Potential Pathway
	Calcareous rocky slopes with chasmophytic vegetation Siliceous rocky slopes with chasmophytic vegetation Old sessile oak woods with Ilex and Blechnum in the British Isles Otter		
Wicklow Mountains SPA	Merlin (Falco columbarius) Peregrine (Falco peregrinus)	13km	No potential pathway (terrestrial of hydrological)
Glenasmole Valley SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) Petrifying springs with tufa formation (Cratoneurion)	13.5km	No potential pathway (terrestrial of hydrological)
Knocksink Wood SAC	Petrifying springs with tufa formation (Cratoneurion) Old sessile oak woods with Ilex and Blechnum in the British Isles Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	14.9km	No potential pathway (terrestrial of hydrological)

Given the scale and the nature of the proposed development site and taking into consideration the distance to qualifying features of the Natura 2000 sites and the lack of ecological connectivity, the following site has been scoped out at this stage:

- Glenasmole Valley SAC;
- Knocksink Wood SAC;
- Wicklow Mountains SAC; and
- Wicklow Mountains SPA.

7. Consideration of Potential LSE

7.1 Introduction

This assessment considers whether the proposed development site is directly connected with or necessary to, the management of the Natura 2000 sites listed in Table 2 for nature conservation. It also checks whether the proposed development site has the potential for a LSE. A Natura 2000 site will only be at risk from LSE where the Source-Pathway-Receptor (S-P-R) link exists between the site and the Natura 2000 site.

7.2 LSE from Loss of Habitat

There will be no land take from any Natura 2000 site as part of the proposed development during both the construction and operation phase. Land take will be from hard surfaces. There is no pathway from source to receptor as the nearest Natura 2000 site is located 3.0km from the site. Habitats do not correspond to habitats listed on Annex I of the Habitats Directive. As mentioned in Section 5.4.1, habitat do not appear to be utilised by any QI or SCI species of the Natura 2000 sites within the zone of influence. The habitats recorded within the site are considered of a low ecological value.

Therefore, there will be no LSE on the conservation objectives of any Natura 2000 site within the Zone of Influence as a result of habitat loss.

7.3 LSE from Direct Emissions to Water

There is a risk, as in any construction site for a pollution event to occur resulting in contamination. In general, pollutants can include hydrocarbons from fuel, construction materials, silt and other harmful chemicals. However, there is not a significant source of pollutants.

In terms of C&D waste, the quantities of C&D waste will be low. The contractor will arrange for removal and disposed of in a suitable licenced facility. It is not expected that any waste soil will be required to be removed from site.

If a construction compound and welfare facilities are required, municipal waste will also be generated on site during the construction phase. This will be segregated at source, removed from site and disposed of in a suitable licenced facility.

There will be a low level of construction vehicles and plant machinery required to complete construction work. All construction machinery and fuel will also be stored in a bunded construction compound.

Construction activities will be limited to a narrow footprint (0.4ha) and a short duration (three-four months). The nature of construction works involves standard routine construction methodologies, that are not complex in nature. In addition, best practice construction practises will also be implemented throughout the construction phase by the appointed contractor. These measures are not included to protect any Natura 2000 site.

There is a weak and distant theoretical hydrological connection between source and receptor. All surface water drainage from the proposed development will connect into existing drainage networks during the construction and operational phase. Currently pollutants in surface water are diluted in the surface water network before entering the River Liffey and subsequently Dublin Bay. As mentioned in Section 3.3.2, the baseline data shows the River Liffey and Dublin Bay are classified as ‘good’ WFD status.

Any pollutants arising from the construction would be minor and localised, these would be diluted in the existing surface water network before discharging into the River Liffey. Diluted pollutants would be diluted further in Dublin Bay and dispersed across a wide area before reaching a Natura 2000 site (nearest 1.5km away). Therefore, the proposed development is not directly connected with any Natura 2000 sites.

As mentioned in Section 4.2.2, the excavation work will occur to a depth of 1150mm (maximum). Dewatering is not envisaged, therefore there is no requirement to pump ground water from the excavation or risk of groundwater connection between the proposed development and Natura 2000 sites.

The operational phase does not envisage an increase of direct emissions to the surface water drainage. The implementation of the SuDS will serve to decrease the volume surface water runoff during the operational phase.

Therefore, there will be no LSE on the conservation objectives of any Natura 2000 site within the Zone of Influence as a result of direct emissions to surface water.

7.4 LSE from Direct Emissions to Air

During construction there is potential for some localised emissions to air through construction dust (from removal of existing traffic island and kerb) and construction vehicles/machinery dust. However, the emission is not significant due to short duration (three to four months), the low level of construction vehicles/plant, nature of the works and the narrow construction footprint along a busy trafficked road. Any particulate matter arising from the construction phases is not expected to be in exceedance of environmental standards set out in relevant Directives[24].

The employment of good construction management practices for the proposed development will serve to minimise the risk of dust emissions. Examples of measures to be employed include the spraying of exposed earthworks during dry periods, the provision of wheel washes and sweeping of roads. A full list of proposed measures will be proposed and implemented by the Contractor in advance of the construction works. These measures are not included to protect any Natura 2000 site.

As mentioned in Section 4.2.8, the Contractor will also be required to develop and implement a detailed CTMP at the outset to ensure that traffic disruption is kept to a minimum.

The operational phase will have no significant negative impact to air emissions. The proposed development aims to improve active travel facilities and reduce the use of motorised vehicles, potentially reducing vehicle emissions during operation.

There is no pathway identified from the proposed development site to any Natura 2000 sites. The distance between the proposed development site and the nearest Natura 2000 site (1.5km) is considered adequately distant for any air quality impacts to occur to any receptor.

Therefore, there will be no LSE on the conservation objectives of any Natura 2000 site within the Zone of Influence as a result of direct emissions to the air.

7.5 LSE from Noise and Visual Disturbance

As mentioned in Section 4.2.5 noise will be generated during the construction of the proposed development due to construction traffic, construction machinery, excavation works etc. The effect of construction noise on sensitive receptors will be temporary only due to the short duration, the low level of construction vehicles/plant and construction staff required, the nature of the works proposed and the narrow construction footprint along a busy trafficked road.

As mentioned in Section 4.2.5, the main vibration source during the construction phase will be from the proposed excavation/milling works. A variety of potential vibration causing items of plant are likely to be used such as excavators, lifting equipment and dumper trucks. Vibration effects will be controlled by the implementation of best construction practice. Examples of measures to be employed include the use of suitable vibration isolators in equipment mountings and ensuring that materials are lowered rather than dropped from heights.

[24] 2008/50/EC and 2004/107/EC

A full list of proposed best practice measures will be proposed and implemented by the contractor in advance of the construction works. These measures are not included to protect any Natura 2000 site. Best practice construction measures taken to manage noise and vibration include;

- ensuring maintenance of plant to minimise noise generation;
- ensuring that materials are lowered rather than dropped from heights;
- noisier activities will be phased and planned to ensure that the nearest noise sensitive receptors;
- not leaving plant idling;
- selection of quiet plant equipment; and
- use of suitable vibration isolators in equipment mountings.

Noisier activities will be phased and planned. This is not to prevent disturbance to any QI or SCI due to the separation distance from any designated sites, instead it is to ensure sensitive residential receptors (Gibson Hotel and a new student accommodation on Mayor Street Upper) do not experience significant construction disturbance.

Construction operations work hours will be limited to the hours of 07:00 and 18:00 (Monday – Friday) and 08:00 to 14:00 (Saturdays). Works outside of these hours will apply for works such as trench road crossings along East Wall Road and resurfacing works along East Wall Road (up to 23:00 at night). Any other works outside of these hours would be by exception.

A limited amount of night works is envisaged during this phase, depending on the element of works, to mitigate traffic impacts to along East Wall Road. North Wall Quay (mentioned in Figure 3). However, the majority of works will occur during the day.

There is no pathway identified from the proposed development site to any Natura 2000 sites. The distance between the proposed development site and the nearest Natura 2000 site (1.5km) is considered adequately distant for any noise and vibration impacts to occur.

As mentioned in Section 5.4.1, habitat do not appear to be utilised by any QI or SCI species of the Natura 2000 sites within the zone of influence. Any mobile QIs and SCIs that could be utilising habitat within the surrounding area will be habituated to high levels of disturbance given the urban setting and baseline noise levels (see Section 3.4).

Therefore, there will be no LSE on the conservation objectives of any Natura 2000 site within the Zone of Influence as a result of noise and visual disturbance.

7.6 LSE from Lighting

Lighting will be limited throughout the construction phase due to the lack of night time working. New lighting is proposed as part of the operational phase of the proposed development. As mentioned in Section 4.3.3, the proposed lighting will replicate the existing lighting in the area. Therefore, this is not expected to light levels for the area. Species within the surrounding area will already be habituated to the baseline levels of light.

There is no pathway identified from the proposed development site to any Natura 2000 sites. The distance between the proposed development site and the nearest Natura 2000 site (1.5km) is considered adequately distant for any impacts to occur.

In addition, there are no Natura 2000 sites within the Zone of Influence that are designated for bat species, which are particularly sensitive to light disturbance.

Therefore, there will be no LSE on the conservation objectives of any Natura 2000 site within the Zone of Influence as a result of light disturbance.

7.7 LSE from Invasive Species

The desk study returned records of the harlequin ladybird within O1834. This is an invasive species listed under S.I 477/2011. It is a generalist species but prefers habitat with access to herbaceous plants or trees. However, the proposed development lacks an abundance of semi-natural habitat and is poorly connected to such habitats. The harlequin ladybird is a direct competitor with the native ladybird. It is unlikely to compete with any QI or SCI for foraging availability. As mentioned in Section 5.4.1, the proposed development site does not appear to be utilised by any QI or SCI species of the Natura 2000 sites within the zone of influence.

There is no pathway identified from the proposed development site to any Natura 2000 sites. The distance between the proposed development site and the nearest Natura 2000 site (1.5km) is considered adequately distant for any impacts to be avoided.

Therefore, there will be no LSE on the conservation objectives of any Natura 2000 site within the Zone of Influence as a result of invasive species.

7.8 Cumulative Effects

Planning applications were identified using the DCC Web Viewer[25]. Planning application within approximately 1km from the proposed development over the past five years were reviewed. The applications listed in Appendix B.2 are typically of large scale, with several required to make environmental considerations during planning.

All the planning application listed in Appendix B.2 are accompanied by AA Screening reports or Natura Impact Statements (NIS) to ensure no LSE occurs on any Natura 2000 site. Therefore, it is considered that the proposed development site and these planning application would not have any likely significant in-combination effect to the designated sites.

The planning application for planning Reference No. DSDZ3632/15 (EXO Building (and subsequent revisions)) is identified as having potential to result in cumulative effects with the proposed development. The EXO development consists of the construction of a commercial office building ranging in height from 8 storeys to 17 storeys. The EXO development is currently under construction.

Depending on the commencement date of the proposed development (Point Junction) and the construction phasing of the EXO development, there may be an overlap with the construction. Hence, potential for in-combination construction traffic. However, the CTMP implemented by the Contractor will be required to account for construction traffic generated by the EXO building. Therefore, significant negative effects are not envisaged.

In conclusion, due to the scale and nature of the planning applications as well as their location in relation to the designated sites, it is considered that the proposed development would not have any likely significant in-combination effect to the designated sites or their qualifying features.

[25] Dublin City Council (DCC). Available on Dublin City Planning Application Map. Accessed 11 October 2022.

8. Assessment of Significance

The proposed development site will not result in any significant direct, indirect or cumulative impacts on Natura 2000 sites. Refer to the checklist in Table 3, which has been used to determine whether significant impacts are likely.

Table 3: Significant Impacts Checklist

Does the project have the potential to	Yes or No
reduce the area of key habitats?	No
reduce the population of key species?	No
change the balance between key species?	No
reduce diversity of the site?	No
result in disturbance that could affect population size or density or the balance between key species?	No
result in fragmentation?	No
result in loss or reduction of key features (e.g., tree cover, tidal exposure, annual flooding)?	No
cause delays in progress towards achieving the conservation objectives of the site?	No
interrupt progress towards achieving the conservation objectives of the site?	No
disrupt those factors that help to maintain the favourable conditions of the site?	No
interfere with the balance, distribution and density of key species that are the indicators of the favourable condition of the site?	No
cause changes to the vital defining aspects (e.g., nutrient balance) that determine how the site functions as a habitat or ecosystem?	No
change the dynamics of the relationships (between, for example, soil and water or plants and animals) that define the structure and/or function of the site?	No
interfere with predicted or expected natural changes to the site (such as water dynamics or chemical composition)?	No

In addition, this judgement has been arrived at on the following basis:

- all development activity will take place within the site works boundary. No works will take place within any Natura 2000 site. There will be no encroachment on the habitats or species of any Natura 2000 site.
- there will be no loss of Natura 2000 site habitat area, no fragmentation of the habitats of Natura 2000 sites, no disturbance to the qualifying species of the Natura 2000 sites, no impacts on population density of these species, no impacts on water resources and no impacts on water quality of the Natura 2000 sites; and
- there will be no significant emissions to air, soil or water during construction or operation. Thus, significant impacts on the receiving environment are not predicted to occur.

9. Screening Statement and Conclusions

The aims of this report were as follows:

- provide information on and assess the potential for the proposed development site to significantly impact on Natura 2000 sites (also known as European sites).
- determine whether the proposed development site is directly connected with, or necessary to the conservation management of any Natura 2000 sites; and
- determine whether the proposed development, alone or in combination with other projects, is likely to have significant effects on Natura 2000 sites in view of their conservation objectives.

It has been objectively concluded by Arup that:

- there is no potential for the proposed development site to significantly impact on Natura 2000 sites.
- the proposed development site is not directly connected with, or necessary to the conservation management of any Natura 2000 sites; and
- the proposed development, alone or in combination with other projects, is not likely to have significant effects on Natura 2000 sites in view of their conservation objectives.

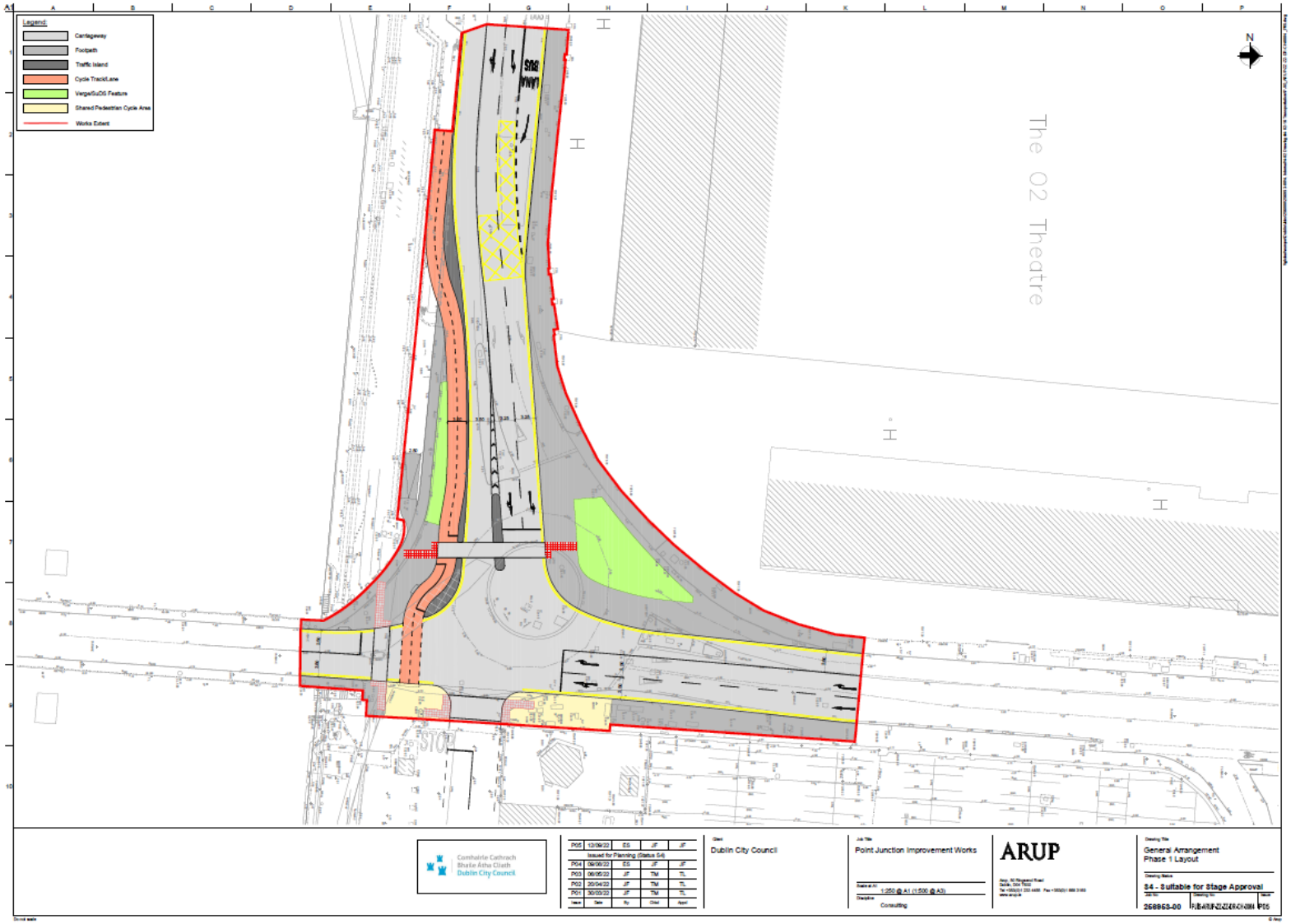
It has been determined by Arup that it is possible to rule out LSE on any Natura 2000 sites. It is the view of Arup that it is not necessary to undertake any further stage of the Appropriate Assessment process.

Refer to Appendix C Findings of No Significant Effects Report.

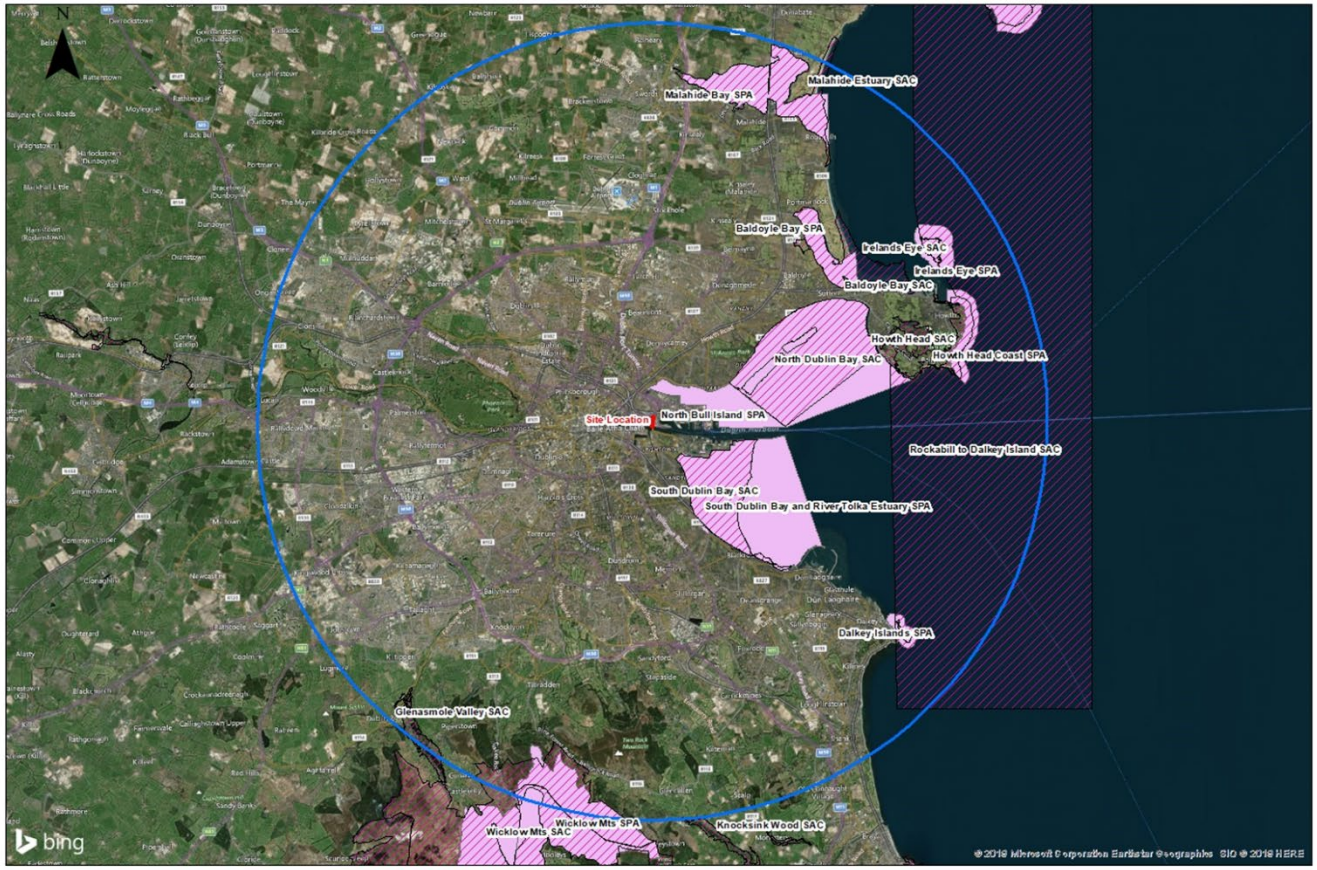
Appendix A

Maps and Drawings

A.1 Point Junction Improvement Scheme Drawing



A.2 Natura 2000 Sites within 15km of the Proposed Development | Not To Scale | Background Mapping © Bing Maps



Legend

- 15km Buffer
- Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)
- Site Location

Appendix B

Tables

B.1 National Biodiversity Data Centre Species List in Full (O1834)

Grid Square	Species Group	Species Name	Record Count	Date of Last Record	Title of Dataset	Designation
Custom	bird	Black-billed Magpie (Pica pica)	2	24/04/2016	Birds of Ireland	
Custom	bird	Black-headed Gull (Larus ridibundus)	1	17/11/2010	Birds of Ireland	Protected under the Wildlife Acts Birds of Conservation Concern: Amber
Custom	bird	Brent Goose (Branta bernicla)	1	17/11/2010	Birds of Ireland	Protected under the Wildlife Acts Birds of Conservation Concern: Amber
Custom	bird	Great Cormorant (Phalacrocorax carbo)	1	17/11/2010	Birds of Ireland	Protected under the Wildlife Acts Birds of Conservation Concern: Amber
Custom	bird	Mew Gull (Larus canus)	1	13/09/2014	Birds of Ireland	Protected under the Wildlife Acts
Custom	bird	Northern Wheatear (Oenanthe oenanthe)	1	06/05/2019	Birds of Ireland	Protected under the Wildlife Acts Birds of Conservation Concern: Amber
Custom	bird	Whooper Swan (Cygnus cygnus)	1	04/03/2020	Birds of Ireland	Protected under the Wildlife Acts Birds of Conservation Concern: Amber
Custom	flowering plant	Eastern Rocket (Sisymbrium orientale)	1	02/07/2012	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	

Grid Square	Species Group	Species Name	Record Count	Date of Last Record	Title of Dataset	Designation
Custom	flowering plant	Narrow-leaved Ragwort (Senecio inaequidens)	1	02/07/2012	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	flowering plant	Oxford Ragwort (Senecio squalidus)	1	02/07/2012	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	flowering plant	Rat's-tail Fescue (Vulpia myuros)	1	02/07/2012	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	flowering plant	Ribbed Melilot (Melilotus officinalis)	1	02/07/2012	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	harvestman (Opiliones)	Mitopus morio	1	18/07/1995	Harvestmen (Opiliones) of Ireland	
Custom	harvestman (Opiliones)	Nelima gothica	1	18/07/1995	Harvestmen (Opiliones) of Ireland	
Custom	harvestman (Opiliones)	Nemastoma bimaculatum	1	24/04/1995	Harvestmen (Opiliones) of Ireland	
Custom	harvestman (Opiliones)	Opilio saxatilis	1	18/07/1995	Harvestmen (Opiliones) of Ireland	
Custom	harvestman (Opiliones)	Phalangium opilio	1	18/07/1995	Harvestmen (Opiliones) of Ireland	
Custom	harvestman (Opiliones)	Platybunus triangularis	2	18/07/1995	Harvestmen (Opiliones) of Ireland	
Custom	insect - beetle (Coleoptera)	Harlequin Ladybird (Harmonia axyridis)	2	18/11/2021	Ladybirds of Ireland	Invasive Species: Regulation S.I. 477 (Ireland)
Custom	insect - beetle (Coleoptera)	Lily Beetle (Lilioceris lilii)	2	06/07/2019	National Invasive Species Database	

Grid Square	Species Group	Species Name	Record Count	Date of Last Record	Title of Dataset	Designation
Custom	insect - butterfly	Common Blue (Polyommatus icarus)	2	22/07/2018	Butterflies of Ireland	
Custom	insect - moth	Silver Y (Autographa gamma)	1	02/09/2018	Moths Ireland	
Custom	Marine mammal	Dolphin species possibly Harbour Porpoise	1	15/08/2018	IWDG Casual Cetacean Sightings	
Custom	terrestrial mammal	European Otter (Lutra lutra)	1	08/10/2015	Atlas of Mammals in Ireland 2010-2015	Protected Species: EU Habitats Directive, Annex II and Annex IV Protected under the Wildlife Acts

B.2 Planning Applications within 1km of the Proposed Development Made Over the Past Five Years with Potential for In-Combination Effects

Description	Distance from Proposed Works (km)
3220/21: Dublin Port Company Dublin Port, Alexandra Road, Dublin 1 Permission for development at this site which extends from North Wall Quay Extension to the Tolka Estuary, to include the western boundary to Dublin Port and pavements along East Wall Road, across the Alexandra Road junction with East Wall Road, across the Tolka Quay Road junction with East Wall Road, Bond Road, across the Promenade Road junction with Bond Road and to end of Bond Road, Dublin Port, Dublin 1 & 3 and permission to amend development permitted under Reg. Ref. 3084/16. The ESB substation (Record of Protected Structures No. 8771) is located within the subject site. The proposed development will consist of construction of a new 1.4km pedestrian walkway and a 2-way cycle lane along East Wall Road and Bond Road from the River Liffey to the Tolka Estuary. This application is accompanied by a Natura Impact Statement that states with mitigation there will be no adverse effects upon the integrity of any of the European sits concerned and no scientific doubt remains as to the absence of such effects.	Immediately adjacent to north-east
DSDZ3632/15: An Post The Exo Building, North Wall Quay , (D01 W5Y2) and at the junction of North Wall Quay and East Wall Road , Dublin 1 The proposed development will consist of: The installation of an exterior totem sign (overall height of 5.45m and width of 1.6m) with a curved LED screen, situated at the corner of East Wall Road and North Wall Quay; The installation of a Mobius structure (overall height of 3.48m and width of 6.96m) at ground floor level at the reception area at the southern façade of the Exo Building; and All associated works required to facilitate the development. This application relates to a proposed development within the North Lotts and Grand Canal Dock SDZ Planning Scheme area. AA Screening outcome stated there will be no risk of significant negative effects on any European site, as a result of the proposed development, either alone or in combination with other plans or projects.	0.15 north
4894/22: Dublin Port Company Site which extends from Promenade Road to Alexandra Road, Dublin Port, Dublin 3 Retention permission is sought for development of part of a link road known as T10 Link Road connecting Promenade Road with Tolka Quay Road to the west of the Terminal 10 State Services yard. The road and associated infrastructure. AA Screening outcome stated the proposed development shall not give rise to significant adverse impacts on the integrity of any Natura 2000 sites	0.65 north-east

Description	Distance from Proposed Works (km)
4353/22: Dublin Port Company Tolka Quay Road, Dublin Port, Dublin 1 The development will consist of the continuance of use of a 100m long 6.5m wide single lane bridge with access ramps over the M50 and a storage area for imported cars and vans and all associated site development and service works as permitted under planning reg. ref. 2495/17 and reg. ref. 3788/11. AA Screening outcome stated the proposed development will not result in likely significant direct, indirect or cumulative effects on the structure, function and conservation objectives for any of the identified Natura 2000 sites.	0.75 north
3283/22: EWD3 Developments Ltd Existing commercial premises at Church Road, East Wall, Dublin 3, D03 XY06 (bounded by Church Road and Blythe Avenue) The development will consist of the demolition of the existing single storey commercial premises and the construction of a two to four-storey apartment block with the upper floors set back, to provide for 13 no. apartments (1 no. studio, 7 no. 1-bed/2-person apartments, 1x 2-bed/3-person apartment and 4 no. 2-bed/4-person apartments) with balconies to the west and south elevations and a communal open space at third floor level. The proposed development will also provide for pedestrian and cyclist access from Church Road, a separate access to Unit 4 from Blythe Avenue, associated internal refuse and storage for 34 no. bikes at ground floor level, associated signage to the northern elevation of the development along Church Road, plant, P.V. solar panels at roof level and all associated site and engineering works necessary to facilitate the development. AA Screening outcome stated the proposed development shall not give rise to significant adverse impacts on the integrity of any Natura 2000 sites.	0.85 north-west
4380/22: Pembroke Beach DAC Development of an office and mixed-use scheme (Referred to as Phase A Commercial) on an infill site of c.15.08 hectares (with a net focused site area of c. 1.78 ha) of land within the former Irish Glass Bottle (IGB) and Fabrizia sites on Sean Moore Road, Dublin 4 (including some 198 sq. metres of public domain on Southbank Road to accommodate vehicle and pedestrian access). The site is identified as within the A1 Lands in the Poolbeg West Strategic Development Zone (SDZ) Planning Scheme (April 2019). The overall site is bounded to the north-west by Sean Moore Road, to the north-cast by South Bank Road, to the south-east by Dublin Port lands and Dublin Bay, and to the south-west by Sean Moore Park. The overall site subsumes the 4.3 hectares site of the infrastructure permission (Parent Permission) (Reg. Ref. PWSDZ3270/19) for which Dublin City Council issued a Notification of Final Decision (10-year permission) on 28 January 2020, permitting: streets, transportation, water services and utilities' infrastructure; public realm and public amenity spaces; and temporary landscaping of a school site, to facilitate Phase 1 development as provided for under the Poolbeg West SDZ Planning Scheme. NIS stated the proposed development will not adversely affect the integrity of European sites.	1.1km south-east

Appendix C

Finding of No Significant Effects Report

C.1 Finding of No Significant Effects Report

Name of Project: Point Junction Improvement Scheme

Names of Natura 2000 sites of relevance to the proposed development site:

Site Name	Site Code
Baldoyle Bay SAC	000199
Baldoyle Bay SPA	004016
Dalkey Islands SPA	004172
Glenasmole Valley SAC	001209
Howth Head Coast SPA	004113
Howth Head SAC	000202
Ireland's Eye SAC	002193
Ireland's Eye SPA	004117
Knocksink Wood SAC	000725
Malahide Estuary SAC	000205
Malahide Estuary SPA	004025
North Bull Island SPA	004006
North Dublin Bay SAC	000206
Rockabill to Dalkey Island SAC	003000
South Dublin Bay and River Tolka Estuary SPA	004024
South Dublin Bay SAC	000210
Wicklow Mountains SAC	002122
Wicklow Mountains SPA	004040

Is the project or plan directly connected with or necessary to the management of the site?

No

Are there other projects or plans that together with the project or plan being assessed could affect the site?

No

THE ASSESSMENT OF SIGNIFICANCE OF EFFECTS

Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site.

It has been determined by Arup that it is possible to rule out likely significant impacts on any Natura 2000 sites.

Explain why these effects are not considered significant.

All development activity will take place within the proposed development site works boundary. No works will take place within any Natura 2000 site. No material or spoil from the works will be deposited in any Natura 2000 site. There will be no encroachment on the habitats or qualifying species of any Natura 2000 site.

There will be no loss of Natura 2000 site habitat area, no fragmentation of the habitats of Natura 2000 sites, no disturbance to the qualifying species of the Natura 2000 sites, no impacts on population density of these species, no impacts on water resources and no impacts on water quality of the Natura 2000 sites.

There will be no significant emissions to air, soil or water during construction or operation. Thus, significant impacts on the receiving environment are not predicted to occur.

DATA COLLECTED TO CARRY OUT THE ASSESSMENT

Who carried out the assessment?

The assessment was supervised, checked and completed by Fraser Maxwell.

Sources of Data:

This report has been prepared with regard to the following guidance documents, where relevant:

- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 and PSSP 2/10;
- Department of Environment, Heritage and Local Government. Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (2010 revision);
- European Commission Environment Directorate-General [hereafter referred to as MN 2000], Managing Natura 2000 sites: The Provision of Article 6 of the Habitats Directive 92/43/EEC (2000);
- European Commission Environment Directorate-General. Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodical Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (2021);
- European Commission Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC (2007);
- European Commission. Communication from the Commission on the precautionary principle (2000);
- Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive (International Workshop on Assessment of Plans under the Habitats Directive, 2011); and
- Office of the Planning Regulator Practice Note PN01 – Appropriate Assessment Screening for Development Management (2021).

Sources of information that were used to collect data on the Natura 2000 network of sites and on the existing ecological environment comprise:

- Catchements.ie[26];
- Dublin City Council. Dublin City Development Plan 2016 - 2022;
- Dublin City Planning Application Map[27];
- Environmental Protection Agency (EPA) Online Map Viewer[28];
- Google aerial photography (viewed in October 2022);
- National Parks and Wildlife Service (NPSW) online data on designated sites[29];
- NPWS online data on protected flora and fauna[30].

Guidance which has assisted in determining whether impacts are likely to be significant include:

- Environmental Protection Agency. Guidelines on the Information to be Contained in Environmental Impact Statements (2022); and
- Flood Maps IE: Layer - Past Flood Events. https://www.floodinfo.ie/map/floodmaps/ (Viewed 25 October 2022).
- Institute of Ecology and Environmental Assessment. Guidelines for Ecological Impact Assessment in the UK and Ireland, Terrestrial, Freshwater, Coastal and Marine (September 2018);

OVERALL CONCLUSIONS

Based on the information provided above, and by applying the precautionary principle, it has been determined by Arup that it is possible to rule out likely significant impacts on any Natura 2000 sites and therefore it is the view of Arup that it is not necessary to undertake any further stage of the Appropriate Assessment process

[26] Catchements.ie. Available on www.catchments.ie. Accessed October 2022

[27] Dublin City Council. Available https://mapzone.dublincity.ie/MapZonePlanning/MapZone.aspx?map=PlanningApplication&search=Plan_Ref&tooltip=Plan_Ref. Accessed October 2022.

[28] EPA. Information on environmental quality data. EPA Online Environmental Map Viewer. Available https://gis.epa.ie/EPAMaps/. Accessed October 2022

[29] NPSW. Designated site data. Available on https://www.npws.ie/maps-and-data/designated-site-data. Accessed October 2022.

[30] NPSW. Designated site data. Available on https://www.npws.ie/maps-and-data/habitat-and-species-data. Accessed October 2022.