Quarryvale Park Redevelopment

Screening for Appropriate Assessment

4 April 2023

Project number: 2022s1010

South Dublin County Council

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Revision History

Revision Ref / Date Issued	Amendments	Issued to
S3-P01 / 29th March 2023	Draft Report	Damien Wildes (SDCC)
A3-C01 / 4th April 2023	Final Report	Damien Wildes (SDCC)

Contract

This report describes work commissioned by Damien Wildes of South Dublin County Council, by an email dated 05th December 2022. Michael Coyle of JBA Consulting carried out this work.

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Purpose

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Abbreviations

AA	Appropriate Assessment
CIEEM	Chartered Institute of Ecology and Environmental Management
DoEHLG	Department of Environment, Heritage and Local Government
EC	European Communities
EPA	Environmental Protection Agency
EU	European Union
GSI	Geological Survey Ireland
INNS	Invasive Non-native Species
IROPI	Imperative Reasons of Over-riding Public Interest
NBDC	National Biodiversity Data Centre
NOx	Nitrogen Oxides
NPWS	National Parks and Wildlife Service
OPR	Office of the Planning Regulator
QI	Qualifying Interest
RBMP	River Basin Management Plan
SAC	Special Area of Conservation
SDCC	South Dublin County Council
SPA	Special Protection Area
WFD	Water Framework Directive
WWTP	Waste Water Treatment Plant
ZoI	Zone of Influence

1 Introduction

1.1 Background

JBA Consulting Engineers and Scientists Ltd. (hereafter JBA) has been commissioned by South Dublin County Council to prepare an Appropriate Assessment Screening Report for the redevelopment of Quarryvale Park. The proposed development consists of the redevelopment of the park area for the enhancement of its facilities for social interactions and biodiversity.

Screening for appropriate assessment is intended to be an initial examination which must be carried out by the Planning Authority or An Bord Pleanála as the competent authority. However, this screening is completed on behalf of the project proposer to show that likely significant effects have been considered in the project development and design, and where necessary progress with further assessment.

1.2 Legislative Context

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora, known as the 'Habitats Directive' - provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 - 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000 sites. Natura 2000 sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79 / 409 / EEC).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans or projects affecting Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment:

"*Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public*."

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

Article 6(4) states:

"*If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member States 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."

The requirements of Articles 6(3) and 6(4) of the Habitats Directive have been transposed into Irish legislation by means of *inter alia* the European Communities (Birds and Natural Habitats) Regulations 2011-2015 (S.I. No. 477 / 2011) as amended.

1.3 Appropriate Assessment Process

Guidance on the Appropriate Assessment (AA) process was produced by the European Commission in 2002, which was subsequently developed into guidance specifically for Ireland by the Department of Environment, Heritage and Local Government (DEHLG) (2009). Office of the Planning Regulator (OPR) produced a Practice Note in 2021, PN01 - Appropriate Assessment Screening for Development Management (OPR, 2021). These guidance documents identify a staged approach to conducting an AA, as shown Figure 1-1.

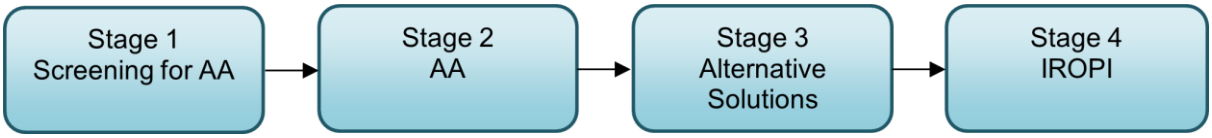

Figure 1-1: The Appropriate Assessment Process (from: Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities, DEHLG, 2009).

1.3.1 Stage 1 - Screening for AA

The initial, screening stage of the Appropriate Assessment is to determine:

- whether the proposed plan or project is directly connected with or necessary for the management of the European designated site for nature conservation
- if it is likely to have a significant adverse effect on the European designated site, either individually or in combination with other plans or projects.

For those sites where, potential adverse impacts are identified, either alone or in combination with other plans or projects, further assessment is necessary to determine if the proposals will have an adverse impact on the integrity of a European designated site, in view of the site's conservation objectives (i.e. the process proceeds to Stage 2).

1.3.2 Stage 2 - AA

This stage requires a more in-depth evaluation of the plan or project, and the potential direct and indirect impacts of them on the integrity and interest features of the European designated site(s), alone and in-combination with other plans and projects, taking into account the site's structure, function and conservation objectives. Where required, mitigation or avoidance measures will be suggested.

The competent authority can only agree to the plan or project after having ascertained that it will not adversely affect the integrity of the site(s) concerned. If this cannot be determined, and where mitigation cannot be achieved, then alternative solutions will need to be considered (i.e. the process proceeds to Stage 3).

1.3.3 Stage 3 - Alternative Solutions

Where adverse impacts on the integrity of Natura 2000 sites are identified, and mitigation cannot be satisfactorily implemented, alternative ways of achieving the objectives of the plan or project that avoid adverse impacts need to be considered. If none can be found, the process proceeds to Stage 4.

1.3.4 Stage 4 - IROPI

Where adverse impacts of a plan or project on the integrity of Natura 2000 sites are identified and no alternative solutions exist, the plan will only be allowed to progress if imperative reasons of overriding public interest can be demonstrated. In this case compensatory measures will be required.

The process only proceeds through each of the four stages for certain plans or projects. For example, for a plan or project, not connected with management of a site, but where no likely significant impacts are identified, the process stops at stage 1. Throughout the process, the precautionary principle must be applied, so that any uncertainties do not result in adverse impacts on a site.

This report is in support of a Stage 1 Screening for Appropriate Assessment.

1.3.5 Recent judgements of the Court of Justice of the European Union (CJEU) and how they are used in this assessment

The CJEU issued a ruling on the consideration of avoidance and reduction measures as a result of the case known as People over Wind, Peter Sweetman v Coillte Teoranta (Case C-323/17). This judgement stated that measures intended to reduce or avoid effects on a Natura 2000 site should only be considered within the framework of an Appropriate Assessment, and it is not permissible to take into account such measures at the screening stage. In practice, this means that any activities that are not integral to the project (i.e., the project could conceivably take place without them) and have the effect of avoiding or reducing an impact on a Natura 2000 site, cannot be considered at the screening stage.

The CJEU ruling in the case of Grace & Sweetman [2018] (C-164/17) clarified the difference between avoidance and reduction (mitigation) measures and compensation. Measures intended to compensate for the negative effects of a project cannot be taken into account in the assessment of the implications of a project, and instead are considered under Article 6(4). This means that any project where an effect on the integrity of a Natura 2000 site remains and can only be offset by compensation, would need to proceed under Article 6(4), demonstrating “imperative reasons of overriding public interest”.

The judgements referred to as the Dutch Nitrogen cases [2018] (C-293/17 and C-294/17) have important implications for projects that could potentially impact on sites that are exceeding critical thresholds for input of damaging ammonia (but could also reasonably apply where other nutrients are impacting Natura 2000 sites). The judgements state that the use of thresholds to exclude project impacts is acceptable in principle, and that strategic plans can be used as mitigation but only with consideration of the certainty (or otherwise) of the outcomes of those strategic plans. It clarifies that where the status of a habitat type is already unfavourable the possibility of authorising activities which increase the problem is necessarily limited.

The CJEU ruling in the case of Holohan v An Bord Pleanala (C-462/17) also clarified the importance in Appropriate Assessment of taking into account habitat types and species outside the boundary of the Natura 2000 site where implications of the impacts on those habitat and species may impact the conservation objectives of the Natura 2000 site. In this assessment functionally linked and supporting habitat for species outside of Natura 2000 sites are assessed where they could potentially impact the conservation objectives of any screened in Natura 2000 sites.

1.4 Methodology

The Screening for Appropriate Assessment has been prepared having regard to the Birds and Habitats Directives, the European Communities (Birds and Natural Habitats) Regulations 2011-15 as amended and relevant jurisprudence of the EU and Irish courts. The following documents have also been used to provide guidance for the assessment:

- DEHLG (2009 rev 2010) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government (DEHLG, 2009).
- Office of the Planning Regulator (2021) OPR Practice Note PN01 - Appropriate Assessment Screening for Development Management (OPR, 2021).
- European Communities (EC) (2018) Managing Natura 2000 Sites: the provisions of Article 6 of the ‘Habitats’ Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission (European Commission, 2000).
- EC (2002) Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission (European Commission et al., 2002).
- EC (2007) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission. European Commission Management (European Commission, 2007).

- EC (2021) Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC. (European Commission 2021)

1.4.1 Desktop study

A desktop study was conducted of available published and unpublished information, along with a review of data available on the National Parks and Wildlife Service (NPWS) and National Biodiversity Data Centre (NBDC) web-based databases, in order to identify key habitats and species (including legally protected and species of conservation concern) that may be present within ecologically relevant distances from the project as explained below. A baseline habitat assessment was performed using satellite imagery of the site. The data sources below (accessed December 2022 - March 2023) were consulted for the desktop study:

- Aerial photography available from www.osi.ie and Esri World Imagery.
- NPWS website (www.npws.ie) where Natura 2000 site synopses, data forms and conservation objectives were obtained along with Annex 1 habitat distribution data and status reports.
- River Basin Management Plans (www.wfdireland.ie)
- NBDC Biodiversity Maps (maps.biodiversityireland.ie)
- Catchments (www.catchments.ie)
- Environmental Protection Agency Maps (https://gis.epa.ie/EPAMaps)
- Geological Survey Ireland (GSI) website (www.gsi.ie)
- GSI - Groundwater data viewer (https://dcenr.maps.arcgis.com)
- Planning Applications (myplan.ie)

1.4.2 Ecological Site Survey

To inform this AA Screening an ecological site survey was performed by JBA Ecologists; William Mulville and Michael Coyle on the 17th of August 2022

The ecological walkover survey recorded habitats and protected species, following the methods outlined in the documents below:

- Heritage Council (2011). Best Practice Guidance for Habitat Survey and Mapping (Smith et al. 2011).
- Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes (NRA, 2009b).

Aerial photographs and site maps assisted the survey. Habitats have been classified and described following Fossitt (2000). Nomenclature for higher plants follows that given in The New Flora of the British Isles 4th Edition (Stace 2019). Identification of Irish plants generally follows Webb's An Irish Flora (Parnell and Curtis, 2012).

1.4.3 In-combination Assessment

The in-combination assessment followed the process for in-combination set out by the DTA Handbook (Tyldesley and Chapman, 2013). The in-combination impacts are considered only after the assessment of the project alone. If the result of this is that the project will have no effect at all on a European site then no in-combination assessment would be necessary. However, where there is no adverse effect on site integrity, but some adverse effect an assessment of this adverse effect in-combination with other plans or projects is carried out. Other plans or projects were searched for using the National Planning Application Database, EIA portal and Myplan.ie databases all accessed online. If no other plans or projects are identified, then the assessment is complete. Where other plans or projects are identified then initially a review is made of its AA screening, or AA, and if the Competent Authority for the plan or project has made a final determination of no effect on the integrity of any European site, either alone or in-combination, this determination is used in this assessment. Where there is not a full AA, or the findings are unclear or out of date, the plan or project documentation is checked for credible evidence

of real (not hypothetical) risk to a European site. Where these are identified then a detailed assessment is carried out. A summary of the approach is presented in Figure 1-2.

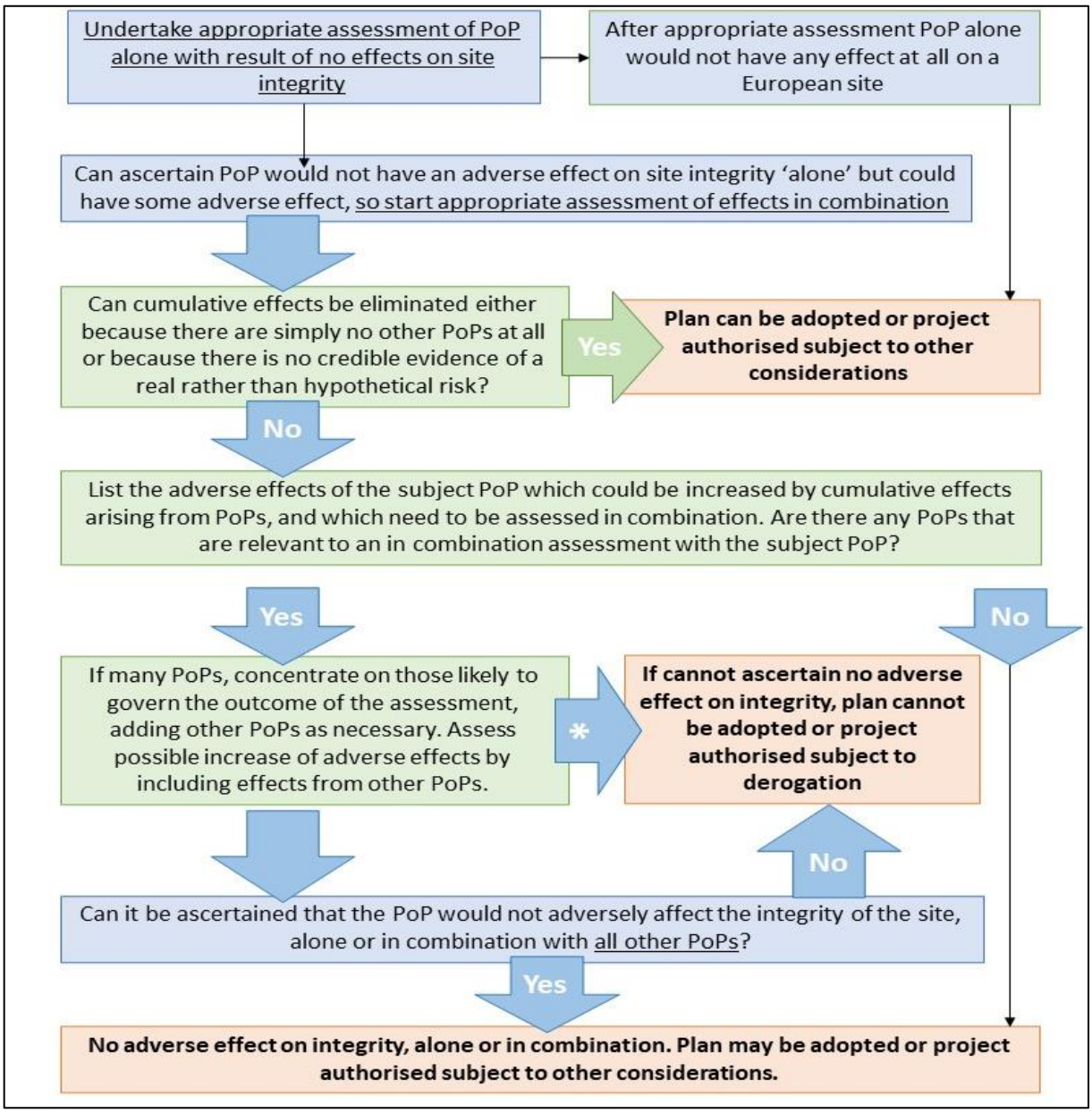

Figure 1-2: Flow diagram of process for in-combination assessment (modified from Tyldesley and Chapman, 2013)

Potential sources of cumulative impacts were identified based on the ecology of valued ecological features only for features where this is a residual or non-significant impact. Potential sources of cumulative impacts were sought within an area where there is the potential for a significant impact on relevant Natura sites identified in Section 4.

1.5 Limitations and constraints

The screening assessment necessarily relies on some assumptions, and it was inevitably subject to some limitations. These would not affect the conclusion, but the following points are recorded in order to ensure the basis of the assessment is clear:

- Information on the site is based on current knowledge from desk top review, as well as information gained from the latest site visit. However, the site visit took place in August 2022, and it is possible that features and information regarding the site may have since changed.
- This assessment is based on the methodology for proposed works as described in this report. Where changes to methodology occur, an ecologist will need to be consulted to determine if the changes are likely to alter the ecological impacts and would therefore need reassessment.

2 Project Description

2.1 The 'Project'

The proposed development is not directly connected with or necessary to the management of any Natura 2000 site and may have potential adverse impacts upon the Natura 2000 sites identified in Section 4. Therefore, the proposed project is subject to the requirements of the AA process.

2.2 Site location

The location for the proposed development is in a park in the Liffey Valley area, west of the Liffey Valley Shopping Centre, and south of the N4 road. The nearest watercourse is the River Liffey (Liffey_180) which the closest point is located 425m north of the development area. The surrounding area is a mixture of residential and commercial properties. This proposed site is shown in (Figure 2-1).

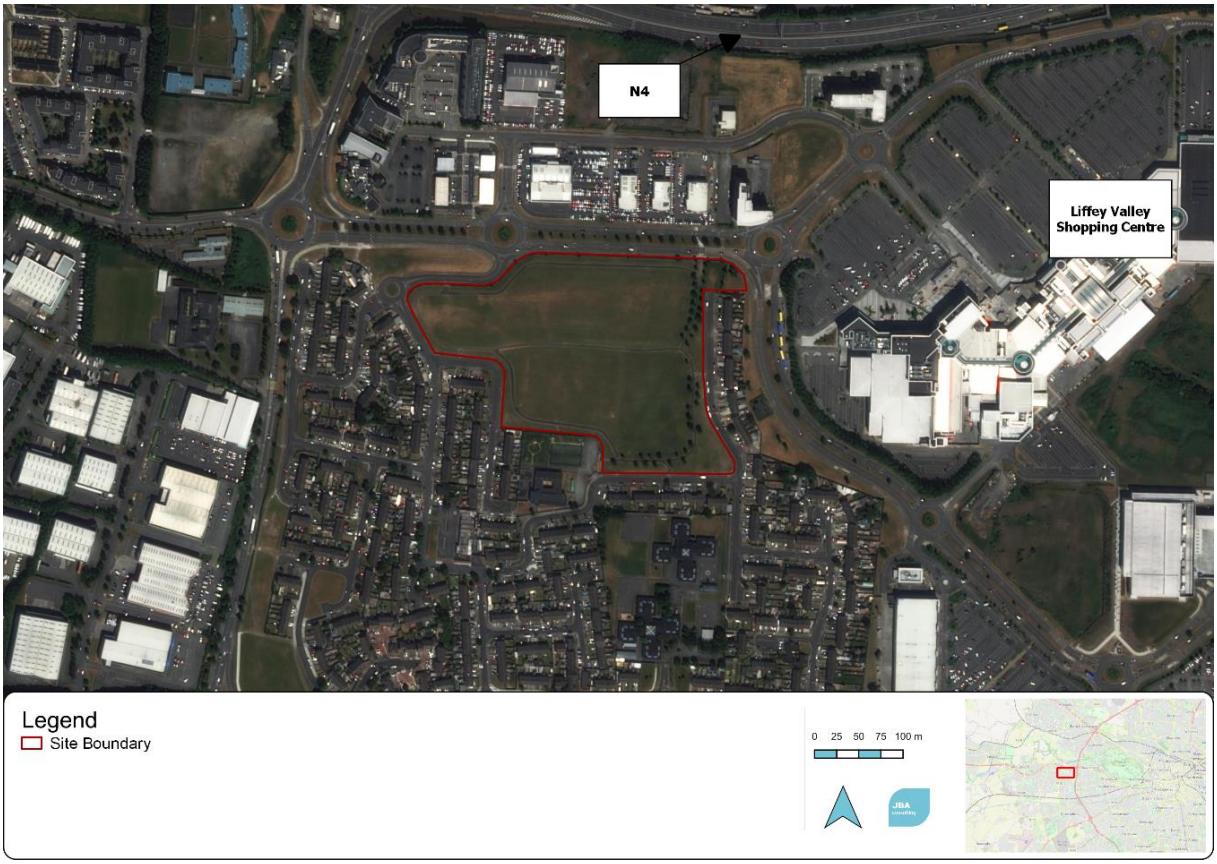

Figure 2-1: Site location (ESRI: Satellite 2023; OSM, 2023)

2.3 Proposed project

The proposed and preferred development of the project includes the redevelopment of the Quarryvale Park. The scope of the project includes: The proposed and preferred development of the project includes the redevelopment of the Quarryvale Park. The Masterplan Proposals of this project include:

- New park structure focused on a formal entry plaza at Fonthill Road junction, with possible rain gardens, linear water feature, seating and feature lighting.
- Major shared footpath/cycle routes linking to Shancastle Lawns and Greenfort Gardens, with street lighting and formal trees.
- Pedestrian nodes with seating.
- Existing oak trees retained, providing an informal memorial walk.
- Provision for active recreation – e.g., Teenspace, natural play areas and pump track or similar.

- Activity circuit, 800m long - with exercise stations and seats/play equipment.
- Possible grass sports pitch.
- Biodiversity improvements - existing boundary hedge retained, grass meadowland management bands, bulbs in linear strips, informal native tree groups.

There are different depths of excavations required for the project, relating to six different functional zones of the development. These include:

- Tree pits – 1.50m deep.
- Streetlight bases – 1.25m deep.
- Play/recreation bases – 1.25m deep.
- Wall foundations – 0.50m deep.
- General hard surfaces – 0.45m deep.
- SuDS hard surfaces – 0.50m deep.

The construction of the proposed site will last approximately 10 months for construction, with 12 months Defects Liability Period and 36 months Planting Maintenance Period.

The Site Masterplan can be viewed in Appendix A.

2.4 Project Area of Influence

The project will primarily affect the site only, but a wider area of influence is used for impacts relating to noise disturbance (1km), air (2km), groundwater pollution (5km), surface water (5km), and an additional hydrological buffer from connecting transitional waters to coastal areas; and any supporting habitat for SAC/SPA species within the vicinity of the site (5km).

3 Existing Environment

3.1 Baseline conditions

The site is located within amenity grassland, set in an urban environment., and the nearest watercourse is the River Liffey (Liffey_180) located approximately 425m north of the site. The proposed development is located within an existing park in the Fonthill area, west of Palmerstown. An ecological walkover survey was carried out on the17th of August 2022 by JBA Ecologists William Mulville and Michael Coyle Descriptions of the habitats and species are provided in the sections below.

3.2 Habitats

Habitats recorded in and around the site boundary are listed in Table 3-1. The survey results are illustrated as a habitat map Figure 3-1. The site mainly consists of amenity grassland, with a surrounding border of a Beech *Fagus sylvatica* hedge, and a grassy verge found in the southwest corner of the site. The footpaths in the east of the site are bordered with treelines of Pedunculate Oak *Quercus robur.*

Table 3-1: List of habitats recorded on site

Habitat	Fossitt Code
Building and artificial surfaces	BL3
Amenity grassland (improved)	GA2
Dry meadow and grassy verges	GS2
Hedgerows	WL1
Treelines	WL2

Figure 3-1: Habitat map of Quarryvale Park (ESRI: Satellite, 2023)

3.2.1 Building and artificial surfaces (BL3)

There is a pathway present on the inside of the boundary of the park, as well as across the centre of the site in an east-west direction.

3.2.2 Amenity grassland (improved) (GA2)

The majority of the site consists of GA2 grasses, with species consisting of Ribwort Plantain *Plantago lanceolata*, Greater Plantain *Plantago major*, Red Clover *Trifolium pratense*, Dandelion *Taraxacum spp.*, Nipplewort *Lapsana communis*, False Oat-grass *Arrhenatherum elatius,* Common Bent *Agrostis capillaris*, Lesser Stitchwort *Stellaria graminea*, Perennial Rye-grass *Lolium perenne*, Field Mustard *Brassica rapa subsp oleifera*, Creeping Cinquefoil *Potentilla reptans* and Dock *Rumex spp*. There are patches throughout the site of small beds of Yarrow *Achillea millefolium* that have been mown around and retained (Figure 3-2 overleaf).

Throughout the site were bird species; Rook *Corvus frugilegus*, Jackdaw *Corvus monedula*, Feral Pigeon *Columba livia f. domestica*, Pied Wagtail *Motacilla alba yarrellii*, Black-headed Gull *Larus ridibundus*, Hooded Crow *Corvus cornix* and House Sparrow *Passer domesticus*.

Figure 3-2: Amenity grassland within Quarryvale Park, with the patches of Yarrow present

3.2.3 Dry meadow and grassy verges (GS2)

There is a patch of grassy verge present on the boundary in the south west of the site with False Oat-grass, Sowthistle *Sonchis spp*, Silverweed *Potentilla anserina*, Field Mustard, Common Poppy *Papaver rhoeas* and Pineappleweed *Matricaria discoidea*. This patch was approximately 2.5m wide (Figure 3-3).

Figure 3-3: Dry grassy verge located along the south-western boundary of the site

3.2.4 Hedgerows (WL1)

The hedging of the site's boundary consisted primarily of Beech *Fagus sylvatica* hedging. There were also some other floral species that were recorded less frequently within the hedgerow, these included Field Mustard, Cleavers *Galium aparine*, Creeping Thistle *Cirsium arvense*, Nettle *Urtica dioica*, Ragwort *Jacobaea vulgaris, and* Bramble *Rubus fruticosus agg.* with occasional Ash *Fraxinus excelsior* and Lime *Tilia cordata x platyphyllos* (Figure 3-4).

Figure 3-4: Boundary hedgerow along the northern boundary

3.2.5 Treelines (WL2)

The treeline stretching the length of the park's eastern / south-eastern section consisted of planted Pedunculate Oak *Quercus robur.*

3.3 Protected Species

The survey did not record any protected fauna or floral species that are qualifying interests of Natura 2000 sites within the ZoI. Desktop study findings of protected or red-listed species within a 5km radius of the site were collated from the National Biodiversity Centre Ireland (NBDC, 2023) and the Botanical Society of Britain and Ireland (BSBI, 2023), and are presented in Appendix C.

3.4 Waterbodies within the Vicinity of the Proposed Site

A tributary of the Water Framework Directive (WFD) River Liffey (Liffey_180), Quarryvale Stream, is located approximately 425m north of the site and drains into the Liffey_190 waterbody, and then into the Liffey Estuary Upper transitional waterbody, The proposed site is located within the Liffey and Dublin Bay catchment, and the Liffey_SC_090 sub-catchment (EPA, 2022). The WFD Status and Risk level of each of these WFD waterbodies are listed below in Table 3-2, and the indirect connection between the site and Dublin Bay is shown in Figure 3-5.

Table 3-2: WFD (2016-2021) status and risk level for river waterbodies in the vicinity of the site

Waterbody	WFD Status	WFD Risk
River Liffey (Liffey_180)	Poor	At Risk
River Liffey (Liffey_190)	Poor	At Risk

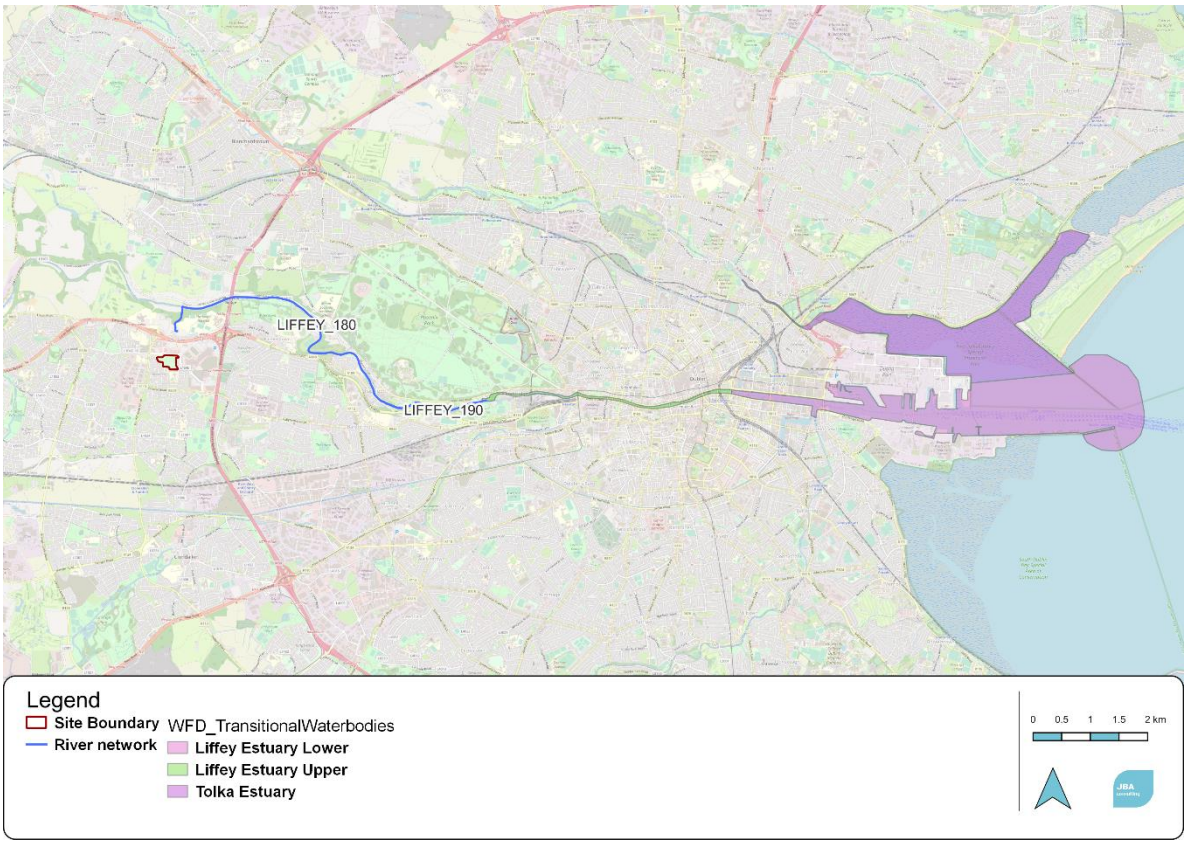

Figure 3-5: Local waterbodies (OSM, 2023)

3.5 Groundwater

The groundwater body which underlies the proposed site is the Dublin groundwater body (IE_EA_G_008) (Figure 3-7). The WFD status for the groundwater body is currently marked as 'Good'; and is currently considered to be undergoing review (EPA, 2023).

The underlying bedrock of the proposed site is dominated by dark limestone and shale of the Lucan formation, and the formation ranges in thickness from 300-800mm. This area comprises entirely of till derived from limestone, with a parent material of "Made ground". The site's water table is quite high, as the vulnerability is described as "Extreme" (Figure 3-8), however the subsoil's permeability is "Not Assessed", but can be assumed to be of Low or Moderate value, as the groundwater recharge coefficient is 20%.

The site is designated as being a "Locally Important Aquifer-Bedrock which is Moderately Productive only in Local Zones", having a limited and relatively poor connection network with fractures, fissures and joints that contributes to a low permeability that decreases even further with depth, and contributes to the low recharge percentage from rainwater and rapid discharges to local streams and rivers, and the low chance of pollutants being transferred through the groundwater system (GSI, 2023).

Figure 3-6: Groundwater bodies in the vicinity of the site (OSM, 2023)

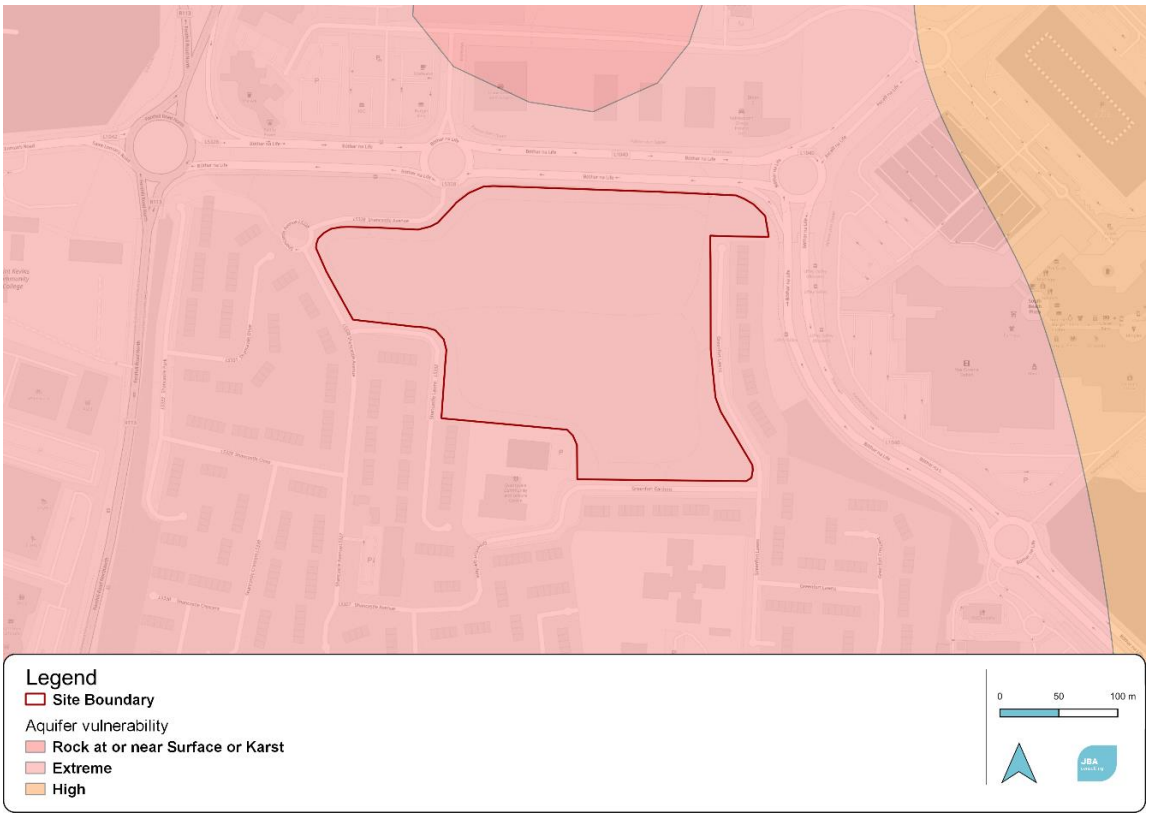

Figure 3-7: Aquifer vulnerability of the site and its surrounding areas (OSM, 2023)

4 Natura 2000 Sites

The DEHLG (2009) guidance identifies that Screening for Appropriate Assessment of a plan or project should consider the following Natura 2000 sites:

- Any Natura 2000 sites within or adjacent to the plan or project area.
- Any Natura 2000 sites within the likely zone of impact of the plan or project. This is dependent on the nature and scale of the plan, with 15km generally recommended for plans, but potentially much less for projects.
- Any Natura 2000 sites that are more than 15km from the plan or project area, but may potentially be impacted upon, for example, through a hydrological connection.

As the scale of proposed works are considered of 'Project' status, Natura 2000 sites within a 5km range of the proposed development were examined. An additional 15km range was used for river/estuarine areas were added where a hydrological connection is applicable. There were no Natura 2000 sites within the 5km range, and those within the 15km range and hydrological buffer are listed in Table 4-1 below and their location are shown in Figure 4-1 (overleaf).

Table 4-1: Natura 2000 sites located within the Zone of Influence (ZoI) of the proposed development.

Natura 2000 site	Site Code	Approximate direct distance from site	Approximate hydrological distance from site
North Dublin Bay SAC	000206	14.3km	n/a
South Dublin Bay SAC	000210	12.4km	n/a
North Bull Island SPA	004006	11.1km	n/a
South Dublin Bay and River Tolka Estuary SPA	004024	12.4km	n/a

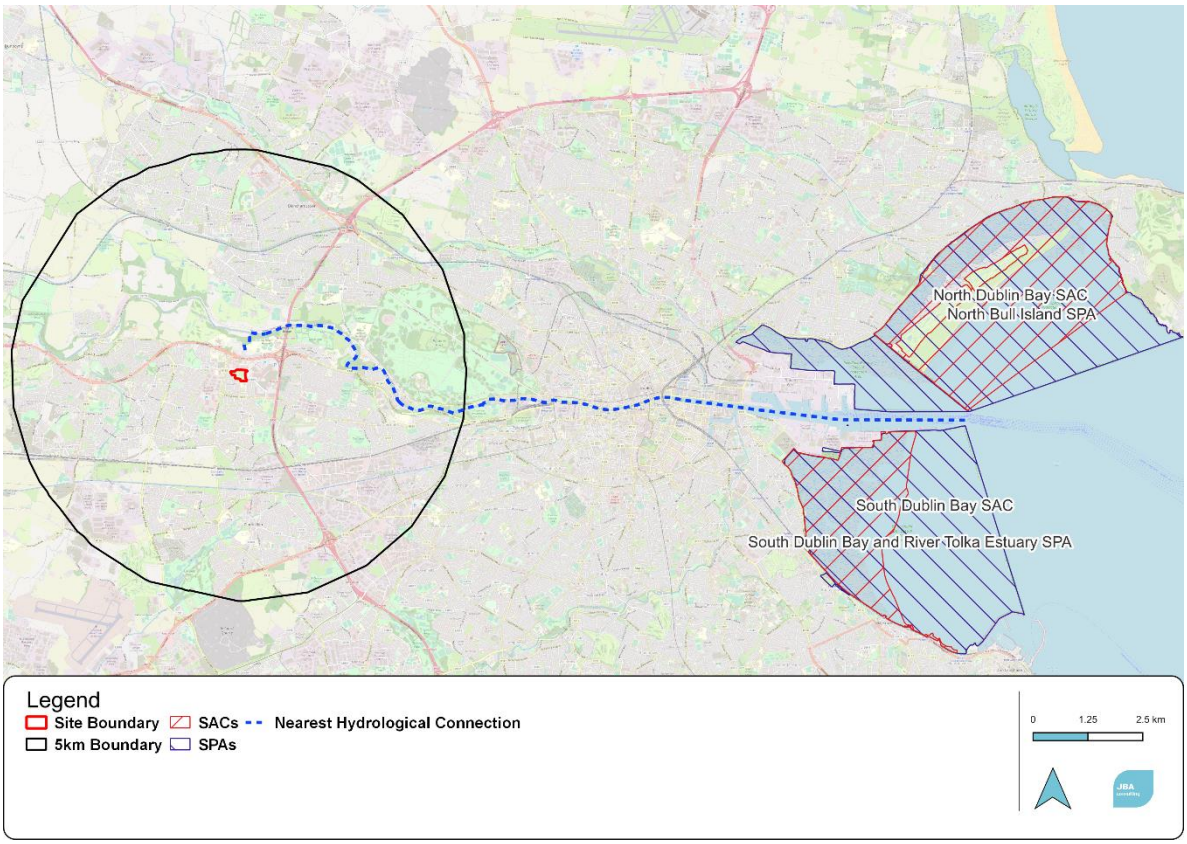

Figure 4-1: Natura 2000 within 15km of the site that may have a hydrological connection (OSM, 2023)

As pollutants can be transported via watercourses and end up in Dublin Bay, the potential impact on these Natura 2000 sites is assessed in detail in Section 5.4. Site descriptions, Qualifying Interests (QI) and threats/pressures for the above Natura 2000 sites are provided in Table 4-2 overleaf.

Table 4-2: Site briefs; Qualifying Interests; and project-relevant threats /pressures and their impacts and sources in relation to the Natura 2000 sites within the 15km ZoI (plus hydrological connectivity extension).

Site Name	Brief	Qualifying Interests	Project Relevant Threats / Pressures: Impact (Source)
South Dublin Bay SAC [000210]	The intertidal flats at their widest points are 3km with channels existing at largest with Cockle Lake. A small sandy beach occurs near to Dun Laoghaire, with an almost entire artificial embankment. The sediments from the Tolka Estuary vary from thixotrophic mud with a high organic content in the inner estuary to a well aerated and exposed sand system off of the Bull Wall. Insights show that many birds who winter in South Dublin Bay do not continue towards North Dublin Bay (NPWS, 2015a).	- Mudflats and sandflats not covered by seawater at low tide [1140] - Annual vegetation of drift lines [1210] - *Salicornia* and other annuals colonising mud and sand [1310] - Embryonic shifting dunes [2110] (NPWS 2013a)	Roads, motorways: Low impact (outside) Urbanised areas, human habitation: High impact (outside) (EEA, 2020a)
South Dublin Bay and River Tolka Estuary SPA [004024]	This site covers a large part of the Dublin Bay, including the intertidal area of the River Liffey and Dun Laoghaire, along with the estuary of the River Tolka to the north of the River Liffey and Booterstown Marsh. The south of the bay has intertidal flats that at their widest extend for almost 3km. The site is important for wintering fowl, integral for the importance of the Dublin Bay complex (NPWS, 2015b).	- Light-bellied Brent Goose *Branta bernicla hrota* [A046] - Oystercatcher *Haematopus ostralegus* [A130] - Ringed Plover *Charadrius hiaticula* [A137] - Grey Plover *Pluvialis squatarola* [A141] - Knot *Calidris canutus* [A143] - Sanderling *Calidris alba* [A144] - Dunlin *Calidris alpina* [A149] - Bar-tailed Godwit *Limosa lapponica* [A157] - Redshank *Tringa totanus* [A162] - Black-headed Gull *Chroicocephalus ridibundus* [A179] - Roseate Tern *Sterna dougallii* [A192] - Common Tern *Sterna hirundo* [A193] - Arctic Tern *Sterna paradisaea* [A194] - Wetland and Waterbirds [A999] (NPWS 2015c)	Roads, motorways Low impact (outside) Urbanised areas, human habitation High impact (outside) (EEA, 2021)

Site Name	Brief	Qualifying Interests	Project Relevant Threats / Pressures: Impact (Source)
North Dublin Bay SAC [000206]	This SAC extends from the inner part of North Dublin Bay, and primarily focuses on North Bull Island. Dynamic dune systems and saltmarshes are found along this region. A variety of important and rare flora habituate this SAC, including Lesser Centaury, Red Hemp-nettle, and Meadow Saxifrage. North Dublin Bay is also of international importance for waterfowl as it hosts Brent Goose, Knot, Bar-tailed Godwit, Oystercatcher, Ringed Plover, Sanderling, and Dunlin (NPWS, 2013b).	- Mudflats and sandflats not covered by seawater at low tide [1140] - Annual vegetation of drift lines [1210] - *Salicornia* and other annuals colonising mud and sand [1310] - Atlantic salt meadows *Glauco-Puccinellietalia maritimae* [1330] - Mediterranean salt meadows *Juncetalia maritimi* [1410] - Embryonic shifting dunes [2110] - Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120] - Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] - Humid dune slacks [2190] - Petalwort *Petalophyllum ralfsii* [1395] (NPWS, 2013c)	Urbanised areas, human habitation: High impact (outside) (EEA, 2020b).
North Bull Island SPA [004006]	This site covers all the inner part of north Dublin Bay, with the seaward boundary extending from Bull Wall lighthouse, to Howth Head. The spit in the north is relatively recent, almost 5km long, 1km wide and running parallel to the coast between Clontarf and Sutton. The saltmarsh extends the length of the landward side of the island, providing the main site for wintering bird roosting in Dublin Bay. The wintering waterfowl use two lagoons as their primary feeding grounds, these lagoons are divided by a causeway. (NPWS, 2014)	- Light-bellied Brent Goose *Branta bernicla hrota* [A046] - Shelduck *Tadorna tadorna* [A048] - Teal *Anas crecca* [A052] - Pintail *Anas acuta* [A054] - Shoveler *Anas clypeata* [A056] - Oystercatcher *Haematopus ostralegus* [A130] - Golden Plover *Pluvialis apricaria* [A140] - Grey Plover *Pluvialis squatarola* [A141] - Knot *Calidris canutus* [A143] - Sanderling *Calidris alba* [A144] - Dunlin *Calidris alpina* [A149] - Black-tailed Godwit *Limosa limosa* [A156] - Bar-tailed Godwit *Limosa lapponica* [A157] - Curlew *Numenius arquata* [A160] - Redshank *Tringa totanus* [A162] - Turnstone *Arenaria interpres* [A169]	Continuous urbanisation: Medium impact (inside) Other patterns of habitation: Low impact (inside) (EEA, 2020c)

Site Name	Brief	Qualifying Interests	Project Relevant Threats / Pressures: Impact (Source)
		- Black-headed Gull *Chroicocephalus ridibundus* [A179] - Wetland and Waterbirds [A999] (NPWS 2015d)	

* = priority Annex I habitat

5 Other Relevant Plans and Projects

5.1 Cumulative Effects

As part of the Screening for an Appropriate Assessment, in addition to the proposed works, other relevant projects and plans in the region that may induce cumulative impacts must also be considered at this stage.

The following projects or plans were identified as potential sources of cumulative impacts:

- South Dublin County Development Plan 2016-2022
- Greater Dublin Drainage Strategy
- Third Cycle River Basin Management Plan for Ireland (2022-2027)
- Planning Applications (retrieved from Data.gov.ie - Planning Application Sites, March 2023)

5.2 Plans

5.2.1 South Dublin County Development Plan 2022-2028

The proposed scheme's development is in line with the South Dublin County Development Plan 2022-2028. It is an objective of the Plan to ensure that all development within the County conforms to key design principles which includes the promotion of sustainable energy and environmental services. These goals include the requirement that the planning system will 'be responsive to our national environmental challenges and ensure that development occurs within environmental limits, having regard to the requirements of all relevant environmental legislation and the sustainable management of our natural capital.

The Plan also aims to protect and enhance surface water quality, to support, improve and protect Natura 2000 sites, and to develop an integrated Green Infrastructure network to enhance biodiversity, provide accessible parks, open spaces and recreational facilities (SDCC, 2022a). The plan also states that work will be in conjunction with Irish Water to protect existing water and drainage infrastructure, to promote investments aiming to support environmental protection and facilitate the sustainable growth of the county.

A Screening for Appropriate Assessment was carried out on the plan, which was concluded that an Appropriate Assessment was necessary for this project. The associated Natura Impact Report concluded that there are no likely significant direct, indirect or secondary impacts of the project on any Natura 2000 sites (SDCC, 2022b), **therefore the SDCC Development Plan is not anticipated to contribute to cumulative or in-combination impacts.**

5.2.2 Greater Dublin Drainage Strategy

The Greater Dublin Drainage Strategy sets out the strategic planning for the development of wastewater treatment in the Greater Dublin Area in relation to the Ringsend Waste Water Treatment Plant (WWTP) Upgrade, Greater Dublin Drainage Project and associated wastewater network drainage projects (Irish Water, 2018). The proposed developed connects with the Local Authority sewer system which is included in this strategy. The Ringsend WWTP Upgrade includes plans to expand the WWTP to its ultimate capacity, together with associated network upgrades required. The Greater Dublin Drainage Project is planned to relieve both the Ringsend WWTP and network loading by construction of a new WWTP at Clonshaugh, an orbital sewer and provision of an outfall pipe discharging 1km north east of Ireland's Eye. The Ringsend WWTP upgrade is in progress and carried out in stages, with an increased capacity of 400,000 PE by the first half of 2021 and the ultimate capacity of 2.4 million PE to be in operation by 2025 (Irish Water, 2018). The Greater Dublin Drainage Project is strategically important to the Dublin Region in that it will provide capacity for residential and commercial growth (Irish Water, 2018).

The Greater Dublin Drainage Strategy is not anticipated to contribute to cumulative or in-combination effects.

5.2.3 Third Cycle River Basin Management Plan for Ireland 2022-2027 (DoHPLG, 2022)

The first cycle of River Basin Management Plans included the Eastern River Basin District - River Basin Management Plan (ERBDMP) 2009 – 2015 (WFD (2010). The plans summarised the waterbodies that may not meet the environmental objectives of the WFD by 2015 and identified which pressures are contributing to the environmental objectives not being achieved. The plans described the classification results and identified measures that can be introduced in order to safeguard waters and meet the environmental objectives of the WFD.

- Prevent deterioration of water body status.
- Restore good status to water bodies.
- Achieve protected areas objectives.
- Reduce chemical pollution of water bodies

The 2nd cycle River Basin Management Plan (RBMP) for Ireland 2018-2021 sets out the actions that Ireland will take to improve water quality and achieve 'good' ecological status in water bodies (rivers, lakes, estuaries and coastal waters) by 2021 (DoHPLG, 2018a). Changes from previous River Basin Management Plans is that all River Basin Districts are merged as one national River Basin District. The Plan provides a more coordinated framework for improving the quality of our waters — to protect public health, the environment, water amenities and to sustain water-intensive industries, including agri-food and tourism, particularly in rural Ireland.

The 3rd and current cycle aims to build on the initiatives of the second cycle, particularly the governance and implementation structures, and to improve the establishment of Irish Water, An Forum Uisce, the Local Authority Waters Programme and the Agricultural Sustainability Support and Advisory Programme.

The third cycle draft Catchment Report for Liffey and Dublin Bay (Catchment Science & Management Unit 2021) identified that between Cycles 2 and 3 there has been an overall small improvement in the catchment's status. The overall change in quality between Cycles 2 and 3 include 2 waterbodies that have achieved High Status, which is an increase of one, 56 which achieve Good Status has been increased by four, 23 achieving a Moderate Status which is a decrease in four waterbodies, and 24 achieving a Poor Status an increase of 1 between cycles. There are no Bad Status waterbodies as of Cycle 3, which is a decrease of one from Cycle 2. The main significant pressures are aquaculture, anthropogenic, atmospheric, historically polluted sites and waste pressures followed by agriculture, urban run-off and forestry.

The Third Cycle River Basin Management Plan for Ireland 2022-2027 is not anticipated to contribute to cumulative or in-combination effects.

5.3 Other Projects

Other projects dating back three years are listed in Table 5-1 (overleaf), which are not retention applications, home extensions and/or internal alterations, and have been granted planning permission in the locality of the proposed site.

Table 5-1: Other projects within approximately 2km which may have an accumulative impact on the development of the project

Planning reference	Address	Application Status	Decision Date	Summary of Development
SHD3ABP-305857-19	St. Edmunds, St. Lomans Road, Palmerstown, Dublin 20	Permission granted	06/03/2020	Mixed use scheme which consists of: (a) 252 residential units in 3 blocks made up of 247 apartment/duplex units within 2 2-8 storey blocks (1 of which is over podium car park) comprising 119 one bed units, 125 two bed units, and 3 three bed units; 5 2 storey, three bed semi-detached/terraced house; all of the residential units will have associated private open space/balconies/terraces facing north/south/east/west; (b) a separate non-residential block measuring (total floor area c. 1118sq.m) and will comprise a creche (c.430sq.m), retail unit (c. 269sq.m), gym (c.152sq.m), community room (c. 231sq.m), and concierge (c. 36sq.m). The development will have 225 car parking spaces (145 spaces at under croft level, 70 spaces at surface level and 10 spaces at the 5 houses), 5 motorcycle parking spaces and 308 secure bike parking spaces. The site is accessed through the existing vehicular access to the west, off the unnamed road to the west. There will be a number of pedestrian entrances along St. Lomans Road, the Fonthill Road (R113) and the unnamed road to the west. In addition to all the new facilities all other site services and works to enable the development of the site will also be provided including site, bin stores, ESB substations, associated roadworks and services connections, a large quantity of public and communal open space, boundary treatment works and landscaping.
SD20A/0109	Kishoge Community College, Thomas Omer Way, Lucan, Co. Dublin	Permission granted	16/07/2020	2 storey modular classroom building and a single storey toilet building, steel framed covered walkway structure linking to the existing school, relocation of existing bicycle shelters and all associated site development works.
SD19A/0008	Site at Balgadddy, South Lucan, Co. Dublin	Permission granted	23/01/2020	Demolition of two existing unoccupied, unused and dilapidated single storey buildings and the construction of a Community Centre and Place of Worship (Mosque) in a detached three storey over basement building (basement, ground, first and second floors), part pitched and part flat roofed, incorporating solar PV panels and a feature minaret and dome on/over roof levels and including: (a) at basement level - circulation spaces, car parking, bicycle parking, exercise room, service rooms, service plant and bin storage; (b) at ground floor level - main entrance and circulation spaces, administrative spaces, toilets and ablutions areas, storage rooms, tea stations, mortuary, prayer room with supporting service rooms, 2 classrooms, a library/book store, 3 retailing/services units, child minding rooms; (c) at first floor level - circulation spaces, administrative spaces, toilets and ablutions areas, 2 apartments, community health rooms, events room, kitchen/servery, prayer gallery overlooking the prayer room; (d) at second floor level - circulation spaces, administrative spaces, toilets, restaurant, kitchen; external to the building will be main vehicular and pedestrian site entrances including gates in the new northern boundary, limited car and bicycled parking, ramp entrance/exit

Planning reference	Address	Application Status	Decision Date	Summary of Development
				to & from the underground basement car park, service yard, external circulation, children's play space, hard and soft landscaped areas, boundary treatments including walls and metal fencing; the areas and locations of each use will be shown on the drawings proposed to be lodged with the planning application and the times of use and occupancy of each are listed within written documents to be lodged with the planning application.
SHD3ABP-307092-20	Lands at Palmerstown Retail Park, Kennelsfort Road Lower, Palmerstown, Dublin 20, D20 AE04	Permission granted	01/09/2020	Demolition of all existing structures on site and the construction of a residential development of 250 'build-to-rent' apartments in 5 blocks; with a cafe and ancillary residential amenity facilities. Block A- 27 apartments in a building ranging from 3-6 storeys over basement, with 1 communal roof garden and most apartments provided with private balconies/terraces. A cafe, reception/concierge with managers office and bookable space at ground floor level; meeting rooms and workspace/lounge at first floor level, a gym at second floor level; and a cinema and a games room at basement level; Block B- 46 apartments in a building 6 storeys over basement and all apartments provided with private balconies/terraces; Block C- 47 apartments in a building 6 storeys over basement and all apartments provided with private balconies/terraces; Block D- 67 apartments in a building 7 storeys over basement and most apartments provided with private balconies/terraces; Block E- 63 apartments in a building 8 storeys over basement and all apartments provided with private balconies/terraces. The development also includes the construction of a basement providing 120 car parking spaces, 10 motorcycle spaces, 250 bicycle spaces and a plant room and bin stores. The proposal also incorporates 5 car parking spaces and 26 bicycle spaces at surface level; upgrades and modifications to vehicular and pedestrian/cyclist access on Kennelsfort Road Lower; utilisation of existing vehicular and pedestrian/cyclist access via Palmerstown Business Park; 1 ESB sub-station; landscaping including play equipment and upgrades to public realm; public lighting; boundary treatments and all associated engineering and site works necessary to facilitate the development.
SD20A/0089	Immediately adjacent to and south-east of the Liffey Valley Shopping Centre, Fonthill Road, Clondalkin, Dublin 22	Permission granted	08/12/2021	Mixed leisure, entertainment and retail extension to the existing Liffey Valley Centre organised around a large public plaza and pedestrian friendly east-west street with parapet levels varying between c.15m and c.18m above street level; the scheme provides for: (a) a two storey commercial extension (c.46,783sq.m gross) with plant areas at roof level to the existing Centre providing for mixed leisure and entertainment units (c. 9,247sq.m gross), food/beverage units (c.4,052sq.m gross), retail units (c. 21,051sq.m gross) and all ancillary space and circulation areas (c.12,433sq.m gross); the main retail area will be anchored by two stores (comprising a total of c.10,090sq.m gross) located on either side of the public plaza; (b) a central public plaza fronting onto the east-west street covered with a large glass canopy in the form of a curved gridshell

Planning reference	Address	Application Status	Decision Date	Summary of Development
				structure, this structure will be the tallest part of the proposal at a height of c. 20m above street level, the food/beverage units are located around the plaza at both ground and first floor levels; (c) car parking over two levels (c.900 spaces including 45 universal access spaces and c.200 long stay cycle spaces with an area of c.27,917sq.m gross) located north-east of the extension area c. 290 short stay cycle spaces, 27 short stay car parking spaces and car/taxi set down areas on the east-west street; c.100 long stay cycles spaces provided within the existing car park to the adjacent to the Westend development (Vue Cinema and restaurants); approximately 2,085sq.m of existing gross floor space is to be removed/demolished over ground and first floor to facilitate the extension; the proposal includes all associated service yards, plant and equipment, photovoltaic panels, electricity substations, all utility connections and works, street lighting, signage, landscaping and boundary treatments; the proposal includes the construction of new toucan crossing points for cyclists on Ascail an Life (Ring Road around the Centre) at the western end of the east-west street to provide safe connection to the existing cycle network.

5.4 Summary

The developments permitted above have the potential to have overlapping construction and short-term residual impact phases with the Proposed Scheme and therefore, in the absence of mitigation measures, these developments may result in potential in-combination or cumulative impacts given their proximity to the local Natura 2000 sites.

The County Development Plan; Greater Dublin Drainage Strategy and River Basin Management Plan and projects within the locality of the proposed project are considered in combination with the currently proposed project in the Screening Assessment section below.

6 Screening Assessment

6.1 Introduction

This screening exercise will focus on assessing the likely adverse effects of the project on the Natura 2000 site identified in Section 4 above.

This section identifies the potential impacts which may arise as result of the proposed project. It then goes on to identify how these impacts could potentially impact on Natura 2000 sites listed in Table 4-1. The significance of potential impacts is also assessed, with any potential in-combination effects also identified.

The Natura 2000 sites to be assessed are:

- North Dublin Bay SAC [000206]
- South Dublin Bay SAC [000210]
- North Bull Island SPA [004006]
- South Dublin Bay and River Tolka Estuary SPA [004024]

6.2 Assessment Criteria

6.2.1 Description of the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 sites

Potential adverse impacts that could cause a significant effect on the qualifying interests of the Natura 2000 sites, during the construction and operational phases of the project, will impact on the sites via surface water pathways, groundwater pathways and land and air pathways. Surface water pathways can impact on surface water quality and surface water dependent habitat quality. Groundwater pathways can impact on groundwater quality and quality of groundwater dependent habitats. Land and air pathways can impact by direct physical disturbance and dust or other air-based emissions.

The proposed project is not anticipated to impact on the qualifying interests of the Natura 2000 sites within the ZoI due to its small scale; the distance between the potential source of impact and the receiving environment (Natura 2000 sites), as well as the lack of hydrological connection. The rationale for excluding impacts via the main pathways is given in more detail in the following section.

6.2.2 Surface Water Pathways

Potential pollutants will be used on-site, which will include oil and petrol/diesel related to machinery, dust and soil spill related to excavations, and concrete related to the project's construction. The proposed site is located within the Liffey_SC_090 WFD sub catchment and does not share this sub-catchment with any Natura 2000 sites (Figure 6-1, overleaf).

The site lacks a direct connection with the nearest watercourse, and the lack of shared sub-catchments between the project site and any Natura sites. The River Liffey (Liffey_180) is located 425m away from site. Pollutants are unlikely to reach this waterbody due to surface water runoff, as there are buildings and vegetative buffers between the site and this waterbody. Any dust that settles on the river through airborne pathways, would then have to travel an approximate 15.8km before reaching the South Dublin Bay and River Tolka Estuary (the closest site). Settlement of silt would occur in the surface water bodies before reaching any of the Natura 2000 sites in Dublin Bay with further dilution occurring with transitional and coastal water in Dublin Bay.

Therefore, given the lack of direct connectivity and general distance to the Natura 2000 sites, adverse impacts from surface water-based pollution, during the construction phase, are not anticipated for the Dublin Bay Natura 2000 sites.

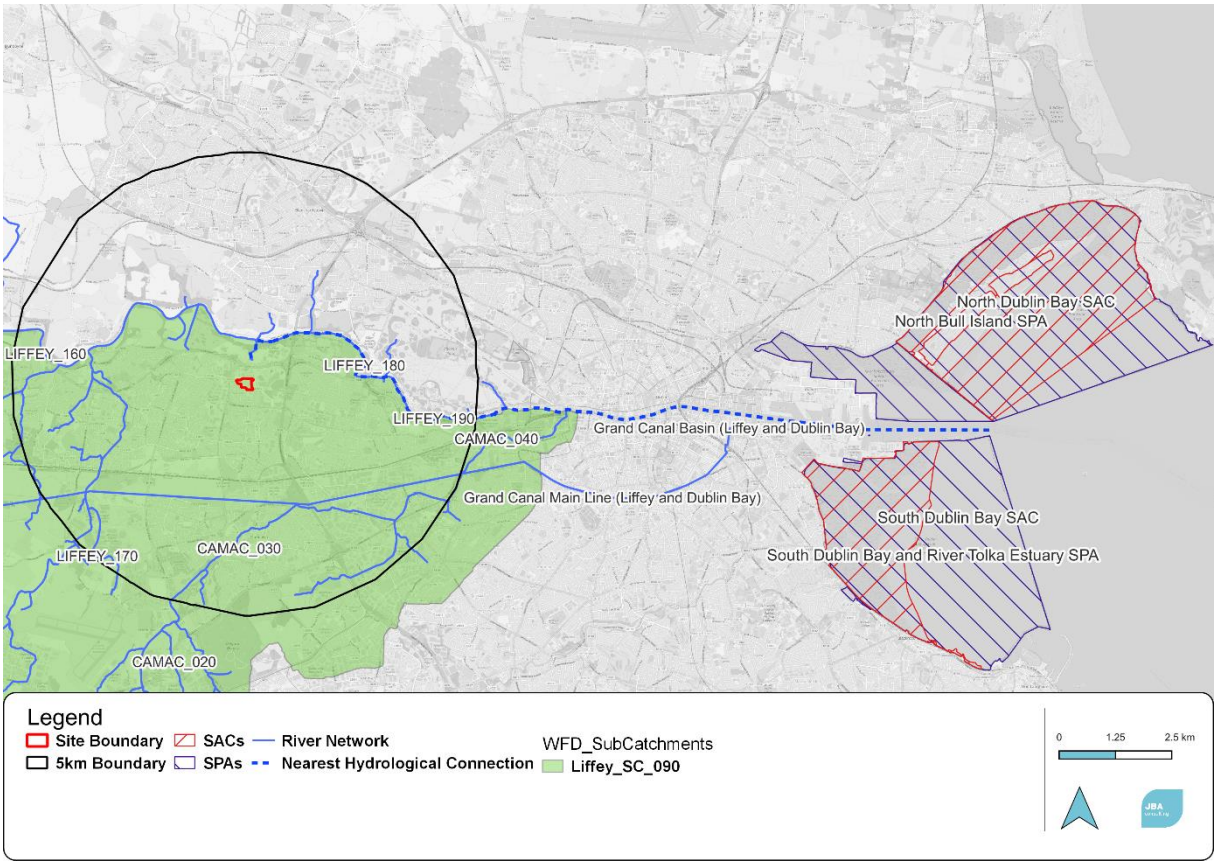

Figure 6-1: WFD sub-catchments of the area surrounding the project site (OSM, 2023)

Operational Phase

Increased surface water run-off from the site is not anticipated as a result of the project's operational phase, given that surface water will be attenuated on-site through permeable concrete SuDS infiltration system, and by surface cross-falls to adjacent soft landscaping areas.

Therefore, adverse impacts via surface water pollution events during the operational phase are not anticipated for any Natura 2000 sites, and their respective QIs.

6.2.3 Groundwater

The proposed park development is located within the Dublin groundwater body (IE_EA_G_008). The site shares its groundwater connection with the four Natura 2000 sites (Figure- 6-2).

While the site's vulnerability is 'Extreme', the permeability and recharge of the site is quite low. The characteristics of the aquifer being "Locally important and Moderately Productive only in Local Zones" results in the groundwater having a low chance of pollutants travelling far distance through the groundwater pathway. There is the high likelihood of any pollutants entering the groundwater experiencing a direct discharge into the local rivers causing a ground-to-surface water pathway of pollutant transferral, however, as previously assessed, there are no anticipated negative impacts in relation to surface water pathways due to the distance from site and the settlement of any pollutants.

Therefore, given that the proposed development is located in an urban setting where the groundwater recharge is low, the far distance from the Natura 2000 sites, and the low capability of this groundwater body to transfer pollutants, negative impacts on the Natura 2000 sites are not anticipated.

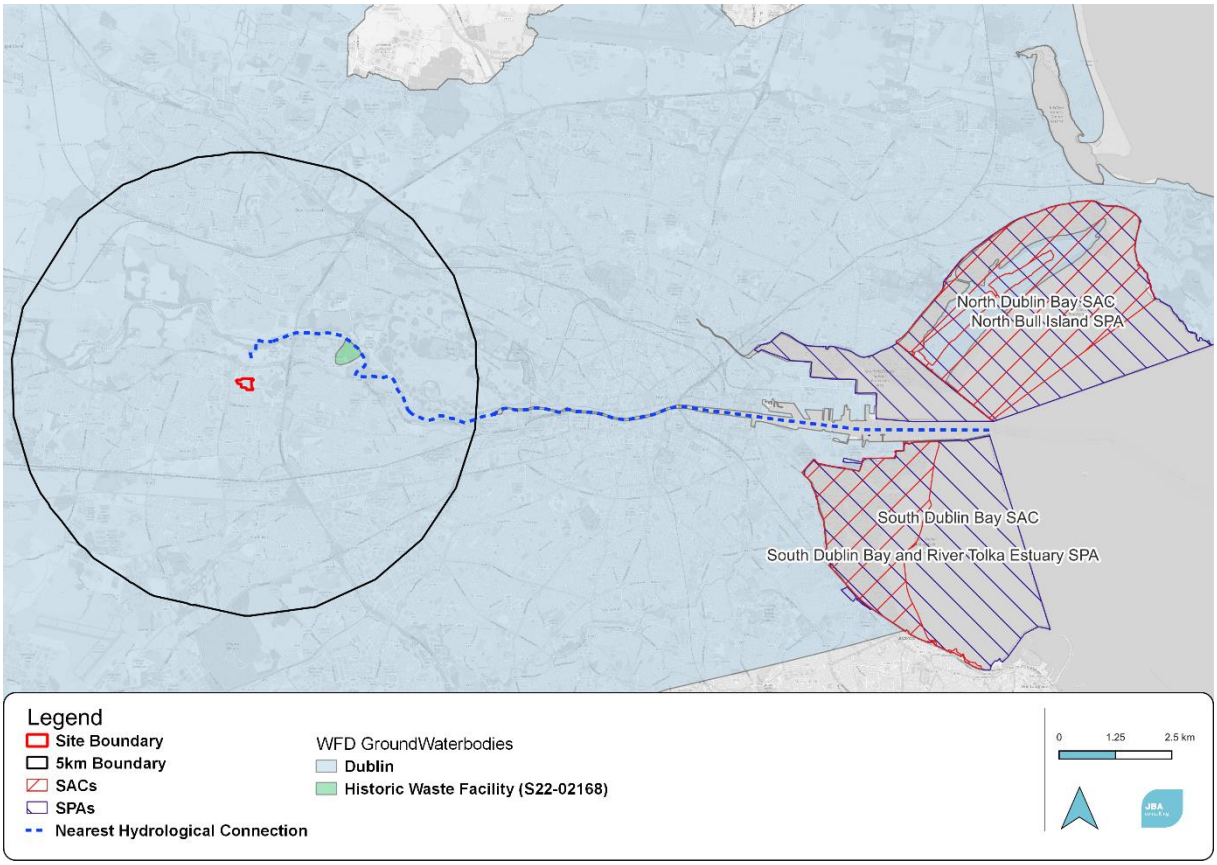

Figure 6-2: Proposed site boundary and Natura sites, with groundwater body connectivity (OSM, 2023)

6.2.4 Land and Air

The loss or degradation of supporting habitats outside the identified Natura 2000 sites via land- and air-based impacts could have potential adverse impacts on a number of the QIs associated with these Natura 2000 sites. Land and air pathways are assessed separately below.

Land (physical on-site and noise disturbance)

Direct physical impacts and indirect impacts, such as visual and noise impacts, do not have the potential to physically disturb habitats, as well as the floral and faunal species within the Natura 2000 sites due to the distance from the proposed site to the Natura 2000 sites.

The proposed site is not considered to provide suitable ex-situ foraging habitat for any QIs of the Natura 2000 sites. The site is in an urban location consisting mainly of built-up features, therefore, impacts via land pathways in terms of ex-situ supporting habitats are not anticipated to have a significant impact on any of the Natura 2000 sites.

Air Pollution

Excavations at the site will produce loose top and sub soil, and emissions may arise from working machinery. Dust release and vehicle emissions can travel considerable distances and could potentially impact the QIs of Natura 2000 sites. The recommended buffer for dust and air pollution is 2km as a baseline, however the distance and direction of travel is also influenced by wind speed and direction.

The prevailing wind in the area is south-west (based on measurements carried out between 2000-2022 at Dublin (Dublin Airport ((Windfinder.com, 2023)). While this means any dust that is generated on-site will most likely be transported away from the Natura 2000 sites. The urban setting of the proposed route also provides barriers, such as buildings and treelines, which will prevent further dispersal of particles. Dust that is generated on site will be transported to the nearest waterbody, the River Liffey, which

creates an air-to-surface water pathway. As assessed previously, due to the distance and settlement of pollutants within the water, there is no anticipated impacts due to the surface water transmission of pollutants.

There will be an increase in local traffic attending the site during construction, resulting in an increase in NOx emissions, however vehicular emissions and dust emissions are not anticipated to significantly impact the QIs of the any Natura 2000 sites due to the relatively small size and temporary nature of proposed works, and the prevailing wind direction.

Therefore, due to the distance and the lack of connection, potential adverse impacts via the air pathway are not anticipated during the construction phase for the Natura 2000 sites and their respective QIs.

Air pollution-based impacts from dust / emissions are not anticipated during the operational phase due to the operational nature of the proposed park development.

6.2.5 Cumulative Impact

In assessing the plans and projects outlined in Section 5, the respective AA screenings were consulted to assess the potential of any cumulative impacts due to their proximity of the site. All of these projects were concluded to not pose any threat to Natura 2000 sites.

As the proposed project is not anticipated to have any significant impact on QIs or conservation objectives on any Natura 2000 site and based on the screening statements of the above plans and planning applications, there is no potential for other plans or projects to act in combination with it to result in likely significant impacts on Natura 2000 sites.

6.2.6 Summary

Due to the location of the proposed site, the temporary nature of the works and its distance to the Natura 2000 sites within the ZoI, the proposed project is not anticipated to have a significant impact via surface water, groundwater and land and air pathways to any Natura 2000 site.

6.2.7 Description of likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 sites

Project Elements	Comment	
Size and scale	Park. The scope of the project includes: The proposed and preferred development of the project includes the redevelopment of the Quarryvale Park. The Masterplan Proposals of this project include: • New park structure focused on a formal entry plaza at Fonthill Road junction, with possible rain gardens, linear water feature, seating and feature lighting. • Major shared footpath/cycle routes linking to Shancastle Lawns and Greenfort Gardens, with street lighting and formal trees. • Pedestrian nodes with seating. • Existing oak trees retained, providing an informal memorial walk. • Provision for active recreation – e.g., Teenspace, natural play areas and pump track or similar. • Activity circuit, 800m long - with exercise stations and seats/play equipment. • Possible grass sports pitch. • Biodiversity improvements - existing boundary hedge retained, grass meadowland management bands, bulbs in linear strips, informal native tree groups.	
Land-take	There will be no direct land take from any of Natura 2000 sites.	
Distance from Natura 2000 site or key features of the site	The Natura 2000 sites and their proximity to the proposed site:	
	North Dublin Bay SAC [000206]	14.3km

Project Elements	Comment	
	South Dublin Bay SAC [000210] North Bull Island SPA [004006] South Dublin Bay and River Tolka Estuary SPA [004024]	12.4km 11.1km 12.4km
Resource requirements (water abstraction etc.)	There will be no water abstraction requirement.	
Emissions (disposal to land, water or air)	Construction Phase: **Water** The proposed development will incorporate the use of permeable concrete sets and soft landscape drainage areas that will reduce the potential for any surface water run-off pollutants. During operation, the site is not expected to directly impact any of the Natura 2000 sites, due to their distance and small-scale operation. Therefore, there will be no permanent impacts on any Natura 2000 site. **Air** Excavations at the site will produce loose top and sub soil, and emissions may arise from working machinery however the proposed site has a south-west prevailing wind year-round, therefore, any dust generated on-site will most likely be transported away from the Natura 2000 sites within the dust settlement zone. Impactful operational air emissions are not anticipated for the proposed development zone. Impactful operational air emissions are not anticipated for the proposed development. Operation phase: During operation, the proposed operations of the project (and its related emissions) are not expected to directly impact any of the Natura 2000 sites, due to their distance and small-scale operation. Therefore, there will be no permanent impacts on any Natura 2000 site.	
Excavation requirements	There are six different depths of excavation required, related to six different functional zones within the park which includes: • Tree pits – 1.50m deep. • Streetlight bases – 1.25m deep. • Play/recreation bases – 1.25m deep. • Wall foundations – 0.50m deep. • General hard surfaces – 0.45m deep. • SuDS hard surfaces – 0.50m deep. These depths are minor and there are no potential impacts associated with these depths.	
Transportation requirements	Temporary Impacts: Levels of traffic to the site during the construction phase will increase traffic to the area but will be temporary in nature. All access to the site will be on pre-existing roads and transportation requirements will not negatively impact the Natura 2000 sites identified within the ZoI. Permanent Impacts: Given the scale, nature and location of the proposed project, transportation requirements will not negatively impact the Natura	

Project Elements	Comment
	2000 sites identified within the ZoI.
Duration of construction, operation, decommissioning etc.	The construction of the proposed site will last approximately 10 months for construction, with 12 months Defects Liability Period and 36 months Planting Maintenance Period
Other	None

6.2.8 Description of likely changes to the Natura 2000 sites

Potential Impact	Comments
Reduction of habitat area	There will be no reduction in habitat area for any of the Natura 2000 sites.
Disturbance to key species	Temporary Impacts: The construction works will temporarily increase the noise level and disturbance locally. However, no significant impacts are anticipated to key species given scale and temporary nature of the construction phase and distance from the Natura 2000 sites. Permanent Impacts: No disturbance to key species is anticipated during operation of the project.
Habitat or species fragmentation	There will be no temporary or permanent habitat or species fragmentation within any of the Natura 2000 sites.
Reduction in species density	There will be no temporary or permanent reduction in species density within any of the Natura 2000 sites, or any QIs of these sites.
Changes in key indicators of conservation value (water quality etc.)	There will be no temporary or permanent changes in key indicators of conservation value (surface water, groundwater and air quality).
Climate change	N/A
Interference with the key relationships that define the structure of the site	There will be no interference with the key relationships that define the structure of the sites.
Interference with key relationships that define the function of the site	There will be no interference with the key relationships that define the function of the sites.
Loss (Estimated percentage of lost area of habitat)	No Natura 2000 sites will experience a direct loss in habitat area.
Fragmentation	Fragmentation of habitat and/or species is not anticipated.
Disruption & disturbance	Disruption and/ or disturbance is not anticipated.
Change to key elements of the site (e.g. water quality etc.)	Potential temporary changes to key elements (i.e. water quality) of the site are not anticipated.

6.2.9 Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is unknown

Based upon best scientific judgement, no significant effects are expected from the elements mentioned above; and there are no elements where the scale or magnitude of impacts is unknown.

6.3 Concluding Statement

In carrying out this AA screening, mitigation measures have not been taken into account. Standard best practice construction measures which could have the effect of mitigating any effects on any European Sites have similarly not been taken into account.

On the basis of the screening exercise carried out above, it can be concluded that the possibility of any significant impacts on any European Sites, whether arising from the project itself or in combination with other plans and projects, can be excluded beyond a reasonable scientific doubt on the basis of the best scientific knowledge available.

Appendices

A Site Masterplan

A1

L-004

L-005

L-006

Car Park

Ramp

SHANCASTLE AVENUE

SHANCASTLE DRIVE

SHANCASTLE CLOSE

SHANCASTLE CRESCENT

SHANCASTLE LAWNS

GREENFORT GARDENS

GREENFORT LAWNS

Community Centre

Shopping Centre

N

GRAPHIC SCALE (metres) 0 10 20 50 100

KEY

- Project extents Approx. 6.10ha
- Entrance plaza
- Main entrance areas
- Main pedestrian/cycle route with streetlights
- Secondary footpaths
- Activity circuit with exercise equipment/seating
- Pedestrian nodes with seating
- Active recreation area e.g. pumptrack
- Teenspace
- Children's play areas
- Raingarden
- Linear water feature
- Sculptural feature
- Streetlight
- Meadowland Grassland management
- Native bulb planting
- Formal trees signature species
- Native tree groups
- Existing trees retained
- Possible grass sports pitch
- Amenity grassland

Issue	Date	By	Chkd	Appd
01	28/03/23	HAR	NDJ	NDJ
Issued for Part 8 Planning				

Client

Comhairle Contae Átha Cliath Theas
South Dublin County Council

Job Title

Quarryvale Local Park Up-grade
Tallaght, Dublin 24

Scale 1:1000 at A1

Discipline

Nicholas de Jong Associates
URBAN DESIGN

Drawing Title

LAYOUT and KEY PLAN

Drawing Status

Part 8 Planning

Job No	Drawing No	Issue
2213	L-004	R1

Do not scale

B Habitat Map

C National Biodiversity Data Centre (2023)

C.1 Protected Species recorded within a 5km radius of the site over the last 10 years

Species Name	Date of last record	Designation
Amphibian		
Common Frog *Rana temporaria*	01/03/2020	EU Habitats Directive: Annex V Wildlife Act 1976 & Amendments
Smooth Newt *Lissotriton vulgaris*	15/06/2020	Wildlife Act 1976 & Amendments
Bird		
Barn Owl *Tyto alba*	07/07/2019	Birds of Conservation Concern in Ireland: Red List Wildlife Act 1976 & Amendments
Barn Swallow *Hirundo rustica*	16/09/2017	Birds of Conservation Concern in Ireland: Amber List Wildlife Act 1976 & Amendments
Black-headed Gull *Larus ridibundus*	25/10/2013	Birds of Conservation Concern in Ireland: Red List Wildlife Act 1976 & Amendments
Brent Goose *Branta bernicla*	07/04/2021	Birds of Conservation Concern in Ireland: Amber List Wildlife Act 1976 & Amendments
Common Coot *Fulica atra*	13/01/2018	EU Birds Directive >> Annex II & III Birds of Conservation Concern in Ireland: Amber List Wildlife Act 1976 & Amendments
Common Kestrel *Falco tinnunculus*	27/11/2014	Birds of Conservation Concern in Ireland: Amber List Wildlife Act 1976 & Amendments
Common Kingfisher *Alcedo atthis*	30/11/2014	EU Birds Directive >> Annex I Birds of Conservation Concern in Ireland: Amber List Wildlife Act 1976 & Amendments
Common Pheasant *Phasianus colchicus*	24/10/2014	EU Birds Directive >> Annex II & III Wildlife Act 1976 & Amendments
Common Snipe *Gallinago gallinago*	17/12/2016	EU Birds Directive >> Annex II & III Birds of Conservation Concern in Ireland: Amber List Wildlife Act 1976 & Amendments
Common Starling *Sturnus vulgaris*	23/02/2021	Birds of Conservation Concern in Ireland: Amber List Wildlife Act 1976 & Amendments
Common Swift *Apus apus*	30/06/2019	Birds of Conservation Concern in Ireland: Amber List Wildlife Act 1976 & Amendments
Common Wood Pigeon *Columba palumbus*	04/06/2017	EU Birds Directive >> Annex II & III Wildlife Act 1976 & Amendments
Great Cormorant *Phalacrocorax carbo*	30/04/2015	Birds of Conservation Concern in Ireland: Amber List Wildlife Act 1976 & Amendments

Species Name	Date of last record	Designation
Herring Gull *Larus argentatus*	18/05/2012	Birds of Conservation Concern in Ireland: Red List Wildlife Act 1976 & Amendments
House Martin *Delichon urbicum*	08/06/2018	Birds of Conservation Concern in Ireland: Amber List Wildlife Act 1976 & Amendments
House Sparrow *Passer domesticus*	15/01/2021	Birds of Conservation Concern in Ireland: Amber List Wildlife Act 1976 & Amendments
Little Egret *Egretta garzetta*	12/10/2017	EU Birds Directive >> Annex I Wildlife Act 1976 & Amendments
Little Grebe *Tachybaptus ruficollis*	19/05/2012	Birds of Conservation Concern in Ireland: Amber List Wildlife Act 1976 & Amendments
Mallard *Anas platyrhynchos*	13/03/2016	EU Birds Directive >> Annex II & III Wildlife Act 1976 & Amendments
Peregrine Falcon *Falco peregrinus*	16/09/2017	EU Birds Directive >> Annex I Wildlife Act 1976 & Amendments
Red Kite *Milvus milvus*	02/09/2016	Birds of Conservation Concern in Ireland: Amber List Wildlife Act 1976 & Amendments
Sky Lark *Alauda arvensis*	05/07/2016	Birds of Conservation Concern in Ireland: Amber List Wildlife Act 1976 & Amendments
Invertebrate		
Freshwater White-clawed Crayfish *Austropotamobius pallipes*	02/09/2016	EU Habitats Directive >> Annex II & V Wildlife Act 1976 & Amendments
Mammals		
Daubenton's Bat *Myotis daubentonii*	31/08/2014	EU Habitats Directive >> Annex IV Wildlife Act 1976 & Amendments
Eurasian Badger *Meles meles*	28/09/2018	Wildlife Act 1976 & Amendments
Eurasian Pygmy Shrew *Sorex minutus*	03/10/2015	Wildlife Act 1976 & Amendments
Eurasian Red Squirrel *Sciurus vulgaris*	24/01/2015	Wildlife Act 1976 & Amendments
European Otter *Lutra lutra*	06/12/2018	EU Habitats Directive >> Annex II & V Wildlife Act 1976 & Amendments
Pine Marten *Martes martes*	21/05/2021	EU Habitats Directive >> Annex V Wildlife Act 1976 & Amendments
Pipistrelle *Pipistrellus pipistrellus sensu lato*	06/06/2013	EU Habitats Directive >> Annex IV Wildlife Act 1976 & Amendments
Soprano Pipistrelle *Pipistrellus pygmaeus*	19/08/2013	EU Habitats Directive >> Annex IV Wildlife Act 1976 & Amendments

Species Name	Date of last record	Designation
West European Hedgehog *Erinaceus europaeus*	23/06/2021	Wildlife Act 1976 & Amendments

C.2 Invasive Species recorded within a 5km radius of the site over the last 10 years

Species Name	Date of last record	Designation
Flora		
Black Currant *Ribes nigrum*	16/09/2017	Medium Impact Species
Butterfly-bush *Buddleja davidii*	13/08/2020	Medium Impact Species
Canadian Fleabane *Conyza canadensis*	02/08/2018	Medium Impact Invasive Species
Cherry Laurel *Prunus laurocerasus*	11/09/2021	High Impact Invasive Species
Common Broomrape *Orobanche minor*	29/06/2019	Medium Impact Invasive Species
Giant Hogweed *Heracleum mantegazzianum*	14/06/2021	High Impact Invasive Species Regulation S.I. 477 (Ireland)
Himalayan Honeysuckle *Leycesteria formosa*	10/11/2021	Medium Impact Invasive Species
Indian Balsam *Impatiens glandulifera*	11/09/2021	High Impact Invasive Species Regulation S.I. 477 (Ireland)
Japanese Knotweed *Fallopia japonica*	09/05/2020	High Impact Invasive Species Regulation S.I. 477 (Ireland)
Japanese Rose *Rosa rugosa*	26/05/2019	Medium Impact Invasive Species
Nuttall's Waterweed *Elodea nuttallii*	18/07/2020	High Impact Invasive Species Regulation S.I. 477 (Ireland)
Russian-vine *Fallopia baldschuanica*	11/08/2020	Medium Impact Invasive Species
Spanish Bluebell *Hyacinthoides hispanica*	07/05/2016	Regulation S.I. 477 (Ireland)
Sycamore *Acer pseudoplatanus*	11/09/2021	Medium Impact Invasive Species
Three-cornered Garlic *Allium triquetrum*	01/05/2021	Medium Impact Invasive Species Regulation S.I. 477 (Ireland)
Invertebrates		

Species Name	Date of last record	Designation
Arthurdendyus triangulatus	03/05/2016	High Impact Invasive Species
Australoplana sanguinea	28/01/2021	Medium Impact Invasive Species
Budapest Slug *Tandonia budapestensis*	16/06/2022	High Impact Invasive Species Regulation S.I. 477 (Ireland)
Common Garden Snail *Cornu aspersum*	18/05/2012	Medium Impact Invasive Species
Harlequin Ladybird *Harmonia axyridis*	18/05/2012	Medium Impact Invasive Species
Jenkins' Spire Snail *Potamopyrgus antipodarum*	02/09/2016	Medium Impact Invasive Species
Mammals		
American Mink *Mustela vison*	02/08/2018	High Impact Invasive Species Regulation S.I. 477 (Ireland)
Brown Rat *Rattus norvegicus*	20/11/2015	High Impact Invasive Species Regulation S.I. 477 (Ireland)
Eastern Grey Squirrel *Sciurus carolinensis*	05/09/2018	High Impact Invasive Species EU Regulation No. 1143/2014 Regulation S.I. 477 (Ireland)
European Rabbit *Oryctolagus cuniculus*	26/09/2018	Medium Impact Invasive Species
Fallow Deer *Dama dama*	19/07/2018	High Impact Invasive Species Regulation S.I. 477 (Ireland) Wildlife Act 1976 & Amendments
House Mouse *Mus musculus*	01/11/2012	High Impact Invasive Species
Reptile		
Red-eared Terrapin *Trachemys scripta*	20/05/2020	Medium Impact Invasive Species EU Regulation No. 1143/2014

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