



**ARMSTRONG
FENTON**
ASSOCIATES

PROJECT: Large Scale Residential Development (LRD)

Environmental Impact Assessment Report

Volume I – Non Technical Summary

for proposed development at

Santry Avenue & Swords Road, Santry, Dublin 9.

CLIENT: Dwyer Nolan Developments Ltd

DATE: March 2024

**Planning &
Development
Consultants**

**Table of Contents**

1.0	Introduction	3
1.1	Introduction & Methodology	3
1.2	Proposed Development.....	3
1.4	Purpose of This EIAR	5
1.5	Information to be contained in a non-technical summary	6
1.6	Format and Structure of The EIAR	7
1.7	Availability of EIAR Doc	8
1.8	Statement of Difficulties Encountered	8
1.9	Errors.....	8
1.10	EIAR Study team.....	8
2.0	Description of Project and Alternatives.....	9
2.1	Information on the site location, design and size of the proposed development.....	9
2.2	Residential Development	11
2.3	Non-Residential Development	12
2.4	Car Parking and Cycle Parking Provision.....	14
2.5	Access	15
2.6	Construction Management Strategy	15
2.7	Direct and Indirect Effects Resulting from Use of Natural Resources	17
2.8	Direct and Indirect Effects Resulting from Emission of Pollutants, Creation of Nuisances and Elimination of Waste.....	17
2.9	Forecasting Methods Used for Environmental Effects	17
2.10	Transboundary Impacts	18
2.11	Alternatives Examined	18
3.0	Non-Technical Summary of EIAR Chapters	21
3.1	Population and Human Health	21
3.2	Biodiversity	22
3.3	Land, Soil and Geology.....	24
3.4	Water.....	27
3.5	Air Quality.....	30
3.6	Climate	32
3.7	Noise	33
3.8	Material Assets: Built Services.....	37
3.9	Material Assets: Transportation	39
3.10	Material Assets: Resource and Waste Management	48
3.11	Archaeology and Cultural Heritage.....	50
3.12	The Landscape	52
4.0	Identification of Significant Impacts / Interactions	60
4.1	Other Impacts	61
4.2	Residual Impacts and Cumulative Impacts.....	61
4.3	Environmental Commitments and Mitigation Measures	62
4.4	Conclusion	62
5.0	Summary of EIA Mitigation and Monitoring Measures.....	62



List of Figures

- Figure 1 - Site layout plan put forward for permission.
- Figure 2 – Proposed Phasing (extract from submitted drawing no. D1809.P30 'Site Layout - Phasing')
- Figure 3 - Noise Monitoring Locations
- Figure 4 - Pedestrian Facilities along Swords Road (Southbound)
- Figure 5 - Pedestrian Crossing at Swords Road/Santry Avenue Junction
- Figure 6 - Pedestrian Crossing at Swords Road/Santry Avenue Junction
- Figure 7 - Existing Bus Stops in the Vicinity of the Subject Site
- Figure 8 - Swords to City Centre Core Bus Corridor Scheme (Source: BusConnects)
- Figure 9 - Proposed Future Metro Stations
- Figure 10 - Summary of the findings of the assessment and recommendation for monitoring of concrete slab removal within the entire footprint of the site (highlighted in blue)
- Figure 11 - Satellite image of site with red line boundary showing surrounding context
- Figure 12 - View location map, an extract from the Verified Photomontage and CGI Report by 3D Design Bureau

List of Tables

- Table 1 – Structure of EIAR – Volume II
- Table 2 – Overall Residential Development Mix
- Table 3 - Summary of phasing proposals
- Table 4 - Proposed Development Vehicle Trips
- Table 5 - Proposed Development Predicted Scale of Traffic Impact



1.0 Introduction

1.1 Introduction & Methodology

This “*Non-Technical Summary*” (hereafter NTS) relates to a Large-scale Residential (hereafter “LRD”) planning application to Dublin City Council for a proposed mixed use and residential development consisting of 321 no. dwellings, 3 no. retail units, a medical suite / GP practice unit and c.1,460sq.m of floor space dedicated to community/arts/cultural uses. All of the proposed non-residential uses are located at ground floor level facing onto Santry Avenue, Swords Road and public open space. A one storey residential amenity unit, facing onto Santry Avenue, is also provided for between Blocks A & D, all on a site measuring c. 1.5 hectares located at the junction of Santry Avenue and Swords Road, Santry, Dublin 9.

The central purpose of the Environmental Impact Assessment Report (EIAR) is to undertake an appraisal of the likely and significant impacts on the environment of the proposed development in parallel with the project design process, and to document this process in the EIAR. This is then submitted to the competent / consent authority to enable it to assess the likely significant effects of the project on the environment. This assessment will then inform the decision as to whether the development should be permitted to proceed.

A full description of the proposed development lands together with a description of the proposed development is provided in Chapter 3 of the accompanying EIAR document. The subject site, of 1.5 hectares, is bounded to the north by Santry Avenue, to the east by Swords Road, to the west by Santry Avenue Industrial Estate, and to the south by the permitted Santry Place development (granted under Dublin City Council Ref’s. 2713/17, 2737/19 & 4549/22). Vehicular access to the development will be via 2 no. access points: (i) on Santry Avenue in the north-west of the site (ii) off Swords Road in the south-east of the site both of which are permitted under the adjoining development at Santry Place.

The Dublin City Development Plan 2022-2028, (hereafter “CDP”) provides a development strategy for the proper planning and sustainable development of the subject site area.

1.2 Proposed Development

This project relates to a proposed mixed-use / residential development, which can be described as follows, in line with the public notices issued for this LRD planning application:

Dwyer Nolan Developments Ltd. wishes to apply for permission for a Large-Scale Residential Development (LRD) on this site, c. 1.5 hectares, located at the junction of Santry Avenue and Swords Road, Santry, Dublin 9. The development site is bounded to the north by Santry Avenue, to the east by Swords Road, to the west by Santry Avenue Industrial Estate, and to the south by the permitted Santry Place development (granted under Dublin City Council Ref.s. 2713/17 (as extended under Ref. 2713/17/X1), 2737/19 & 4549/22).

The proposed development provides for 321 no. apartments, comprised of 104 no. 1 bed, 198 no. 2 bed, & 19 no. 3 bed dwellings, in 4 no. seven to thirteen storey buildings, over basement level, with 3 no. retail units, a medical suite / GP Practice unit and community/arts & culture space (total c.1,460sq.m), all located at ground floor level, as well as a one storey residential amenity unit, facing onto Santry Avenue, located between Blocks A & D.

The proposed development consists of the following



- (1) Demolition of the existing building on site i.e. the existing Chadwicks Builders Merchants (c. 4,196.8m²).
- (2) Construction of 321 no. 1, 2, & 3 bed apartments, retail units, medical suite / GP Practice, community/arts & culture space, and a one storey residential amenity unit in 4 no. buildings that are subdivided into Blocks A-G as follows:
 - Block A is a 7-13 storey block consisting of 51 no. apartments comprised of 22 no. 1 bed, 23 no. 2 beds & 6 no. 3 bed dwellings, with 2 no. retail units located on the ground floor (c. 132sq.m & c.172sq.m respectively). Adjoining same is Block B, which is a 7 storey block consisting of 38 no. apartments comprised of 6 no. 1 bed, 26 no. 2 bed, & 6 no. 3 bed dwellings, with 1 no. retail unit (c.164sq.m) and 1 no. medical suite / GP Practice unit located on the ground floor (c. 130sq.m). Refuse storage areas are also provided for at ground floor level.
 - Block C is a 7 storey block consisting of 53 no. apartments comprised of 14 no. 1 bed & 39 no. 2 bed dwellings. Adjoining same is Block D which is an 8 storey block consisting of 44 no. apartments comprised of 22 no. 1 bed, 15 no. 2 bed, & 7 no. 3 bed dwellings. Ground floor, community/arts & culture space (c. 583sq.m) is proposed in Blocks C & D, with refuse storage area also provided for at ground floor level.
 - Block E is an 8 storey block consisting of 49 no. apartments comprised of 7 no. 1 bed & 42 no. 2 bed dwellings. A refuse storage area, substation, & switchroom are also provided for at ground floor level. Adjoining same is Block F which is a 7 storey block consisting of 52 no. apartments comprised of 13 no. 1 bed & 39 no. 2 bed dwellings. Ground floor, community/arts & culture space (c.877sq.m) is proposed in Blocks E & F. A refuse storage area, bicycle storage area, substation, & switchroom are also provided for at ground floor level of Blocks E & F.
 - Block G is a 7 storey block consisting of 34 no. apartments comprised of 20 no. 1 bed & 14 no. 2 bed dwellings. A refuse storage area & bicycle storage area are also provided for at ground floor level.
- (3) Construction of a 1 storey residential amenity unit (c. 166.1sq.m) located between Blocks A & D.
- (4) Construction of basement level car park (c.5,470.8sq.m), accommodating 161 no. car parking spaces, 10 no. motorbike parking spaces & 672 no. bicycle parking spaces. Internal access to the basement level is provided from the cores of Blocks A, B, C, D, E, & F. External vehicular access to the basement level is from the south, between Blocks B & C. 33 no. car parking spaces & 58 no. bicycle parking spaces are also provided for within the site at surface level.
- (5) Public open space of c. 1,791sq.m is provided for between Blocks C-D & E-F. Communal open space is also proposed, located between (i) Blocks E-F & G, (ii) Blocks A-B & C-D, and (iii) in the form of roof gardens located on Blocks A, C, & F and the proposed residential amenity use unit, totalling c.2,986sq.m. The development includes for hard and soft landscaping & boundary treatments. Private open spaces are provided as terraces at ground floor level of each block and balconies at all upper levels.
- (6) Vehicular access to the development will be via 2 no. existing / permitted access points: (i) on Santry Avenue in the north-west of the site (ii) off Swords Road in the south-east of the site, as permitted under the adjoining Santry Place development (Ref. 2713/17).



- (7) **The development includes for all associated site development works above and below ground, bin & bicycle storage, plant (M&E), sub-stations, public lighting, servicing, signage, surface water attenuation facilities etc.**

1.3 Requirement for EIA (Screening)

Screening is the term used to describe the process for determining whether a proposed development requires an EIA by reference to mandatory legislative threshold requirements or by reference to the type and scale of the proposed development and the significance or the environmental sensitivity of the receiving baseline environment.

Annex I of the EIA Directive 85/337/EC requires as mandatory the preparation of an EIA for all development projects listed therein.

Schedule 5 (Part 1) of the Planning & Development Regulations 2001 (as amended) transposes Annex 1 of the EIA Directive directly into Irish land use planning legislation. The Directive prescribes mandatory thresholds in respect to Annex 1 projects.

Annex II of the EIA Directive provides EU Member States discretion in determining the need for an EIA on a case-by-case basis for certain classes of project having regard to the overriding consideration that projects likely to have significant effects on the environment should be subject to EIA.

The proposed development falls below the threshold for a mandatory EIAR. The subject proposal comprises 321 no. dwellings and is on a site of less than 10 hectares. Therefore, a mandatory EIA is not required. However, when assessed in conjunction with neighbouring developments i.e.:

- directly to the south (permitted under Dublin City Council Ref. 2737/19. i.e. named Santry Place),
- lands to the northeast of Omni Park Shopping Centre (permitted under An Bord Pleanála Ref. 307011) and
- south-east (permitted under An Bord Pleanála Ref. 303358-19 and Ref. 306987 i.e. Swiss Cottage) of the application lands;

the Applicant is cognisant of the cumulative impacts which the permitted and proposed developments may have and as such has prepared this EIAR to accompany their planning application in order to allow for a comprehensive assessment of the proposed development.

1.4 Purpose of This EIAR

The objective of this EIAR is to identify and predict the likely environmental impacts of the proposed development; to describe the means and extent by which they can be reduced or ameliorated; to interpret and communicate information about the likely impacts; and to provide an input into the decision making and planning process.

The EIAR is the primary element of the Environmental Impact Assessment (EIA) process and is recognised as a key mechanism in promoting sustainable development, identifying environmental issues, and in ensuring that such issues are properly addressed within the capacity of the planning system.



1.5 Information to be contained in a non-technical summary

This Non-Technical Summary (NTS) has been prepared in accordance with *inter alia* the requirements of the EU 2014 EIA Directive, Planning and Development Acts 2000-2018 as well as the Planning and Development Regulations, 2001, (as amended) (in particular by the European Union (Planning & Development) (Environmental Impact Assessment Regulations 2018)).

EIA Process Overview

One of the main purposes of the EIA process is to identify the likely significant impacts on the human environment, the natural environment and on cultural heritage associated with the proposed development, and to determine how to eliminate or minimise these impacts. The EIAR summarises the environmental information collected during the impact assessment of the proposed development.

A new definition of environmental impact assessment is now contained in Section 170A of the Planning and Development Act, 2000, as amended which reflects to the process as described under Article 1(2)(g) 4 of Directive 2014/52/EU and goes on to say that it includes:

(i) an examination, analysis and evaluation, carried out by the planning authority or the Board, as the case may be, in accordance with this Part and regulations made thereunder, that identifies, describes and assesses, in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of the proposed development on the following:

(I) population and human health;

(II) biodiversity, with particular attention to species and habitats protected under the Habitats Directive and the Birds Directive;

(III) land, soil, water, air and climate;

(IV) material assets, cultural heritage and the landscape;

(V) the interaction between the factors mentioned in clauses (I) to (IV), and

(ii) as regards the factors mentioned in subparagraph (i)(I) to (V), such examination, analysis and evaluation of the expected direct and indirect significant effects on the environment derived from the vulnerability of the proposed development to risks of major accidents or disasters, or both major accidents and disasters, that are relevant to that development;

Several interacting steps typify are involve in the various stages of the EIA process, which may be referred to in outline as including:

- Screening;
- Scoping;
- Preparation of EIA Report;
- The examination by the Competent Authority (CA) of the information presented in the environmental impact assessment report;



Screening: Screening is the term used to describe the process for determining whether a proposed development requires an EIA.

Scoping: This stage firstly identifies the extent of the proposed development and associated site, which will be assessed as part of the EIA process, and secondly, it identifies the environmental issues likely to be important during the course of completing the EIA process through consultation with statutory and non-statutory stakeholders. Where relevant, scoping requests were issued and the responses received have been considered as part of the compilation of the EIAR. The content of the EIAR has been informed by national guidelines, guidelines issued by the European Commission and other policy documents which are set out at Section 1.4 of the EIAR. In addition, pre-planning meetings with the various departments of Dublin City Council all informed the EIAR.

Preparation of EIAR Report: The main elements in the preparation of an EIA Report relate to the consideration of alternatives, project description, description of the receiving environment, identification and assessment of impacts, monitoring and mitigation proposals.

The examination by the CA of the information presented in the environmental impact assessment report: The planning authority (and, if necessary An Bord Pleanála) must consider each application for development consent on its own merits, taking into account all material considerations, including the reasoned conclusion in respect of EIA, before making its decision to grant, with or without conditions, or to refuse consent.

1.6 Format and Structure of The EIAR

1.6.1 EIAR Structure

The structure of the EIAR is laid out in the preface of each part for clarity. It consists of two volumes as follows:

- Volume I: Non-Technical Summary (this document)
- Volume II: Environmental Impact Assessment Report.

Volume II is the main volume of the EIAR. It provides information on the location and scale of the proposed development, details on design and impacts on the environment (both positive and negative) as a result of the proposed development. Each of the environmental aspects as listed below are examined in terms of the existing or baseline environment, identification of potential construction and operational stage impacts and where necessary proposed mitigation measures are identified.

The preparation of an EIAR requires the assimilation, co-ordination and presentation of a wide range of relevant information in order to allow for the overall assessment of a proposed development. For clarity and to allow for ease of presentation and consistency when considering the various elements of the proposed development, a systematic structure is used for the main body of the EIAR document. The structure used in this EIAR document is a “*Grouped Format structure*”. This structure examines each environmental topic in a separate chapter of the EIAR document. The structure of the EIAR Volume II document is set out in Table 1.1 over:



Chapter	Title
1	Introduction
2	Planning Policy Context
3	Description of Project and Alternatives
4	Population and Human Health
5	Biodiversity
6	Land, Soil and Geology
7	Water
8	Air Quality
9	Climate
10	Noise
11	Material Assets: Built Services
12	Material Assets: Transportation
13	Material Assets: Resource and Waste Management
14	Archaeology and Cultural Heritage
15	The Landscape
16	Identification of Significant Impacts / Interactions
17	Summary of EIA Mitigation and Monitoring Measures

Table 5 – Structure of EIAR – Volume II

1.7 Availability of EIAR Doc

A copy of the EIAR document and Non-Technical Summary of the EIAR document is available for purchase at the offices of Dublin City Council (Planning Authority) at a fee not exceeding the reasonable cost of reproducing the document. It can also be viewed on the SHD website – www.santryavenuelrd.ie. set up by the applicant.

1.8 Statement of Difficulties Encountered

No particular difficulties, such as technical deficiencies or lack of knowledge, were encountered in compiling any of the specified information contained in this statement, such that the prediction of impacts has not been possible. Where any specific difficulties were encountered these are outlined in the relevant chapter of the EIAR.

1.9 Errors

While every effort has been made to ensure that the content of this EIAR document is error free and consistent there may be instances in this document where typographical errors and/or minor inconsistencies do occur. These typographical errors and/or minor inconsistencies are unlikely to have any material impact on the overall findings and assessment contained in this EIAR.

1.10 EIAR Study team

The EIAR was prepared by a study team led by Armstrong Fenton Associates Planning and Development Consultants, who were responsible for the overall management and co-ordination of the document. The EIAR team is set out in Chapter 1, Table 1.1 of Volume II of the EIAR.



2.0 Description of Project and Alternatives

2.1 Information on the site location, design and size of the proposed development

The subject site (i.e. the red line boundaries of application detailed on the drawings accompanying the application) measures approximately 1.5ha in area and is located at the junction of Santry Avenue and Swords Road, with frontage onto both roads (being bounded to the east by Swords Road and to the north by Santry Avenue) and is currently occupied by Chadwicks building providers (formerly Heiton Buckley). Access to the subject site is currently limited to an existing site entrance off / onto Santry Avenue.

Under the CDP the subject site is zoned Z3 with the objective “*To provide for and improve neighbourhood facilities*”. The CDP recognises the importance of Z3 zoned lands in the contribution of meeting the housing delivery requirements of the city. In line with the CDP, the subject site represents a highly suitable location for the provision of infill residential development. The objective of the Z3 land use zoning objective is to provide for and improve neighbourhood facilities. The proposed development complies with the requirements of the zoning objective with the provision of uses such as community/arts/cultural, residential amenity unit, 3 no. retail units and a medical suite / GP Practice unit, all of which face onto Swords Road and Santry Avenue.

Vehicular access to the development will be via 2 no. existing / permitted access points: (i) on Santry Avenue in the north-west of the site (ii) off Swords Road in the south-east of the site, as permitted under the adjoining Santry Place development (Ref. 2713/17).

The subject site is currently in brownfield condition. To the north, the site is bounded by Santry Avenue. Beyond Santry Avenue is Santry Demesne Park which provides a range of open space, sporting and recreational facilities including Morton Stadium and Santry Community Garden. To the east, Swords Road borders the application site, with retail convenience stores opposite the site. To the west, the subject site is bounded by the Santry Avenue Industrial Estate. The neighbouring lands bounding the southern boundary of the site are currently being developed by the Applicant as part of the permitted residential scheme known as Santry Place (Ref.s 2713/17, 2737/19 & 4549/22).

With the Santry Place development to the south currently nearing completion, the subject application is considered to represent an ideal opportunity for an integrated mixed-use development which will continue the recent regeneration of the Santry area. To this end, we note the following developments in the vicinity of the subject site which have been recently permitted and /or are under construction:

- **ABP-306987-20** - Permission for the development of 120 no. apartments and associated site development works on the former Swiss Cottage lands, Swords Road, Santry, Dublin 9. The development included for building heights of 3 no. storeys to 7 no. storeys and caters for a density of c. 250 no. dwellings per hectare. The development supersedes and amends the previously permitted development granted under ABP-303358-19. The site is located approximately 100 meters to the south-east of the subject application site.
- **ABP-307011-20** - Permission for the development 324 no. apartments, a creche and associated site development works on lands to the northeast of Omni Park Shopping Centre, Swords Road, Santry, Dublin 9. The development included for building heights of 5 no. storeys to 12 no. storeys and caters for a density of c. 250 no. dwellings per hectare. The site is located approximately 250 meters to the south of the subject application site.

It is considered that the proposed development is in keeping with the aforementioned recently permitted developments at Santry Place, Swiss Cottage and the site to the northeast of Omni Shopping Centre, particularly in terms of height and density, and represents sustainable and coherent planning of this important corner location on an entrance route into Dublin city. The EIAR submitted at this time is deemed appropriate, to review the cumulative impact of the proposed scheme given the quantity of units permitted in the permissions listed above.

The Site Layout Plan (Fig. 1) prepared by Davey & Smith Architects illustrates the proposed development.

A summary of the proposed development includes the following works:

- Residential development (321no. dwellings);
- Retail units (3 no. Units);
- Medical Suite / GP Practice Unit;
- C.1,460sq/m of floor space dedicated to Community/Ars/Cultural uses;
- Residential amenity unit;
- Communal, Public and private open spaces;
- Landscaping;
- Car / Bicycle parking and bin storage;
- Services infrastructure, utilities and public lighting;
- ESB Substation;
- Building and directional signage and
- All associated infrastructural and site development works.



Figure 4 - Site layout plan put forward for permission.



2.1.1 Demolition

Permission is sought to demolish the existing building on site i.e. the existing Chadwicks Builders Merchants (c. 4,196.8m²).

2.2 Residential Development

In summary, the proposed development comprises the construction of 321 no. dwellings comprised of 104 no. 1 bed, 198 no. 2 bed, & 19 no. 3 bed dwellings, in 4 no. seven to fourteen storey buildings, over basement level – details of which are set in Table 2 over:

Block	Total No. of Dwellings	No. of 1 beds	No. of 2 beds	No. of 3 beds	Total Residential Floor Area (sq.m)
Block A	51	22	23	6	3,500.50
Block B	38	6	26	6	3,136.90
Block C	53	14	39	0	3,892.90
Block D	44	22	15	7	3,235.30
Block E	49	7	42	0	3,614.30
Block F	52	13	39	0	3,818.90
Block G	34	20	14	0	2,106.70
Total	321	104	198	19	23,305.50 m²

Table 6 – Overall Residential Development Mix

A wide variety of apartment typologies have been developed to ensure that the scheme provides for high quality design, based upon the 12 urban design criteria set out in the Urban Design Manual (2009), the details of which are set out in Statement of Consistency and the Architectural Design Statement which accompany the application.

Due to the prominent location of the site addressing two main roads, the proposed development has been designed to provide for a strong urban form and good street frontage. In light of the orientation of the site and having regard to both permitted developments and the changing nature of the immediate environs, the buildings are orientated in a north-south direction, whilst addressing the streets they abut. The proposed blocks are defined by variations in building type and design, internal road layout and hierarchy and related open spaces.

The varying heights of the proposed buildings break up the mass and volume of the scheme, with only one tall building of 13 storeys proposed, which will act as a landmark to the prominent corner at the junction of Swords Road and Santry Avenue. The proposed height of 7 storeys at the southern end of the scheme, marries in with the adjoining Santry Place, currently under construction, but also presents an appropriate urban street edge onto Swords Road. The introduction of 8 storey buildings fronting onto Santry Avenue



sit side by side of the tallest building thus creating a variance and natural transition between 7 and 13 storeys.

2.3 Non-Residential Development

2.3.1 Retail Use

The development includes 3 no. retail uses located on the ground floors of Blocks A and B. These retail units have been strategically located, fronting on to both Santry Avenue and Swords Road, to cater for active frontage and bring a new vibrancy to a highly visible corner location in this urban community. The proposed retail units are also put forward in recognition of the Z3 (Neighbourhood Centres) zoning attached to the site. In accordance with the vision for Z3 lands, these uses will create a new focal point in the neighbourhood by providing a range of convenience type services to both the existing and future local population. It is also considered that these retail units compliment larger existing retail facilities in the area, particularly the Aldi supermarket to the west and the Omni Shopping Centre to the south.

It is submitted that the provision of 3 no. retail units at ground floor level, forming a strong ground floor frontage, directly addressing the adjoining streetscapes, and adjacent to an existing large urban park (Santry Demesne), will provide for an attractive new range of facilities to serve local needs in compliance with the zoning objective attached to the site.

2.3.2 Medical Suite / GP practice use

On the ground floor of Block B, it is proposed to accommodate a medical suite / GP use in Unit E. Under the Z3 “Neighbourhood Centres” land use zoning objective attached to the site, “medical and related consultants” is a permissible use in accordance with the CDP.

We note from the assessment of the previous SHD application (Ref. ABP-310910-21) that the Planning Authority stated that in terms of the ground floor uses that a condition should require retail / medical use of such units. The Planning Authority also noted that many observations referred to the lack of GP services in the area. We also note that in their recommendation to grant permission, the Planning Authority suggested that commercial unit E shall be provided as a medical suite/GP practice unit.

In addition, in his assessment of the application, the An Bord Pleanála Inspector concurred with the Planning Authority and stated the following: *“In respect of the commercial units proposed on the site, I note that condition no. 4 recommended by the Chief Executive identifies uses for the commercial units, including the use of Unit E as a medical suite / GP practice. I consider this condition to be reasonable and appropriate having regard to the objectives for the Z3 zone. Such condition would also satisfactorily address observer’s concerns regarding the lack of healthcare facilities in the area. In the event that the prescribed uses proved unviable, it would be open to the landowner to demonstrate same and seek a change of use at a later date. I consider that the condition should allow some flexibility with regard to which specific unit is used for medical / GP surgery use”.*

Based upon all of the foregoing, the current proposal provides for a medical suite / GP practice unit on the ground floor of Block B, occupying a space of c. 130sq.m



2.3.3 Community/Arts/Cultural Uses

In accordance with the Z3 “*Neighbourhood Centres*” zoning attached to the site, the proposed development provides for community/arts & culture uses, totalling 1,460sq.m, which is spread across the ground floors of Blocks C-D and E-F. The submitted ground floor plan illustrates that a variety of community/arts & culture uses can be accommodated within the proposed floor area dedicated to such uses. On the ground floor of Blocks C-D, c.583sq.m of floorspace is proposed, while Blocks E-F cater for an additional c.877sq.m. Prior to the submission of this application for permissions, the Applicant engaged with Dublin City Council and Dublin Arts Office regarding the provision of the required 5% of floorspace to cater for community/arts/cultural uses. In addition, this LRD planning application is accompanied by a Cultural Infrastructure (Impact) Assessment (hereafter “CIA”) which has examined what the demand for such uses is in the local area. The CIA finds that *“the proposed space across 4 blocks (blocks C and D providing c. 583sq.m and blocks E and F providing c. 877.2 sq.m) is sufficient in scale to host multiple cultural (artist workspace, performance, rehearsal, maker or multipurpose space) and community typologies, as well as to accommodate a wide range of artforms and community uses”*. In addition, the CIA has revealed a lack of appropriate cultural infrastructure near the site and asserts that *“a shared community / music and dance or makerspace, alongside provision for artist workspace studios, would deliver a notable cultural /community asset not just to the creative and arts professionals in the area, but to the wider community of Artane-Whitehall. In addition to this, through a co-design model, should areas within the cultural allocation of the site be fitted out to accommodate dance they could also serve the needs of the local sporting community through provision of martial arts, boxing, and/or gymnastics”*. Based upon the findings of the CIA, the ground floor space in Blocks C-D and E-F has been designed to accommodate potential uses such as maker space, dance studios, community resource, artists studios.

The total proposed community/arts & culture uses is put forward in compliance with objective CUO25 of the CDP, which requires that for all large scale developments above 10,000sq.m in total area, that a minimum of 5% community, arts and culture spaces including exhibition, performance and artist workspaces predominantly internal floorspace is to be provided. The total floor area of the proposed development is 25,530.1m². 5% of the total proposed floor area equates to c.1,276.5m², therefore the proposed 1,460m² exceeds the minimum requirement under objective CUO25 of the CDP.

It is considered that the floor spaces proposed to be dedicated to community/arts & culture uses, dependant on the tenant(s), will provide the opportunity to implement a range of programmes and services to benefit the community and meets the demand for such uses, as identified in the submitted CIA. It is envisaged that the community/arts & culture uses will enable new and established communities in Dublin 9 to engage with each other, fostering a sense of community and increasing the social interaction.

The proposed community/arts & culture spaces fronting onto Santry Avenue in Blocks D and E have been designed as a welcoming space, with large windows maximising light and amenity use. It is considered that these spaces have the potential to cater for a number of functions such as community resource / maker space, and will offer a focal point within the scheme. To the rear of same, as one moves into Blocks C and F, larger spaces are proposed to accommodate further community/arts & culture uses, e.g. artist studios and dance studios, and through a co-design model, should areas within the cultural allocation of the site be fitted out to accommodate dance they could also serve the needs of the local sporting community through provision of martial arts, boxing, and/or gymnastics which provides flexibility and long term sustainability in terms of the viability of the use of these spaces. The frontage of all of these spaces onto either the public realm or open spaces will ensure that there will be a consistent level of activity in this part of the development. It is envisaged that the management of the proposed community/arts & culture spaces will be operated by a specified management company, who may liaise with Dublin City Council and / or Dublin



City Council's Arts Office and / or the Dublin City Local Community Development Committee in terms of what services the allocated floorspace caters for. It is considered that upon a grant of permission being issued for the proposed development, that the specific details of quantum and location of such floor space/uses will be agreed with the Planning Authority at compliance stage, post planning.

2.3.4 Residential Amenity Use

In addition to the above commercial / retail and community uses, the proposed development includes for a one storey residential amenity use unit (166.1m²) located between Blocks A & D which fronts onto Santry Avenue. It is considered that the proposed residential amenity use unit will be capable of supporting a range of services while also providing for recreation space to future residents of the development, helping to create a sense of community between residents of the proposed apartment blocks. The residential amenity use unit also provides for a focused entrance point to this new development on Santry Avenue, aiding the creation of a sense of place and identity for the development.

The dedicated residential amenity unit fronts onto the new public realm at Santry Avenue, positioned in between the proposed retail unit at ground floor of Block A and the proposed community/arts & culture unit at ground floor of Block D. To the west, on the ground floor of Block E is the proposed community use unit, so the location of all of these units alongside each other and fronting onto the street will create a vibrancy along the new street front and provide residents with essential amenity space. The community unit as well as the commercial units will create a homely and welcoming atmosphere within the development.

Roof terraces / garden terrace amenity space are provided on the roofs of Blocks A, C, & F and the proposed residential amenity use unit, which will offer recreational meeting areas for residents to socialise and enjoy rooftop views of Dublin City and Santry Demesne Park to the north.

2.4 Car Parking and Cycle Parking Provision

Car parking for the proposed development is provided for in the form of basement level parking and surface level parking. In total, the proposed development caters for 194 no. car parking spaces.

The basement level measures c. 5,470.8m² and includes for 161 no. car parking spaces. Of the total 194 no. on-site dedicated car parking spaces to be provided, 161 no. spaces will be provided within the basement car parking and 33 no. spaces are provided as surface car parking. The surface car parking includes:

- 15 no. Residential Spaces,
- 4 no. Car Share/Car Club spaces,
- 2 no. Set Down spaces,
- 2 no. Retail spaces,
- 6 no Medical GP spaces,
- 3 no. Community spaces and
- 1 no. dedicated 24/7 operational loading bay on-site.

The development proposes a total of 18 no. spaces (equating to 9.3% of all parking spaces) disabled spaces comprising 12 no. spaces at basement level and 6 no. spaces at surface level.



The parking proposals include the following;

- 4 no. Car Share parking spaces,
- 3 no. Set Down/Loading Bays,
- 18 no. dedicated mobility impaired parking spaces (9%),
- 103 no. Electric Vehicle and charging point spaces (53%),
- 180 no resident's car parking spaces,
- 10 no. motorbike spaces.

Cycle parking for the proposed development is also provided in the form of basement level parking and surface level parking. The development proposes to provide a total of 740 no. cycle parking spaces with 690 no. long term stay (664no. within basement) and a further 58 proposed as short term stay on surface level.

Please refer to the enclosed Traffic & Transport Assessment (TTA) carried out by DBFL Consulting Engineers for full details of parking in the proposed scheme.

2.5 Access

Vehicular access to the proposed development will be via 2 no. existing / permitted access points: (i) on Santry Avenue in the north-west of the site (ii) off Swords Road in the south-east of the site, as permitted under the adjoining Santry Place development (Ref. 2713/17).

2.6 Construction Management Strategy

A Resource & Waste Management Plan (R&WMP) has been prepared for the proposed development and accompanies the planning application (refer to Appendix 13.1 of the EIAR Volume I). Certain assumptions are made in the R&WMP based on the information available at this time and, for the avoidance of doubt, it is not proposed or intended that the applicant / contractor(s) are bound by these proposals which may change depending on the timing and circumstances pertaining at the time of construction.

On receipt of a grant of planning and prior to the commencement of works, a detailed final Construction Management Plan (CMP) will be prepared. The contractor will be required to comply with and implement the requirements and mitigation measures as set out in this EIAR and any conditions imposed as part of planning permission. An Outline CMP has been prepared for the proposed project and is included with the planning application documentation. In addition, a Mobility Management Plan (MMP) has also been prepared and is also included as part of this application. Certain assumptions are made in both the Outline CMP and MMP based on the information available at this time and, for the avoidance of doubt, it is not proposed or intended that the applicant / contractor(s) are bound by these proposals which may change depending on the timing and circumstances pertaining at the time of construction.

A Construction and Environmental Management Plan has also been prepared by DBFL Consulting Engineers which addresses noise and vibration, traffic management, working hours, pollution control, dust control, road cleaning, compound/public health facilities and staff parking associated with the construction works, and is submitted as part of this SHD planning application.

2.6.1 Construction Programme / Phasing

It is estimated that construction of the development will take approximately five years to complete. The applicant has provided an indicative construction programme in the Outline CMP (submitted with the Planning Application documentation) which depicts the sub-areas only for development. A phasing plan also accompanies the planning application – please refer to Davey & Smith Architects drawing no. D1809.P30 and Fig. 2 overleaf. The intended sequence of development may change post grant of planning permission as a detailed construction programme is dependent on contractor appointment, market and other considerations.

Phasing Sequence	No. of Units	Other
First Phase	89	Blocks A & B, Communal Open Space
Second Phase	97	Blocks C & D, Public Open Space
Third Phase	135	Blocks E, F & G, Remainder of Works

Table 7 - Summary of phasing proposals



Figure 5 – Proposed Phasing (extract from submitted drawing no. D1809.P30 ‘Site Layout - Phasing’)



2.6.2 Construction Activities

The construction works associated with the project will be contained within the application site boundary. These works will include excavation, earthworks, etc.

Some construction activity may take place off-site within the control of the developer. These activities may include access and haul routes, site compound(s), storage of materials and soil/excavated material, screening and processing of existing materials for re-use within the development works, construction parking, staff welfare facilities etc. These areas will be identified in the detailed CMP.

Typically, construction will commence at 07.00 to 19.00 Mondays to Fridays inclusive, between 08.00 to 14.00 on Saturdays and not at all on Sundays and public holidays. During the construction period, due to exceptional circumstances, construction work may be necessary outside these standard hours. If necessary, this will be agreed in advance with DCC.

The contractor will be guided by the Resource & Waste Management Plan which accompanies the application with regard to re-use, recovery, recycle and disposal of waste produced during construction. Chapter 12 of the EIAR, Material Assets: Resource and Waste Management, also considered the re-use recovery, recycle and disposal of waste arising from the development.

2.7 Direct and Indirect Effects Resulting from Use of Natural Resources

Details of significant direct and indirect effects arising from the proposed development are outlined in Chapters 4-15 which deal with '*Aspects of the Environment Considered*'. No significant adverse impact is predicted to arise from the use of natural resources.

2.8 Direct and Indirect Effects Resulting from Emission of Pollutants, Creation of Nuisances and Elimination of Waste

Details of emissions arising from the development together with any direct and indirect effects resulting from same have been comprehensively assessed and are outlined, where relevant, in the relevant in Chapters 4-15 which deal with '*Aspects of the Environment Considered*'. There will be no significant direct or indirect effects arising from these sources.

2.9 Forecasting Methods Used for Environmental Effects

The methods employed to forecast and the evidence used to identify the significant effects on the various aspects of the environment are standard techniques used by each of the particular individual disciplines. The general format followed was to identify the receiving environment, to add to that a projection of the "loading" placed on the various aspects of the environment by the development, to put forward amelioration measures, to lessen or remove an impact and thereby arrive at net predicted impact.

Where specific methodologies are employed for various sections they are referred to in the Receiving Environment (Baseline Scenario) sections in the EIAR. Some of the more detailed/specialised information sources and methodologies for a number of the environmental assessments are outlined hereunder.



2.10 Transboundary Impacts

Large-scale transboundary projects¹ are defined as projects which are implemented in at least two Member States or having at least two Parties of Origin, and which are likely to cause significant effects on the environment or significant adverse transboundary impact.

Having regard to the nature and extent of the proposed development, which comprises a residential development, located in Santry, within the administrative area of County Dublin, transboundary impacts on the environment are not considered relevant, in this regard.

2.11 Alternatives Examined

Chapter 3 of the EIAR (Volume II) also includes a summary of alternatives which were considered for the proposed development of the subject lands. These options were considered as the scheme progressed and the key considerations and amendments to the design having regard to the key environmental issues pertaining to the lands are summarised in this section of the EIAR.

2.11.1 Do Nothing Alternative

The “*Do Nothing*” Scenario describes the impacts of the proposed development, if it were not carried out.

The positive benefits to the national, regional and local community arising from the development of this site would not materialise in the “*Do Nothing*” scenario. In addition, the “*Do Nothing*” scenario would result in non-compliance with the NPF which contains the following relevant objectives:

- **National Policy Objective 3a** - Deliver at least 40% of all new homes nationally, within the built-up footprint of existing settlements;
- **National Policy Objective 32** - To target the delivery of 550,000 additional households to 2040.

This alternative is therefore not attractive with the site possibly remaining occupied by a tenant in the large industrial type building and associated yard on site.

2.11.2 Alternative Site Layouts

The proposed residential development has been prepared in accordance with the requirements of the National Planning Framework, the Regional Spatial and Economic Strategy for the Mid-East area as well as the relevant Section 28 Guidelines including those relating to Urban Development and Urban Heights (2018), the Apartment Guidelines (2023) and the Sustainable Residential Development & Compact Settlements Guidelines (2024) as well as, where relevant, the Dublin City Development Plan 2022-2028 and has been the subject of pre-application meetings with the Planning Authority prior to lodgement of this LRD application with Dublin City Council.

Insofar as the EIA is concerned, a number of iterations of the site layout and alternative designs were prepared and considered for the project. This involved taking into account the various technical and

¹ The definition is based on Articles 2(1) and 4 of the EIA Directive and Article 2(3) and (5) of the Espoo Convention, respectively. <http://ec.europa.eu/environment/eia/pdf/Transboundry%20EIA%20Guide.pdf>



environmental considerations which are addressed in the EIA and which informed the design of the proposed development.

The design process, having taken into consideration the discussions held with the DCC, individual consultants who inform the chapters of this EIAR, and the feedback received from DCC at the Pre-Application Consultations, has resulted in the layout now put forward for permission, which is illustrated in Fig. 1 above. It is considered that this layout represents the best utilization of these zoned lands, complies with the objectives for the lands contained in the CDP and mitigates against significant environmental impacts.

In summary, the development proposal will, *inter alia*:

- Comply with the land-use zoning designation for the subject site
- Provide appropriate accommodation which can cater for different life stages by delivering apartments and duplex units in a mix of 1, 2 & 3 bedroom units
- Provide an appropriate density of development, which will develop a new urban quarter in Santry
- Comply with the Planning Authority's detailed quantitative standards for residential development as set out in the existing Dublin CDP and, where appropriate, Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities (2023)
- Provide a level of social housing (32 no. units) which equates to circa 10% of the overall quantum of proposed dwellings
- Support sustainable transport modes via the creation of pedestrian and cycle connections
- The proposed development also provides for 3 no. retail uses, a medical suite / GP practice unit and c.1,460sq.m of floorspace to cater for community/arts/cultural uses, all at round floor level of Blocks A, B, C, D & E, and a residential amenity unit (c.166m²) at ground floor level located between Blocks A and D.
- Protect the existing residential amenity enjoyed by the residents of neighbouring developments
- Preserve, where feasible, the natural amenity characteristics of the site, and provide for new features where necessary in order to ensure that the visual impact of the development is minimised. This has been achieved by allocating areas of open space for recreation, all of which will be developed in accordance with the overall Landscape Plan for this proposed development.

2.11.3 Final Layout Alternative

With regard to the layout put forward for permission, the iterative process included alternative site layouts that were considered with the objective of submitting an overall high-quality designed scheme which has undergone a robust consideration of relevant alternatives in reference to the comparison of environmental effects and meets the requirements of the EIA Directive, based on the multidisciplinary review across all environmental topics.



The final design now put forward for permission presents the most effective utilization of this significant site whilst also fulfilling the objectives of the Planning Authority and providing for long term, sustainable housing for which there is a considerable demand at present and providing for a use of material, architectural form and colour to create a high level of visual amenity.

Dublin City Council LRD Opinion (Ref. LRD6044/23-S2)

During the course of the pre-planning process for this proposed LRD, detailed discussions took place at two stages with the Planning Authority, Dublin City Council (DCC), and within the LRD Opinion of (DCC), which was issued thereafter, details were set out regarding the specific information to be included as part of a LRD planning application. The LRD Opinion stated that the reinstatement of the commercial uses is welcomed. Commentary was also received regarding the bulk, massing, height and scale and layout of the proposal, requesting that consideration be *“given to revising the proportions, footprint, and roofline of this corner element, rather than the removal of several storeys from the previously submitted design. It is acknowledged that the Planning Authority recommended the reduction in height by way of condition on previous proposals, however, the opportunity to design this building from first principles, to an appropriate height, should not be ignored at this juncture”*.

Following the receipt of detailed feedback from the Planning Authority, during the course of the pre-application meeting, and following receipt of the LRD Opinion, which advised on further consideration relating to aspects of the proposed development, the applicant and design team have undertaken a number of revisions to the development proposal which is reflected within the final development proposal submitted for permission as part of a LRD planning application.

As noted within the development description sections of this chapter, the scheme now comprises a quantum of residential development consisting of 321 no. dwellings.

The key changes proposed related to:

- Increase of height of Block A from 11 storeys to 13 storeys, with the top floor accommodating an outdoor roof terrace,
- Changes to the mix of dwelling types,
- Greater enclosure of streets through the location of buildings,
- Updates to design and function of open spaces.

Responses to each of these items have been provided as part of the LRD planning application pack, and the scheme has been updated and improved where necessary as a result.

The proposed development takes into account all effects raised with respect to the pre-application design submitted to Dublin City Council, and within DCC's LRD Opinion, and provides for a sustainable development that has been optimised to emphasise positive environmental effects whilst reducing negative environmental impacts wherever possible.

The main consideration has been to achieve a design solution for the preferred layout which would enable all of the functional and operational requirements of the scheme to be met, whilst also ensuring the sensitive siting of new elements within the site. Having established the quantum, type and mix of both uses and residential units, a series of alternatives were considered by the design team. This process has enabled the final proposal to evolve. The need to provide for a suitable level of urban design at this prominent corner location, appropriate building height and design, enclosure of open spaces through the built form, in addition



to landscaping, has driven the final layout form and design solution as proposed as part of the LRD planning application.

Alternative locations for the various built elements of the development were considered and examined at the design stage.

3.0 Non-Technical Summary of EIAR Chapters

3.1 Population and Human Health

This Chapter, prepared by Armstrong Fenton Associates Planning and Development Consultants, relates primarily to '*Human Beings*'- the potential impacts of the development proposal on human beings, population, and human health within the vicinity of the application site and an assessment of these issues.

One of the principal concerns in the development process is that people, as individuals or communities, should experience no diminution in their quality of life from the direct or indirect impacts arising from the construction and operation of a development. Ultimately, all the impacts of a development impinge on human beings, directly and indirectly, positively and negatively.

3.1.1 Potential Construction and Operational Phase Impacts

The construction phase of the proposed development is likely to result in a positive net improvement in economic activity in the area of the proposed development site, particularly in the construction sector and in associated and secondary building services industries. The sector has grown strongly in recent years and this development will help to further enhance growth and reduce the increasing pressure on the housing market.

The construction phase of the proposed development will primarily consist of site clearance, excavation and construction works, which are likely to take place over 3 no. main phases, which will be largely confined to the proposed development site. Notwithstanding the implementation of remedial and mitigation measures, there will be some minor temporary residual impacts on population (human beings) and human health most likely with respect to nuisance caused by construction activities. It is anticipated that subject to the careful implementation of the remedial and mitigation measures proposed throughout this EIAR document any adverse likely and significant environmental impacts will be avoided. Positive impacts are likely to arise out of an increase in employment and economic activity. The overall predicted likely and significant impact of the construction phase will be short-term, temporary and likely to be neutral.

The proposed development will result in a generally positive alteration to the existing brownfield site in terms of the provision of residential units to serve the growing residential population of the city in accordance with the objectives of Dublin City Council's Development Plan. Positive impacts on population and human health will include health benefits associated with the provision of a significant quantity of open space, pedestrian and cyclist accessibility to the site, including the provisions of connections from the development to Santry Demesne Park, a highly permeable layout which connects the site to existing development to the south and delivers the objectives of the CDP. The provision of 3 no. retail uses, a medical suite / GP practice unit on site, as well as c.1,460sq.m of floor space to accommodate community/arts/cultural uses and a residential amenity unit, enhances the quality of the development and helps to create sustainable communities.



3.1.2 Mitigation

The implementation of the range of remedial and mitigation measures included throughout this EIAR document is expected to have the impact of limiting any adverse significant and likely environmental impacts of the operational phase of the proposed development on population and human health.

Overall, subject to adherence to best practice and implementation of appropriate mitigation measures detailed in this EIAR, the overall temporary impacts associated with the construction phase (noise, dust, visual, traffic disruption) are considered to represent a slight / moderate negative impact for the population. In order to avoid and / or reduce impacts on the adjoining residents, a CMP will be put in place prior to the commencement of development.

3.2 Biodiversity

The Biodiversity Chapter (Chapter 5) details the Ecological Impact Assessment (EiA) of the Proposed Development, which assesses the potential effects of the development works on habitats and species; particularly those protected by National and International legislation or considered to be of particular nature conservation importance. This describes the ecology of the Site and surrounding area, with emphasis on habitats, plants, and animals, and will assess the potential effects of the Construction and Operational Phases of the Proposed Development on these ecological receptors.

A detailed desk study, in combination with a suite of field surveys, was carried out regarding the Proposed Development. Field surveys included: habitat/flora (including invasive plants) surveys, mammal surveys, bird scoping surveys, and bat surveys. All surveys were carried out at the appropriate time of year, and no limitations were encountered in the preparation of this Chapter.

A total of 12 statutory designated sites/areas were considered to fall within the precautionary zone of influence (ZOI) of the Proposed Development. Of these sites, 11 are associated with Dublin Bay downstream along the Santry River; the Dublin Bay UNESCO Biosphere, North Dublin Bay SAC (000206), South Dublin Bay and River Tolka Estuary SPA (004024), North Bull Island SPA (004006), North-west Irish Sea SPA (004236), two Ramsar sites: Sandymount Strand/Tolka Estuary (832) and North Bull Island (406), and three pNHAs; South Dublin Bay pNHA (000210), North Dublin Bay pNHA (000206), and Dolphins, Dublin Docks pNHA (004024). One designated area, Santry Demesne pNHA (000178), is located across Santry Avenue from the Site, approximately 20m to the north.

The protected sites/areas associated with Dublin Bay all overlap and are all linked to the Site of the Proposed Development via one weak hydrological pathway in the form of the Santry River which passes approximately 674m to the north of the Site. The potential impacts to the SACs and SPAs are assessed in detail in the Appropriate Assessment (AA) Screening that accompanies this application under separate cover (Enviroguide, 2024a). Dublin Bay UNESCO Biosphere, as well as the pNHAs and RAMSAR sites assessed in this Chapter are covered by proxy by the conclusions of the AA Screening, which rules out significant impacts to Natura 2000 sites, as the potential impacts identified are the same as those detailed for the SAC/SPAs. This conclusion is enabled by the similarities in the impact pathways (pollution of the Santry River and Dublin Bay) to important features for which all five sites are designated (i.e., coastal/wetland habitats and waterbirds). Therefore, no Natura 2000 or international Sites are considered further as key ecological receptors (KERs) in this Chapter. Due to its proximity to the Site, Santry Demesne pNHA and protected species therein may be impacted by noise, dust, and pollution in surface water runoff as a result of Proposed Development works. Santry Demesne pNHA is therefore considered further as a KER.



The Site is made up of developed land including an active Chadwick's wholesaler. The Site is low value for biodiversity, mainly comprising built surfaces. Some small areas of grassland and scrub exist on Site and will be removed. The western and eastern boundaries of the Site have mature treelines, which will be retained, and hedgerows, which will be replaced. Three potentially invasive species were noted along the western fence line within the Site boundary: a single Butterfly-bush *Buddleja davidii*, a number of Sycamore *Acer pseudoplatanus* saplings and Cotoneaster *Cotoneaster spp.* None of these species are listed under regulation S.I. 477².

The Site is considered to be of local importance to breeding birds due to the potential for Herring Gull (*Larus argentatus*), an amber-listed species, to nest on the warehouse roof. However, due to the distance from any Natura 2000 site designated for Herring Gull and the abundance of similar nesting surfaces in the vicinity, the Site is not considered to be an important *ex-situ* site for wintering birds. Green-listed bird species noted on Site may breed in the limited hedgerow habitats on Site.

The limited hedgerow and scrub on Site provide limited suitable habitat for any protected mammal species, and the isolated nature of these habitats in the surrounding urban landscape make it unlikely that mammals utilise the site. No suitable habitat for amphibians was noted on Site.

The bat surveys and assessments conducted on Site in 2021 concluded that the Site itself is considered to be of negligible importance for bats. No bats were recorded during the bat activity survey in 2021, the Site lacks mature trees and commuting and foraging routes, and the buildings on Site lack roosting suitability for bats. Site is also deemed unsuitable for bats due to isolated nature in an urban context and existing high light levels on Site. The following designated sites, habitats, and species were considered as KERs as part of the EclA of the Proposed Development:

- Santry Demesne pNHA (000178)
- Hedgerows (WL1) and Treelines (WL2)
- Medium impact invasive species
- Otter (*Lutra lutra*) utilising the Santry River in Santry Demesne north of the Site.
- Breeding Bird Assemblage.
- Fish Assemblage of the Santry River.

Potential impacts were identified and can be summarised as potential Construction Phase impacts via increases in noise and dust emissions to nationally designated areas (Santry Demesne pNHA); loss of hedgerow habitat; disturbance of breeding birds utilising hedgerow habitat on Site due to habitat loss and unlikely disturbance to mammals and fish utilising the Santry River due to runoff of sediment or other water borne pollutants into the Santry River and designated sites located downstream, and light pollution impacts to nocturnal species e.g., bats. No negative impacts are envisaged as a result of the Operational Phase of the Proposed Development.

The integrated design features and mitigation measures recommended to address the above potential impacts include measures to suppress noise and dust and limit pollutant runoff in surface water. These include measures detailed in the Construction Environmental Management Plan (CEMP) accompanying this submission under separate cover (DBFL, 2024b).

The above timing of works must also take into account the breeding bird season, such that vegetation

² The NDBC have records of two medium impact invasive species within the 2km grid squares (O14Q and O13U) within which the Proposed Development is located. Three potentially invasive species were found by Enviroguide Consulting during the walk over survey on the 13th of May 2021. These species were again observed during the walk over survey on the 14th of February 2024.



clearance occurs outside the period of March-August. Mitigation of impacts to species associated with the Santry River (Otter and fish assemblage) is included in the measures detailed in the CEMP (DFBL, 2024b).

Enhancement measures recommended for the Site include 40 no. Swift Bricks to be included in the architectural design (DSA, D1809.P20) and public lighting designed to minimise light spill and enhance the Site's suitability for bats. In addition, a Biodiversity Management Plan (BMP) has been prepared by Enviroguide (Enviroguide, 2024b) and accompanies this application under separate cover. This document details the landscape management operations for the Proposed Development, including cutting/trimming regimes and maintenance, and how they can be conducted in a manner that maximises the biodiversity value of the habitats proposed to be created at the Site.

No significant cumulative impacts involving the Proposed Development and other developments were identified. In terms of residual impacts, the construction mitigation measures detailed in this Chapter, along with the design features to be adopted to minimise adverse impacts to animals at the Site, will be sufficient to reduce any identified potential impact to KERs associated with the Site to 'not-significant'. It is considered that provided the mitigation measures proposed are carried out in full, there will no significant negative impact to any valued habitats, designated sites or species.

3.3 Land, Soil and Geology

This chapter was prepared by Laura McLoughlin, Senior Civil Engineer and Ryan Parkes, Civil Engineer, of DBFL Consulting Engineers and comprises of an assessment of the likely impact of the proposed development on the soils and the geological environment, as well as identifying proposed mitigation measures required to minimise any impacts.

3.3.1 Potential Construction and Operational Phase Impacts

It is anticipated that the main construction activity impacting soils and geology will comprise the following:

Excavation of existing subsoil layers will be required in order to allow for basement excavation, drainage and utility installation and provision of underground attenuation of surface water. Underlying subsoil layers are expected to be generally suitable for reuse as non-structural fill.

In the context of materials imported to site, these will be natural stones sourced from locally available quarries in accordance with the appropriate statutory guidelines, greenfield/inert soil imported under a Waste Permit issued by the local authority; or materials that have been approved as by-products by the EPA in accordance with the EPA's criteria for determining a material is a by-product, per the provisions of article 27(1) of the European Communities (Waste Directive) Regulations, 2011.

Imported materials will be granular in nature and used in the construction of road pavement foundations, drainage and utility bedding and surrounds. Imported fill may be required to raise the development to the required level for drainage.

Materials will be brought to site and placed in their final position in the shortest possible time. Any imported material will be kept separate from the indigenous arisings from the site. All excavation to accommodate imported material will be precisely co-ordinated to ensure no surplus material is brought to site beyond the engineering requirement.

During the construction phase there is a risk of accidental pollution from the sources noted below. Accidental spills and leaks may result in contamination of the soils underlying the site.



- Storage of oils and fuels on site
- Oils and fuels leaking from construction machinery
- Spillage during refuelling and maintenance of construction machinery
- Use of cement and concrete during construction works

Groundwater vulnerability is mapped as 'low' by the GSI at the proposed site. This vulnerability will likely be temporarily increased due to the removal of soils, subsoils and made ground cover during construction. Therefore, accidental spillages may have potential to impact on the 'locally important' aquifer.

Any excavations associated with development of the site are expected to be moderate. The drainage infrastructure will require excavations of approximately 2.0m on average with 3.0m in the deepest sections. A basement is proposed for under blocks Blocks A, B, C, D, E & F and expected to be in the region of approximately 3m. It is possible that underlying geology may be disturbed in areas of deep excavation, this will be verified by site investigation works following the receipt of planning permission.

Once the construction stage is complete and the development is in-situ and operational, the geology beneath the proposed site will remain unchanged. Subsoil will either be covered by surface hardstanding, building footprint or landscaped areas.

There will be no direct discharges to soil or groundwater during the operational phase of the proposed development. Foul effluent and surface water will be discharged to the Irish Water sewer and Dublin City Council surface water drainage network following the required treatment measures.

There will be no significant storage or use of hazardous materials during the operational phase that could adversely impact subsoil, groundwater or surface water in the vicinity of the site. Accidental losses of oil, petrol or diesel on roadways or in car parks could cause contamination if these elements entered the underlying soil and groundwater. However, the presence of surface hardstanding throughout these areas would render this unlikely. In addition, all surface water will be routed through a suitably sized petrol interceptor before entering the public surface water network.

In the absence of mitigation measures, should accidental losses of oil, diesel, or petrol to ground occur, they would be considered direct, negative impacts of temporary duration, given that they would be confined to one-off releases. This would be considered a medium impact to a medium sensitivity environment, and the significance of the impact would be moderate.

3.3.2 Mitigation Measures

During demolition of existing structures any hazardous material identified on site will be removed by specialist contractors.

Excavation of existing subsoil layers has been minimised as far as reasonably practicable. Cut type earthworks operations will not be required to achieve designed site levels, however some cut type earthworks will be required to construct the basements and attenuation system. Cut material is considered likely to be suitable to be reused as non-structural fill elsewhere on site.

Disturbed subsoil layers will be stabilized as soon as practicable (e.g. backfill of service trenches, construction of road capping layers, construction of building foundations and completion of landscaping). The duration that subsoil layers are exposed is to be minimised in order to mitigate against weather effects.



Stockpiles of excavated subsoil material will be protected for the duration of the works.

Measures will be implemented to capture and treat sediment laden surface water runoff (e.g. sediment retention ponds, surface water inlet protection).

With regards to the importation of fill to site, the source of aggregate, fill material and topsoil imported to site will be carefully selected and vetted in order to ensure that it is of a reputable origin and that it is “clean” (i.e. will not contaminate the environment). Project contract and procurement procedures will be developed to ensure that aggregate, fill material and topsoil are acquired from reputable sources with suitable environmental management systems as well as regulatory and legal compliance.

No large or long-term stockpiles of fill material will be held on the site. At any time, the extent of fill material held on site will be limited to that needed in the immediate vicinity of the active work area.

Smaller stockpiles of fill, where required, will be suitably protected to ensure no sediment laden runoff enters existing surface water drains. Such stockpiles are to be located in order to avoid double handling.

A construction traffic management plan will be developed and implemented in order to minimise the disturbance caused by large vehicles. This management plan shall include and detail:

- Predetermined haul routes for earthworks plant and vehicles delivering construction materials to site.
- Vehicle wheel wash facilities in the vicinity of any site entrances and road sweeping to maintain the road network in the immediate vicinity of the site.
- Dust suppression measures (e.g. dampening down)

Due to the presence of a locally important aquifer beneath the site, it will be necessary to employ mitigation measures at the construction site in order to prevent spillages to ground of fuels, and to prevent consequent soil or groundwater quality impacts. These measures are outlined in the Construction & Environmental Management Plan (CEMP) and are listed here as follows:

- Over Ground Oil / Diesel Storage – Only approved storage system for oil / diesel within the site will be permitted.
- The bunded area will accommodate the relevant oil / diesel storage capacity in case of accidental spillage. Any accidental spillages will be dealt with immediately on site however minor by containment /removal from site;
- All hazardous substances on-site shall be controlled within enclosed storage compounds that shall be fenced-off and locked when not in use to prevent theft and vandalism;
- Fixed plant shall be self-bunded; mobile plant must be in good working order, kept clean, fitted with drip trays where appropriate and subject to regular inspection; water runoff from designated refuelling areas shall be channelled to an oil-water separator, or an alternative treatment system, prior to discharge; and,
- Spill kits and oil absorbent material shall be carried with mobile plant and located at vulnerable locations around the site to reduce risk of spillages entering the sub-surface or groundwater environment; booms shall be held on-site for works near drains or dewatering points.



Upon completion of the construction phase all temporary construction compounds are to be removed. Such areas are to be reinstated in accordance with the landscape architects plan and engineer's drawings. All construction waste and/or scrapped building materials are to be removed from site on completion of the construction phase.

Oil, fuel etc. storage areas are to be decommissioned on completion of the construction phase. Any remaining liquids are to be removed from site and disposed of at an appropriate licenced facility. All sediment control measures (e.g. sediment retention ponds) are to be decommissioned on completion of the construction phase. Such areas are to be reinstated in accordance with the landscape architects plan and engineer's drawings.

The operational phase of the development is unlikely to have any significant adverse impacts on the local geological/hydrogeological environment due to the environmental considerations incorporated into the design. These measures will seek to avoid or minimise potential effects, in the main, through the implementation of best practice construction methods and adherence to all relevant legislation.

3.4 Water

Chapter 7 the EIAR was prepared by Laura McLoughlin, Senior Civil Engineer and Ryan Parkes, Civil Engineer, of DBFL Consulting Engineers of DBFL Consulting Engineers and comprises of an assessment of the likely impact of the proposed development on the surrounding hydrogeological environments (including flood risk, surface water drainage, foul drainage and water supply), as well as identifying proposed mitigation measures to minimize any impacts.

The Geological Survey Ireland (GSI) Online Data Services classifies the aquifer at the subject site as "*Locally Important Aquifer – Bedrock which is Generally Moderately Productive in Local Zones*". There is also a gravel aquifer overlaying the bedrock, which is classified as "*Locally important gravel aquifer*".

GSI classifies the site's groundwater vulnerability as low across the site.

The primary hydrological feature in the vicinity of the site is the Santry River (approx. 700m north of the site). Excavations of the basement of the neighbouring development to depths of 4m encountered no ground water.

A Site Specific Flood Risk Assessment of the proposed development has been carried out by DBFL Consulting Engineers and is submitted as a separate document to the EIAR, however, it confirms that it was determined that the site is within Flood Zone C as defined by the Guidelines and based on the ECFRAMS mapping. Therefore, the development of housing on the subject site is appropriate for the site's flood zone category and a justification test as outlined in the Guidelines is not required and that it is considered that the flood risk mitigation measures once fully implemented are sufficient to provide a suitable level of protection to the proposed development and will not cause an increased risk of flooding to external properties.



3.4.1 Potential Construction and Operational Phase Impacts

Potential impacts that may arise during the construction phase are noted below:

- Surface water runoff during the construction phase may contain increased silt levels (e.g. runoff across areas stripped of hardstanding) or become polluted by construction activities.
- Discharge of rainwater pumped from excavations may also contain increased silt levels (potential impact on existing hydrology e.g. discharge to existing open drain).
- Accidental spills and leaks associated with storage of oils and fuels, leaks from construction machinery and spillage during refuelling and maintenance contaminating the surrounding surface water and hydrogeological environments.
- Concrete runoff, particularly discharge of wash water from concrete trucks (potential impact on existing hydrology e.g. infiltration to ground).
- Discharge of vehicle wheel wash water (potential impact on existing hydrology e.g. discharge to existing surface water drainage infrastructure).
- Improper discharge of foul drainage from contractor's compound (impact on existing hydrology e.g. cross-contamination of existing surface water drainage.).
- Cross contamination of potable water supply to construction compound.

Potential operational phase impacts are noted below:

- Accidental hydrocarbon leaks and subsequent discharge into piped surface water drainage network (e.g. along roads and in driveway areas).
- Increased impermeable surface area will reduce local ground water recharge and potentially increase surface water runoff (if not attenuated to greenfield runoff rate).
- Increased discharge to foul drainage network (Daily Foul Discharge Volume = approx. 955m³)
- Increased potable water consumption (Average Daily Domestic Demand = approx. 144.6m³)

Implementation of the mitigation measures described will prevent and minimize the potential impacts of this interaction.

3.4.2 Mitigation Measures

The following measures are proposed during the construction phase to mitigate against risks to the surrounding hydrological environment.

- A site-specific Construction Management Plan will be developed and implemented during the construction phase. Site inductions will include reference to the procedures and best practice as outlined in the Construction Management Plan.
- Rainwater pumped from excavations is to be directed to on-site settlement ponds.
- Surface water runoff from areas stripped of hardstanding and surface water collected in excavations will be directed to on-site settlement ponds where measures will be implemented to capture and treat sediment laden runoff prior to discharge of surface water at a controlled rate.
- Weather conditions and seasonal weather variations will also be taken account of when planning stripping the site and excavations, with an objective of minimizing soil erosion.
- In order to mitigate against spillages contaminating the surrounding surface water and hydrogeological environments, all oils, fuels, paints and other chemicals shall be stored in a secure bunded hardstand area. Refuelling and servicing of construction machinery will take place in a



designated hardstand area which is also remote from any surface water inlets (where not possible to carry out such activities off site).

- Concrete batching will take place off site and wash out of concrete trucks will take place off site (at authorized concrete batching plant in full compliance with relevant planning and environmental consents).
- Discharge from any vehicle wheel wash areas is to be directed to on-site settlement ponds.
- Any groundwater pumped from excavations is to be directed to on-site settlement ponds.
- It is proposed to implement a programme for monitoring water quality at the outfall as part of the construction of this development, in agreement with the Planning Authority.
- The construction compound will include adequate staff welfare facilities including foul drainage and potable water supply. Foul drainage discharge from the construction compound will be tankered off site to a licensed facility until a connection to the public foul drainage network has been established.
- The construction compound's potable water supply shall be protected from contamination by any construction activities or materials.

For the operational phase of the proposed development, the design of proposed site levels (roads, plaza, finished floor levels etc.) has been carried out in such a way as to replicate existing surface contours, break lines etc. as closely as reasonably practicable and avoid concentrating additional surface water flow in any particular location. However, some localised areas have been raised in order to enable gravity foul drainage and provide sufficient depth of cover. In these areas the levels have been designed to provide overland flow paths have been designed to ensure that during exceedance events, runoff is directed away from buildings to soft landscaped areas.

Following the Site Specific Flood Risk Assessment, it has been determined that the entire site / zoned developable area is located in Flood Zone C as defined by the Guidelines (i.e. proposed development is considered to have the required level of flood protection up to and including the 1% AEP flood event.)

Surface water runoff from the site will be attenuated to the greenfield runoff rate as outlined in the Greater Dublin Strategic Drainage Study (GDSDS). Surface water discharge rates will be controlled by a Hydrobrake type vortex flow control device in conjunction with attenuation storage.

The following methodologies are being implemented as part of a SuDS surface water treatment train approach:

- Permeable paving along carriageways and parking areas.
- Green roofs - extensive.
- Blue roofs
- Catchpit manholes.
- Installation of hydrobrake limiting surface water discharge from the site to combined greenfield runoff rates.
- Surface water discharge to pass via a Class 1 bypass fuel / oil separator (sized in accordance with permitted discharge from the site).

A contract will be entered into with a suitably qualified contractor for maintenance of the attenuation system, Hydrobrake and by-pass fuel / oil separator noted above.

No specific mitigation measures are proposed in relation to foul drainage however, all new foul drainage lines will be designed, installed and tested in accordance with Irish Water Code of Practice.



No specific mitigation measures are proposed in relation to water supply. However, all new watermain will be designed, installed and tested in accordance with the Irish Water Code of Practice.

The potential impact of climate change has been allowed for as follows;

- Pluvial flood risk - attenuation storage design allows for a 20% increase in rainfall intensities, as recommended by the GDSDS.
- Pluvial flood risk - drainage system design allows for a 20% increase in flows, as recommended by the GDSDS.

3.5 Air Quality

Chapter 8 of the EIAR was prepared by AWN Consulting Ltd. This chapter was completed by Aisling Cashell, an Environmental Consultant in the air quality section of AWN Consulting Ltd. She holds a BA and an MAI in Civil, Structural and Environmental Engineering from Trinity College Dublin. This chapter was reviewed by Ciara Nolan, a Senior Environmental Consultant in the Air Quality & Climate section of AWN Consulting. She holds a BSc in Energy Systems Engineering from University College Dublin and has also completed an MSc in Applied Environmental Science at UCD. She is a Member of the Institute of Air Quality Management (MIAQM) and the Institute of Environmental Science (MIEnvSc). She specialises in the fields of air monitoring, air quality & climate assessments for EIA and air dispersion modelling.

Baseline Environment

Baseline data and data available from similar environments indicates that levels of nitrogen dioxide (NO₂), particulate matter less than 10 microns (PM₁₀) and particulate matter less than 2.5 microns (PM_{2.5}) and are generally well below the National and European Union (EU) ambient air quality standards.

Potential Impact of the Proposed Development

Construction Phase

An assessment of the potential dust impacts as a result of the construction phase of the proposed development was carried out based on the UK Institute for Air Quality Management 2024 guidance document '*Guidance on the assessment of Dust from Demolition and Construction*'. This established the sensitivity of the area to impacts from construction dust in terms of dust soiling of property, human health and ecological effects. The surrounding area was assessed as being of low sensitivity to dust soiling, of low sensitivity to dust-related human health effects and of medium sensitivity to dust-related ecological effects.

The sensitivity of the area was combined with the dust emission magnitude for the site under three distinct categories: earthworks, construction and trackout (movement of vehicles) in order to determine the mitigation measures necessary to avoid significant dust impacts. It was determined that there is at most a medium risk of dust related impacts associated with the proposed development. In the absence of mitigation there is the potential for **direct, short-term, localised, negative, and slight** impacts to air quality.

In addition, construction phase traffic emissions have the potential to impact air quality, particularly due to the increase in the number of HGVs accessing the site. Construction stage traffic did not meet the scoping criteria for a detailed modelling assessment outlined in Transport Infrastructure Ireland's 2022 guidance



document 'Air Quality Assessment of Specified Infrastructure Projects – PE-ENV-01106' As a result a detailed air assessment of construction stage traffic emissions has been scoped out from any further assessment and the construction stage traffic emissions will have a **imperceptible, short-term** and **neutral** impact on air quality.

Operational Phase

Operational phase traffic has the potential to impact air quality due to vehicle exhaust emissions as a result of the increased number of vehicles accessing the site. The change in traffic associated with the operational phase of the proposed development did not meet the PE-ENV-01106 criteria requiring a detailed air dispersion modelling assessment. Therefore, it can be determined that during the operational phase, the proposed development will have a **direct, long-term, negative** and **imperceptible** impact on air quality.

Mitigation and Residual Effects (Post-Mitigation)

Construction Phase

Detailed dust mitigation measures are outlined within Section 8.7 of Chapter 8 to ensure that no significant nuisance as a result of construction dust emissions occurs at nearby sensitive receptors. Once these best practice mitigation measures, derived from the Institute for Air Quality Management 2024 guidance 'Guidance on the Assessment of Dust from Demolition and Construction' as well as other relevant dust management guidance, are implemented the impacts to air quality during the construction of the proposed development are considered, **short-term, direct, negative** and **not significant**, posing no nuisance at nearby sensitive receptors (such as local residences).

Operational Phase

As the predicted concentrations of pollutants will be imperceptible no mitigation is required. The impact to air quality has been assessed as **long-term, localised, negative** and **imperceptible**.

Cumulative Impact of the Proposed Development

Construction Phase

There is the potential for cumulative impacts to air quality should the construction phase of the proposed development coincide with that of other developments within 250m of the site. A review of proposed/permitted developments in the vicinity of the site was undertaken and relevant developments with the potential for cumulative impacts were identified.

There is a low risk of dust impacts associated with the proposed development. The dust mitigation measures outlined in Section 8.7 of Chapter 8 will be applied during the construction phase which will avoid significant cumulative impacts on air quality. With appropriate mitigation measures in place, the predicted cumulative impacts on air quality associated with the construction phase of the proposed development and the permitted cumulative developments are deemed **short-term, localised, negative** and **imperceptible**.

Operational Phase

The direct impacts of the operational phase on air quality associated with the proposed development are predicted to be imperceptible. Cumulative impacts are considered **direct, long-term, negative** and



imperceptible.

Overall no significant impacts to air quality are predicted during the construction or operational phases of the proposed development.

3.6 Climate

AWN Consulting Limited conducted an assessment of the likely impact on climate associated with the proposed development at the junction of Santry Avenue and Swords Road, Santry, Dublin 9.

Baseline Environment

The existing climate baseline can be determined by reference to data from the EPA on Ireland's total greenhouse gas (GHG) emissions and compliance with European Union's Effort Sharing Decision "EU 2020 Strategy" (Decision 406/2009/EC). The EPA estimate that Ireland had total GHG emissions of 60.76 Mt CO_{2e} in 2022. This is 3.72 Mt CO_{2e} higher than Ireland's annual target for emissions in 2022. EPA projections indicate that assuming full implementation of the Climate Action Plan and the use of the flexibilities available Ireland can achieve an emissions reduction of 30% by 2030.

3.6.1 Potential Impact of the proposed Development

The potential impacts on climate have been assessed in two distinct ways – a greenhouse gas assessment (GHGA) and a climate change risk assessment (CCRA). The GHGA quantifies the GHG emissions from a project over its lifetime and compares these emissions to relevant carbon budgets, targets and policy to contextualise magnitude. The CCRA considers a projects vulnerability to climate change and identifies adaptation measures to increase project resilience.

Construction Phase

Calculation of the GHG emissions associated with the construction of the proposed development was calculated using the online OneClick Carbon Designer for Ireland Carbon Calculator Tool. GHG emissions associated with the proposed development are predicted to be a small fraction of Ireland's Industry and Buildings (Residential) sector 2030 emissions ceilings of 4 Mt CO_{2e} each. The proposed development will incorporate some mitigation measures which will aim to reduce climate impacts during construction and once the development is operational.

Operational Phase

GHG emissions during the operational phase due to road traffic were assessed. The changes in traffic volumes associated with the operational phase of the development were not substantial enough to meet the assessment criteria requiring a detailed climate modelling assessment, as per Transport Infrastructure Ireland (TII) 2022 guidance "PE-ENV-01104: Climate Guidance for National Roads, Light Rail and Rural Cycleways (Offline & Greenways) – Overarching Technical Document". The proposed development has incorporated a number of sustainability measures into the design of the development which will aid in reducing impacts to climate once operational.

A CCRA was conducted to consider the vulnerability of the proposed development to climate change, as per the TII 2022 PE-ENV-01104 guidance. This involves an analysis of the sensitivity and exposure of the development to future climate hazards which together provide a measure of vulnerability. The hazards



assessed included flooding (coastal, pluvial, fluvial); extreme heat; extreme cold; drought; extreme wind; lightning, hail, fog, wildfire and landslides. The proposed development is predicted to have at most low vulnerabilities to the various climate hazards and therefore climate change risk is not considered significant. Overall, no significant impacts to climate are predicted during the construction or operational phases of the proposed development.

3.6.2 Mitigation and Residual Effects (Post-Mitigation)

A number of best practice mitigation measures are proposed for the construction phase of the proposed development to ensure that impacts to climate are minimised. Design mitigation has been considered when assessing the vulnerability of the development to future climate change.

The impact to climate as a result of a proposed development must be assessed as a whole for all phases. The proposed development will result in some impacts to climate through the release of GHGs. TII state that the crux of assessing significance is *“not whether a project emits GHG emissions, nor even the magnitude of GHG emissions alone, but whether it contributes to reducing GHG emissions relative to a comparable baseline consistent with a trajectory towards net zero by 2050”*. The proposed development has been designed to reduce the impact on climate where possible during operation. The proposed development has incorporated some minimal measures to reduce climate change impacts. Once mitigation measures are put in place, the effect of the proposed development in relation to GHG emissions is considered **direct, long-term, negative** and **slight**, which is overall **not significant** in EIA terms.

In relation to climate change vulnerability, it has been assessed that there are no significant risks to the proposed development as a result of climate change.

Cumulative Impact of the Proposed Development

With respect to the requirement for a cumulative assessment PE-ENV-01104 states that *“for GHG Assessment is the global climate and impacts on the receptor from a project are not geographically constrained, the normal approach for cumulative assessment in EIA is not considered applicable.”*

However, by presenting the GHG impact of a project in the context of its alignment to Ireland’s trajectory of net zero and any sectoral carbon budgets, this assessment will demonstrate the potential for the project to affect Ireland’s ability to meet its national carbon reduction target. Therefore, the assessment approach is considered to be inherently cumulative.

The cumulative impact of the proposed development in relation to GHG emissions is considered **direct, long-term, negative** and **slight**, which is overall **not significant** in EIA terms.

3.7 Noise

Chapter 9 of the EIAR provides an assessment of the likely noise and vibration impacts associated with the proposed development, and has been undertaken by Leo Williams (Senior Acoustic Consultant) Senior Acoustic Consultant at AWN Consulting.

Baseline noise monitoring has been undertaken across the development site to determine the range of noise levels at varying locations across the site.



Figure 6 - Noise Monitoring Locations

At location 1, in July 2020, the primary noise sources were observed to be vehicles passing on the Swords Road, occasional local traffic within the residential estate, distant construction noise and aircraft noise. Traffic noise from junctions with Santry Avenue and the R104 also contributed to measured noise levels. Ambient noise levels were in the range of 56 to 58 dB L_{Aeq} . Background noise levels were in the range of 52 to 54 dB L_{A90} .

At this location, in February 2024, the primary noise sources were observed to be vehicles passing on the Swords Road, occasional local traffic within the residential estate. Ambient noise levels were consistent at 63 dB L_{Aeq} . Background noise levels were consistent at 57 dB L_{A90} .

At location 2, in July 2020, the primary noise sources were observed to be traffic noise on the Swords Road, movements within the carpark of the commercial park. Construction noise from adjacent sites and passing pedestrian activity also contributed to measured levels to vary degrees. Ambient noise levels were of the order of 69 dB L_{Aeq} . The elevated max level of 95 dB was caused by a passing pedestrian talking loudly in close proximity to the microphone. Background noise levels were in the range of 59 to 60 dB L_{A90} . At this location, in February 2024, the primary noise sources were observed to be traffic noise on the Swords Road and pedestrian activity close to the monitoring location. An ambulance with siren sounding was noted during the second measurement, elevating the L_{Aeq} and L_{Amax} levels. Ambient noise levels were in the range of 69 to 79 dB L_{Aeq} . Background noise levels were in the range of 59 to 60 dB L_{A90} .

At location 3, the primary noise sources were observed to be from distant vehicle movements along Santry Avenue and the Swords Road, as well as distant construction. Aircraft, birdsong and birdcall were also noted to be contributing to measured noise levels. Ambient noise levels were in the range of 51 to 57 dB L_{Aeq} . Background noise levels were in the range of 46 to 47 dB L_{A90} .



At location 4, on installation and collection at this location the primary noise sources were observed to be traffic noise on Swords Road and Santry Avenue. Activities relating to the day-to-day operation of a commercial trade business currently in operation on the site also contributed to daytime measured noise. Daytime ambient noise levels ranged from 60 to 63 dB L_{Aeq} with an average of 62 dB L_{Aeq} . Daytime background noise levels ranged from 52 to 57 dB L_{A90} with an average of 55 dB L_{A90} .

Night-time ambient noise levels ranged from 55 to 57 dB L_{Aeq} with an average of 56 dB L_{Aeq} . Night-time background noise levels ranged from 44 to 48 dB L_{A90} with an average of 45 dB L_{A90} . Night-time maximum noise levels were in the range of 75 to 90 dB L_{Aeq} with an average of 80 dB.

In addition, the L_{AFmax} values were measured over 15-minute intervals over the duration of the unattended monitoring survey. On review of the maximum noise levels the value of 74 dB L_{AFmax} is not regularly exceeded on a given night (less than 10 events).

3.7.1 Potential Construction and Operational Phase Impacts

At construction stage, during the construction phase of the proposed development, a variety of items of plant will be in use, such as excavators, dumper trucks, compressors and generators. Awn has been advised that initial site investigations indicate that it is not anticipated that piling will be required during the construction of building foundations.

Due to the nature of daytime activities undertaken on a construction site of this nature, there is potential for generation of significant levels of noise. The flow of vehicular traffic to and from a construction site is also a potential source of relatively high noise levels.

Taking into account the outline construction programme, it is possible to predict typical noise levels using guidance set out in BS 5228-1:2009+A1:2014. Table 10.17 outlines typical plant items and associated noise levels that are anticipated for various phases of the construction programme.

The calculations set out in Chapter 10: Noise of the EIAR Volume II assume that the equipment will operate for 66% of the 12-hour working day (i.e. 8 hours) and that a standard site hoarding, typically 2.4m height will be erected around the perimeter of the construction site for the duration of works. It is assumed that construction works will take place during normal working hours only.

During demolition and ground-breaking in the excavation phase, there is potential for vibration to propagate through the ground. Empirical data for this activity is not provided in the BS 5228- 2:2009+A1:2014 standard, however the likely levels of vibration from this activity is expected to be below the vibration threshold for building damage on experience from other sites.

It is anticipated that excavations will be made using standard excavation machinery, which typically do not generate appreciable levels of vibration close to the source. Taking this into account and considering the distance that these properties are from the works and the attenuation of vibration levels over distance, the resultant vibration levels are expected to be well below a level that would cause disturbance to building occupants or even be perceptible.

During the operational phase, the selection of building services plant to be used will ensure that noise levels comply with the criteria described in Section 10.2.3.1 of chapter 10. It is acknowledged that the selection of the specific plant items is subject to change during the detailed design stage, and this is normal industry practice. However, noise from any new plant items will be designed and/or controlled so as not to give rise to any adverse effects at the nearest noise sensitive locations.



During the operational phase of the proposed development, there will be an increase in vehicular traffic associated with the site on some surrounding roads.

A traffic impact assessment relating to the proposed development has been prepared by DBFL Consulting Engineers, as part of this EIAR. Using this information, the related noise impacts along the relevant road links has been assessed.

3.7.2 Mitigation Measures

Construction Phase:

The contract documents will clearly specify the construction noise criteria included in this chapter which the construction works must operate within. The Contractor undertaking the construction of the works will be obliged to take specific noise abatement measures and comply with the recommendations of BS 5228-1:2009+A1:2014 *Code of Practice for Noise and Vibration Control on Construction and Open Sites – Noise* and the *European Communities (Noise Emission by Equipment for Use Outdoors) Regulations, 2001*. These measures will ensure that:

- No plant used on site will be permitted to cause an ongoing public nuisance due to noise.
- The best means practicable, including proper maintenance of plant, will be employed to minimise the noise produced by on site operations.
- All vehicles and mechanical plant will be fitted with effective exhaust silencers and maintained in good working order for the duration of the contract.
- Compressors will be attenuated models fitted with properly lined and sealed acoustic covers which will be kept closed whenever the machines are in use and all ancillary pneumatic tools shall be fitted with suitable silencers.
- Machinery that is used intermittently will be shut down or throttled back to a minimum during periods when not in use;
- Any plant, such as generators or pumps that is required to operate outside of normal permitted working hours will be surrounded by an acoustic enclosure or portable screen.

Noise control measures that will be considered include the selection of quiet plant, enclosures and screens around noise sources, limiting the hours of work and noise and vibration monitoring, where required.

Operational Phase:

During the operational phase of the development, noise mitigation measures with respect to the outward impact of traffic from the development are not deemed necessary.

Taking into account that sensitive receivers within the development are much closer than off-site sensitive receivers, once the relevant noise criteria is achieved within the development it is expected that there will be no negative impact at sensitive receivers off site, and therefore no further mitigation required.

With regards to inward noise, as is the case in most buildings, the glazed elements and ventilation paths of the building envelope are typically the weakest element from a sound insulation perspective. In general, all wall constructions (i.e. block work or concrete and spandrel elements) offer a high degree of sound insulation, much greater than that offered by the glazing systems. Therefore, noise intrusion via the wall construction will be minimal.



It is important to note that the acoustic performance specifications detailed herein are minimum requirements which apply to the overall glazing and ventilation systems. In the context of the acoustic performance specification the 'glazing system' is understood to include any and all of the component parts that form part of the glazing element of the façade, i.e. glass, frames, seals, openable elements etc.

The assessment has demonstrated that the recommended internal noise criteria can be achieved through consideration of the proposed façade elements at the design stage. The calculated glazing and ventilation specifications are preliminary and are intended to form the basis for noise mitigation at the detailed design stage. Consequently, these may be subject to change as the project progresses.

3.8 Material Assets: Built Services

This chapter of the EIAR was prepared by Laura McLoughlin, Senior Civil Engineer and Ryan Parkes, Civil Engineer, of DBFL Consulting Engineers of DBFL Consulting Engineers and assesses and evaluates the likely impact of the proposed development on existing surface water and foul drainage, and utility services in the vicinity of the site during both the construction and operational phases, as well as identifying the nature of any impacts and provide the necessary mitigation measures arising from the proposed development. The material assets considered in this chapter include Surface Water Drainage, Foul Drainage, Water Supply, Power, Gas and Telecommunications.

3.8.1 Potential Construction and Operational Phase Impacts

Construction Phase

Power and water will be required during construction activities and servicing of the temporary site compound. The development site will be connected to the local electricity network system and mains water supply. Given the scale and transient nature of construction works, the power and water demand on the local electricity and mains water systems would not be considered significant and would not be anticipated to impact upon local power or water supply.

Telecommunications requirements during the construction phase will be provided using mobile phones / broadband. There would be no anticipated impacts to the local telecommunications system. Foul water from staff welfare facilities generated during the construction phase will be collected on site in designated waste holding containers / port-a-loo units and emptied on a regular basis by a licenced waste contractor.

The installation of the utilities for the development will be conducted in parallel with the other services. This will mainly involve excavation of trenches to lay ducting, construction/installation of access chambers and backfilling of trenching. The trenching and backfilling works will be carried out in conjunction with the construction of the roads and footpaths throughout the scheme.

Connecting to ESB cable routes may lead to loss of connectivity to and / or interruption of the supply from the electrical grid to the surrounding areas. Any loss of supply will be managed by ESB Networks to minimise impact on neighbouring properties.

There may be a potential loss of connection to the Gas Networks Ireland infrastructure while carrying out works to provide service connections. This likely adverse impact may be characterised as a temporary, regionally short term, moderate impact.



Again, there may be potential loss of connection to the telecommunications infrastructure while carrying out works to provide service connections. This likely adverse impact may be characterised as a temporary, regionally short term, moderate impact. The site compound will require a power and telecommunications connection. This likely adverse impact will be temporary and negligible.

Operational Phase

Potential operational phase impacts on the water infrastructure are noted below:

- Accidental hydrocarbon leaks and subsequent discharge into piped surface water drainage network (e.g. along roads and in hardstanding areas);
- Increased impermeable surface area will reduce local ground water recharge and potentially increase surface water runoff (if not attenuated to greenfield runoff rate);
- Increased discharge to foul drainage network (Daily Foul Discharge Volume = approx. 955m³);
- Increased potable water consumption (Average Daily Domestic Demand = approx. 144.6m³).

Implementation of the mitigation measures described in this report will prevent and minimize the potential impacts of this interaction.

3.8.2 Mitigation Measures

Mitigation measures proposed in relation to the drainage and water infrastructure for the construction phase include *inter alia* the following:

A detailed “*Construction Management Plan*” will be developed and implemented during the construction phase. Site inductions will include reference to the procedures and best practices as outlined in the “*Construction Management Plan*”.

The construction works contractor shall liaise with the relevant utility providers prior to works commencing, with on-going consultation throughout the proposed development. Where new services are required, the construction works contractor shall apply to the relevant utility provider and adhere to the requirements outlined in the connection permit / licence.

The Contractor will be obliged to put measures in place to ensure that there are no interruptions to existing services unless this has been agreed in advance with the relevant service provider.

All works in the vicinity of utilities apparatus will be carried out in ongoing consultation with the relevant utility company or local authority and will be in compliance with any requirements or guidelines they may have.

Where new services or diversions to existing services are proposed, the Contractor will apply to the relevant utility company for a connection permit, where appropriate, and will adhere to their requirements. Where possible, backup network supply to any services will be provided should the need for relocation or diversion or existing services be required. Otherwise, relocation or diversion works will be planned to incur minimal impact, with users notified in advance of any works.



Connections to the utility networks will be coordinated with the relevant utility provider and carried out by approved contractors.

For the operational stage of the proposed development, the mitigation measure include:

Please refer to Chapter 7 of the EIAR “Water” for mitigation measures associated with the surface water treatment. All new drainage lines (foul and surface water) will be pressure tested and will be subject to a CCTV survey to identify any possible defects prior to being made operational.

Chapter 7 includes the mitigation measures associated with the surface water system for the development.

Water conservation methods such as the use of low flush toilets and low flow taps should be incorporated into dwellings to reduce water volumes and related treatment and abstraction costs of the development.

Similarly, water conservation methods would reduce the loading on the foul sewer network. As part of the development, a number of different SuDS measures are proposed to minimise the impact on water quality and quantity of the runoff and maximise the amenity and biodiversity opportunities within the site.

The measures detailed below have been designed to take account of potential percolation but have not been incorporated into any storage calculations. This will result in additional storage being available in extreme events.

The proposed SuDS measures will include a combination of Source Control, Site Control and Regional Control measures as part of a Management Train whereby the surface water is managed locally in small sub-catchments rather than being conveyed to and managed in large systems further down the catchment. The combination of SuDS measures will maximise the potential for surface water interception, reducing the impact on the existing surface water drainage network. The proposed techniques will offer a high level of treatment processes and nutrient removal of the runoff, particularly during the “first flush”.

The proposed development is located within an area designated for the type of development proposed. As such the services pertaining to the development are required to facilitate the proposed scheme. It is not possible to not provide the services required. Notwithstanding this, the potable water, foul and stormwater services have all been designed in accordance with the requirements of the various stake holders, notable, Irish Water for the foul and potable water utilities and Dublin City Council for the surface water services.

3.9 Material Assets: Transportation

This chapter of the EIAR has been prepared by Thomas Jennings of DBFL Consulting Engineers and assesses and evaluates the likely impact of the proposed development on the existing transportation system in the vicinity of the site, as well as identifying proposed mitigation measures to minimise any identified impacts arising from the mixed-use development at Santry Avenue, Dublin 9

3.9.1 Existing Transport Infrastructure

The subject site is adjacent to the R132 Swords Road corridor and will post construction benefit from having site accesses onto both (i) the R132 Swords Road (Left In-Left Out) and (ii) the R104 Santry Avenue. Travelling northbound from the subject site, the R132 Swords Road continues towards Swords and

Balbriggan to the north and also allows access to the M50/M1 motorway via Junction No. 2. Travelling southbound from the subject site along the R132 Swords Road access is provided to Whitehall, Drumcondra and southwards to Dublin City Centre via the N1 corridor. Travelling east along the R104 corridor, the R104 Santry Avenue joins the R132 Swords Road whereas travelling westwards it connects the site with Ballymun and Finglas as well as M50 via Junction 4 at Ballymun.

The R132 Swords Road is subject to a speed limit of 50kph with street lighting available on both sides of the road. In the vicinity of the subject site pedestrians can benefit from the provision of footways on both sides of the carriageway, in addition to the pedestrian crossing facilities provided as part of the traffic signal controls at the R132 Swords Rd / R104 Santry Avenue Junction (Figure 4).



Figure 4: Pedestrian Facilities along Swords Road (Southbound)

The R104 Santry Avenue is subject to a speed limit of 50kph with street lights on one side of the road. Footpaths are provided on both sides of the road with signal-controlled pedestrian crossing (60m to the west of the existing Chadwick’s Access) in close proximity of the subject site exiting entrance, in addition to the pedestrian crossing provided at Swords Road/Santry Avenue Junction.



Figure 5: Pedestrian Crossing at Swords Road/Santry Avenue Junction

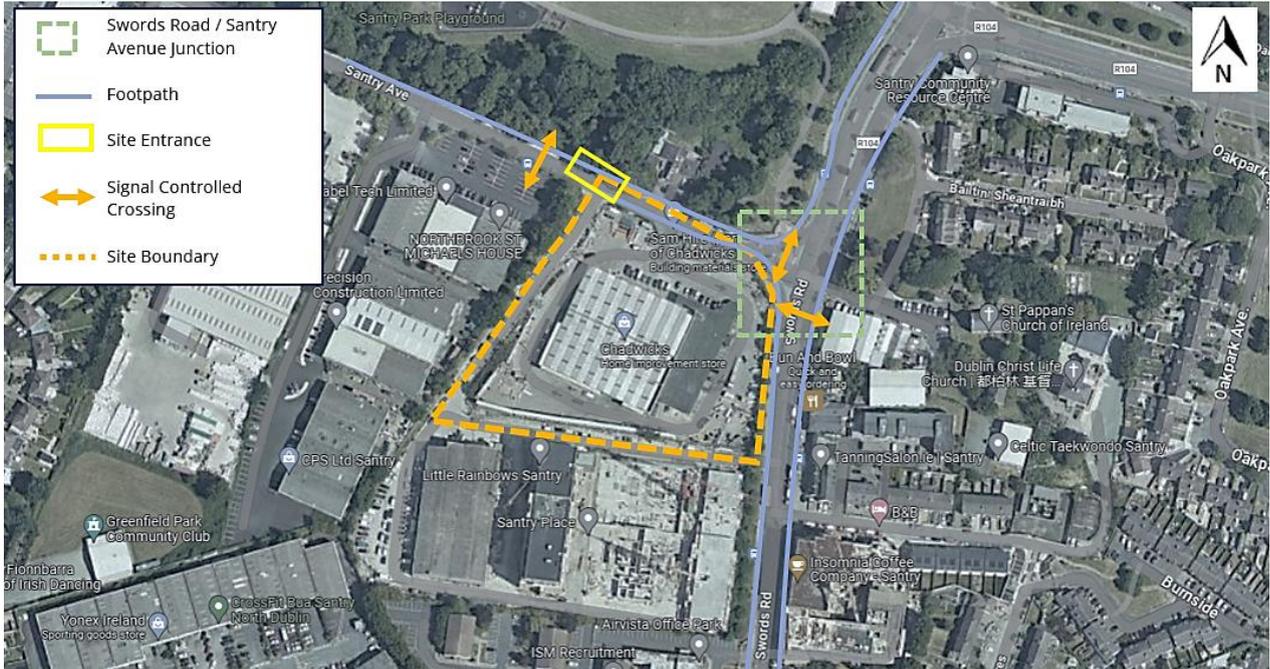


Figure 6: Pedestrian Crossing at Swords Road/Santry Avenue Junction

Cycle lanes are provided on both sides of R132 Swords Road corridor north of the Swords Road/ Santry Avenue signalised junction whereas no dedicated cycle facilities are currently provided towards the south of the junction along the R132 corridor. However, southbound cyclists along the R132 Swords Road corridor can benefit from the use of a bus lane though, whilst northbound cyclists along this corridor must share the road carriageway with vehicular traffic.

Dublin Bus currently operates six services in the vicinity of the subject site. These routes provide access to destinations such as Dublin Airport, Dublin City Centre, Swords and Balbriggan. An additional route between Finglas and Kilbarrack is operated by Go Ahead Ireland. Figure 7 presents the location of the nearest bus stop to the site entrance.

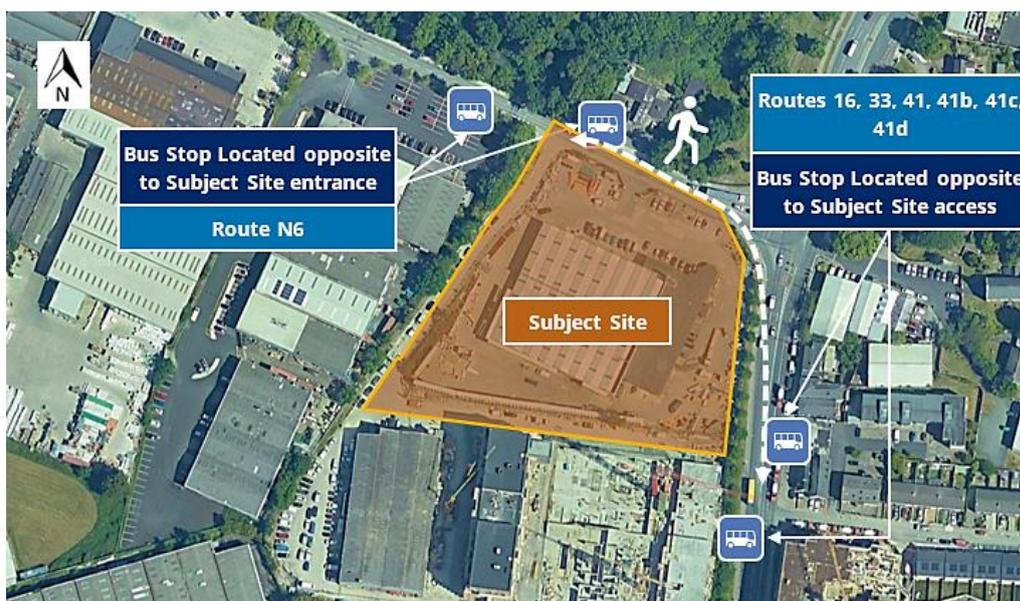




Figure 7: Existing Bus Stops in the Vicinity of the Subject Site

3.9.2 Proposed Transport Infrastructure

The subject site lies within the “*Dublin North Central Sector*” of the Greater Dublin Area Cycle Network Plan published by NTA in December 2013. The sector “*extends between the Malahide Road to the east, the M50 motorway to the north, Finglas to the west and the North Circular Road to the South*”. The proposed development site is also ideally located to benefit from the enhanced accessibility levels that will be delivered by the BusConnects proposals. The subject site will be directly serviced by the following BusConnects routes;

- **A Spine, Branch A2:** Airport – City Centre – Ballinteer - Dundrum
- **A Spine, Branch A4:** Swords – City Centre – Tallaght
- **D Spine, Branch D4:** Swords Road – City Centre – Clondalkin
- **Orbital Route N6:** Finglas – Santry – Coolock – Donaghmede
- **Radial Route 22:** Glen Ellan road – River Valley – City Centre

In relation to the subject site, the proposed development lies immediately adjacent to Swords to City Centre Core Bus Corridor Scheme as illustrated in Figure 8 below. The corridor will commence south of Swords at the Pinnock Hill Junction, travelling in a southerly direction along the R132 Swords Road past Airside Retail Park, Dublin Airport and Santry Park. The route will continue on the R132 past Santry Demesne, where the Swords Road joins the R104 at Coolock Lane.

The route will continue on the R132 in a southerly direction through Santry village. It will continue along the Swords Road past Whitehall to Griffith Avenue. The route will follow Drumcondra Road Upper past the DCU St Patrick’s Campus to the river Tolka. It will continue through Drumcondra, on Drumcondra Road Lower to Binns Bridge on the Royal Canal. From there it will continue on Dorset Street Lower as far as Eccles Street, from where it will continue on Dorset Street Upper to North Frederick Street. The Statutory Planning Application for the Swords to City Centre Core Bus Corridor Scheme has been submitted to An Bord Pleanála and is now at the formal statutory public consultation period.

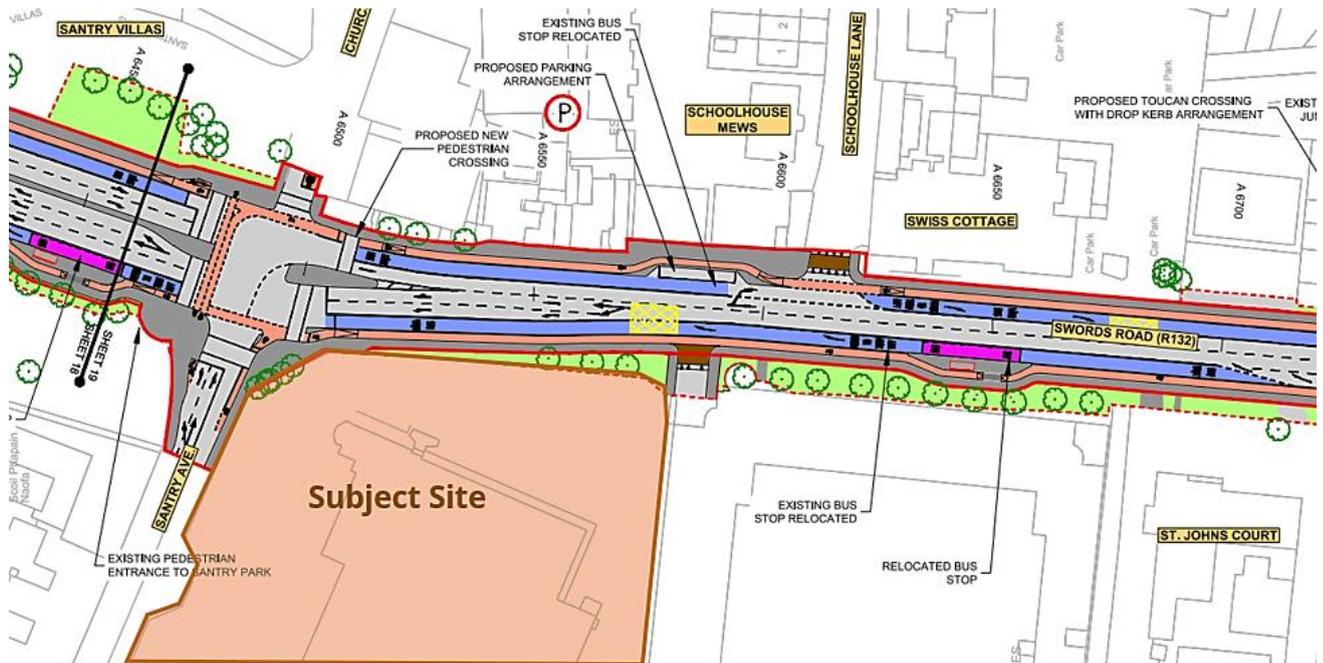


Figure 8: Swords to City Centre Core Bus Corridor Scheme (Source: BusConnects)

The Emerging Preferred Route of Bus Connects Swords-City Centre Corridor illustrates that the site does not cause any hindrance to the proposed corridor. It also shows improved pedestrian and Cycle facilities as well as new bus stop that will be provided adjacent to the proposed site entrance along Swords Road (as being delivered by the neighbouring permitted scheme (Ref. 2713/17). The subject site will benefit from enhanced levels of accessibility and mobility offered by NTA Bus Connects proposals. Bus Connects will also offer improved cycle and walking facilities surrounding the site in addition to the efficient and high frequency bus service and connectivity.

The MetroLink project is the proposed North-South urban high-capacity rail service that will operate between Swords and Dublin City Centre while serving Dublin Airport. MetroLink will allow for journey times of 25 minutes between Swords and the City Centre with the capacity to carry up to 20,000 passengers per direction per hour. This capacity will be delivered by running up to 30 fully automated driverless trains per hour. The subject site is situated approximately within 1.8km walking distance from the proposed Northwood and Ballymun Stations. Figure 9 below highlights the proximity of the subject site to these future metro stations.

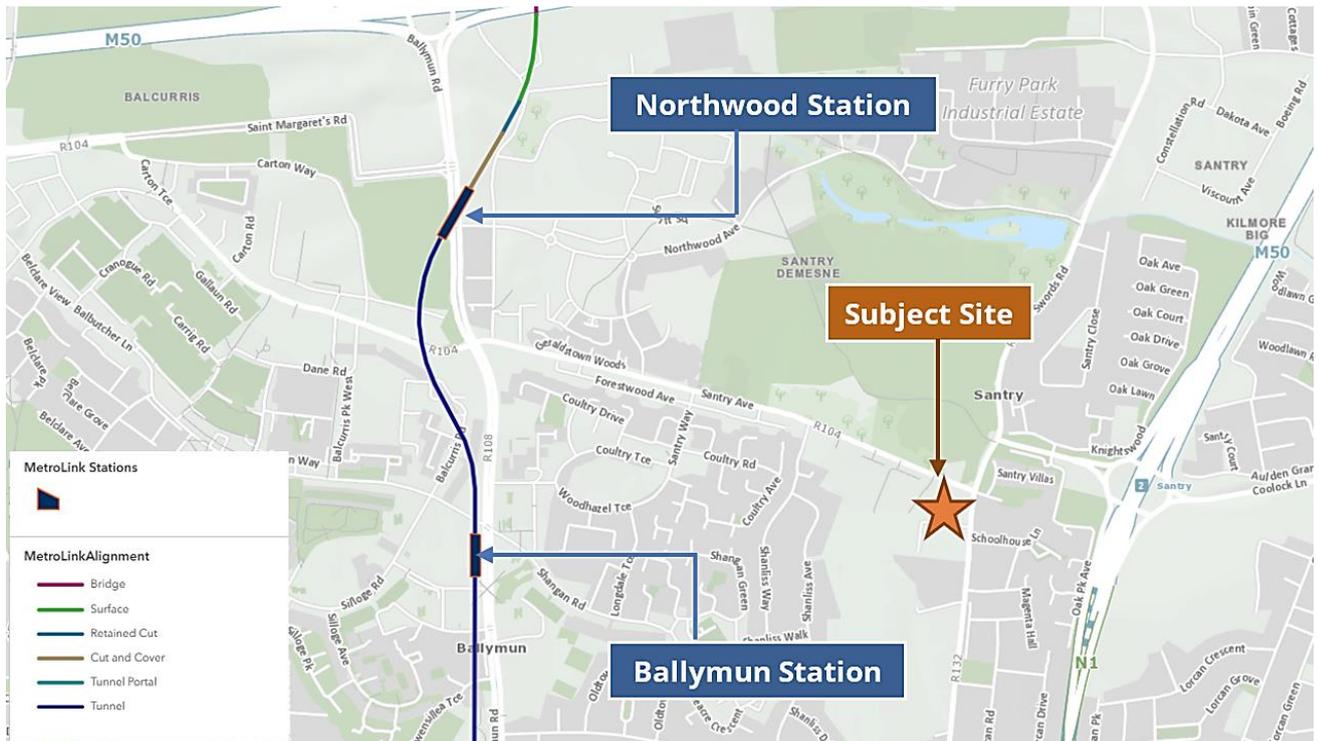


Figure 9: Proposed Future Metro Stations

3.9.3 Potential Construction and Operational Phase Impacts

Construction Phase

Construction traffic will only be generated on weekdays (0700-1900 subject to Planning conditions) and will consist of the following two principal categories:

- Private vehicles owned and driven by site construction staff and by full time supervisory staff.
- Excavation plant, dumper trucks and delivery vehicles involved in site development works and material delivery vehicles for the following: granular fill materials, concrete pipes, manholes, reinforcement steel, ready-mix concrete and mortar, concrete blocks, miscellaneous building materials, etc.

On-site employees will generally arrive before 08:00, thus avoiding the morning peak hour traffic. These employees will generally depart after 16:00. It should be noted that a large proportion of construction workers are anticipated to arrive in shared transport. Considering the sensitivity of the site, opportunities for remote off-site compound parking will be explored. Deliveries will be actively controlled and subsequently arrive at a dispersed rate during the course of the working day.

The number of staff on site will vary during the construction period of each construction phase (3 No.) but is predicted to be greatest in the early period of phase 2. Based upon the experience of similar developments, a development of this type and scale would at a maximum necessitate approximately 50 staff on site at any one time, subsequently generating no more than 34 two-way vehicle trips during the peak AM and PM periods over the period of the phased construction works.



It is anticipated that the proposed development would be constructed over three phases and a combined period of approximately 60 months. Following the completion of the initial site clearance works and basement excavation, the generation of HGV movements during the build period will be evenly spread throughout the day and as such will not impact significantly during the peak traffic periods. For this scale of development, we do not expect HGV vehicle movements to exceed 4 vehicles per hour during the busiest period of construction 'build' works.

Based on a preliminary review of the existing survey data and proposed site levels we estimate that approximately 20,000 m³ of material will require excavation as part of the scheme proposals. It is estimated that 20,000 m³ equates to 5 to 6 truckloads per hour depending upon vehicle characteristics. At 44 loads removed per day this equates to 52 days of earthmoving works as part of the adopted worst-case assessment to clear the entire site in one single activity.

It is predicted that the build period will occur over a longer period of time when compared to the demolition and waste material removal stage. Accordingly, the concentration of imported material activities will be spread over time. The busiest build period is predicted to be generated during the construction of the basement facility, however, the level of the HGV movements generated during this period is estimated to be less than the 5 to 6 truckloads per hour during the excavation period. Throughout the build period, it is estimated that between 3 to 4 HGV trips will be generated per hour.

An appropriate control and routing strategy for HGVs can also be implemented for the duration of site works as part of the CTMP. It is not proposed to utilise any roads with weight/height restrictions as part of the routing of HGVs during the construction phase. HGVs will be directed to use Santry Avenue (e.g. Existing Chadwicks access) when accessing/egressing the site from the wider strategic network thereby maximising the opportunity to segregate construction vehicles from other traffic.

A significant benefit of the subject development site's characteristics is that all construction traffic vehicle parking demands can be accommodated on-site thereby minimising the impact upon the operational performance and safety levels of the adjacent public road network and adjoining properties.

Considering the site's proximity to the strategic road network and following the implementation of an appropriately detailed CTMP, it is concluded that construction traffic will not give rise to any significant traffic concerns or impede the operational performance of the local road network and its surrounding junctions. At its peak, the level of construction vehicle trips generated is predicted to be less when compared to when the scheme is completed and operational.

Operational Phase

Whilst a significant proportion of person trips to/from the proposed development will be undertaken by sustainable modes of travel, the specific impact of the subject scheme will be predominantly influenced by the number of additional vehicle movements that the scheme could potentially generate.

It has been assumed that the developments non-residential units will serve predominantly the proposed development, the local walking catchment and passing traffic. As such these non-residential uses are not predicted to give rise to material levels of the additional vehicular traffic.



Period	AM Peak (07:45-08:45)			PM Peak (16:30 - 17:30)		
Vehicle Movement	Arr	Dep	Total	Arr	Dep	Total
Original Trip Rates	0.065	0.152	0.217	0.154	0.096	0.250
Adjusted Trip Rates	0.036	0.083	0.119	0.084	0.052	0.137

Table 8: Proposed Development Vehicle Trips

The TII document ‘*Guidelines for Traffic Impact Assessments*’ states that the impact of any specific development upon the local road network is considered material when the level of traffic it generates surpasses 10% and 5% on normal and congested networks respectively. When such levels of impact are generated a more detailed assessment should be undertaken to ascertain the specific impact upon the networks operational performance. An assessment was therefore undertaken for the relevant links surrounding the site, to determine the percentage level of impact generated by the proposed development as presented in Table 5:

Junction ID	Junction	Design Year	Percentage Impact	
			AM	PM
J1	R132 Swords Road / R104 Santry Avenue / Santry Villas Junction	2027	0.91%	0.90%
		2032	0.86%	0.85%
		2042	0.83%	0.81%
J2	R104 Santry Avenue Site Access (Entrance 1)	2027	2.64%	3.09%
		2032	2.51%	2.93%
		2042	2.40%	2.81%
J3	R132 Swords Road / Santry Place Site Access (Entrance 2)	2027	1.05%	1.18%
		2032	1.00%	1.12%
		2042	0.96%	1.07%

Table 5: Proposed Development Predicted Scale of Traffic Impact

The impact predicted for all three junctions within all design years is considered to be insignificant and well below the 5% threshold for necessitating further more detailed analysis. However, for the purpose of robust analysis both site access junctions (predicted impact >1%) will be subject to further assessment in order to determine pre-development and post-development performance of the development’s two site access junctions using the PICADY modelling software respectively.

The AM and PM Peak Hour PICADY based assessment undertaken at both proposed priority-controlled site access junction’s (i.e. Santry Ave and Swords Rd) established that both junctions will continue to operate within acceptable operational parameters and with reserve capacity being recorded in all future design year scenarios.

3.9.4 Mitigation Measures

Construction Phase

The Construction Management Plan will be prepared as part of the planning application with an associated Construction Traffic Management Plan (CTMP) which will incorporate a range of integrated control measures and associated management activities with the objective of minimising the construction activities



associated with the development. The following initiatives will be implemented to avoid, minimise and/or mitigate against the anticipated construction period impacts:

- The works will be undertaken across three phases thereby minimising the otherwise concentration of construction activities into a single defined period.
- During the pre-construction phase, the site will be securely fenced off from adjacent properties, public footpaths and roads;
- Appropriate on-site parking and compound area will be provided to prevent overflow onto the local network;
- It is likely that some numbers of the construction team will be brought to/from the site in vans/minibuses, which will serve to reduce the trip generation potential;
- Delivery vehicles to and from the site will be spread across the course of the working day, therefore, the number of HGVs travelling during the peak hours will be relatively low;
- Truck wheel washes will be installed at construction entrances and any specific recommendations with regard to construction traffic management made by Dublin City Council will be adhered to;
- Potential localised traffic disruptions during the construction phase will be mitigated through the implementation of industry standard traffic management measures. These traffic management measures shall be designed and implemented in accordance with the Department of Transport's Traffic Signs Manual "*Chapter 8 Temporary Traffic Measures and Signs for Roadworks*" and "*Guidance for the Control and Management of Traffic at Roads Works – 2nd Edition*" (2010); and
- Site entrance point/s from the public highway will be constructed with a bound, durable surface capable of withstanding heavy loads and with a sealed joint between the access and public highway. This durable bound surface will be constructed for a distance of 10m from the public highway.
- Material storage zone will be established in the compound area and will include material recycling areas and facilities;
- 'Way finding' signage will be provided to route staff / deliveries into the site and to designated compound / construction areas;
- Dedicated construction haul routes will be identified and agreed with Dublin City Council prior to commencement of activities on-site; and
- On completion of the works, all construction materials, debris, temporary hardstands etc. from the site compound will be removed off-site and the site compound area reinstated in full on completion of the works.

Operational Phase

A package of integrated mitigation measures has been identified to off-set the additional local demand that the proposed residential development at the subject site could potentially generate as a result of the forecast increase in vehicle movements by residents of the scheme. The identified measures and associated timescale for their implementation are summarised below.

- **Management** – A Mobility Management (MMP) has been compiled by DBFL with the aim of guiding the delivery and management of coordinated initiatives by the scheme promotor to be implemented upon occupation of the site. The MMP will ultimately seek to encourage sustainable travel practices for all journeys to and from the proposed development.
- **Car Parking Management Strategy** - A management regime will be implemented by the



development's management company to control and actively manage the availability of on-site car parking for residents. The signing of a rental agreement for one of the proposed residential apartments will NOT include access to a designated on-site parking space. All potential residents (prior to signing rental agreement) will be notified that the proposed scheme is a 'low car allocation' development with no access (or guarantee thereof) to either (i) the limited on-site residents car parking provision or (ii) apply to Dublin City Council for a residents parking permit (to park on-street in one of the neighbouring streets). Nevertheless, all residents of the proposed residential apartment scheme will have the opportunity to apply to the on-site management company for both a (i) residents car parking permit (updated weekly, fortnightly, monthly, quarterly or annually) and subsequently access to a dedicated (assigned) on-site basement car parking space or (ii) a visitor's car parking permit for a short period of time. A charge will be applied to obtain a permit with the objective of covering the associated management costs and discouraging long term usage of the car parking space. All surface located parking bays will also be subject to parking management regime.

- **Infrastructure** – Infrastructure measures identified to reduce reliance of private vehicles include the provision of ample secure cycle parking on site and ensuring a design which promotes permeability for pedestrians and cyclists to, through and from the development. The level of parking provision for the development will also act as a powerful mobility management measure, ensuring against an overprovision of parking and a resultant over reliance on the private vehicle. Development also proposes dedicated pedestrian footpaths and cycle paths throughout the development site.
- **Car Sharing** – The provision of 4 no. dedicated car share (GoCar) spaces for the use of the scheme's residents. The availability of these on-site provide a viable alternative to residents owning private vehicles whilst still having access to a car as and when required.

3.10 Material Assets: Resource and Waste Management

This chapter of the EIAR was prepared by prepared by Chonail Bradley of Awn Consulting Ltd.

AWN Consulting Ltd. carried out an assessment of the potential impacts associated with waste management during the construction and operational phases of the proposed development. The receiving environment is largely defined by Clare County Council as the local authority responsible for setting and administering waste. Awn Consulting undertook the waste management assessment. The receiving environment is largely defined by Dublin City Council (DCC) as the local authority responsible for setting and administering waste management activities in the area through regional and development zone specific policies and regulations.

3.10.1 Baseline Environment

There is currently no waste generated at the proposed development site as it is closed, however commercial activities that generated waste, were undertaken on this site.

3.10.2 Potential Impacts of the Proposed Development

Construction Phase

During the construction phase the mismanagement of waste, including the inadequate storage of waste, inadequate handling of hazardous waste, the use of inappropriate or insufficient segregation techniques, and



the use of non-permitted waste contractors, would likely lead to negative impacts such as waste unnecessarily being diverted to landfill, litter pollution which may lead to vermin, runoff pollution from waste, fly tipping and illegal dumping of waste. In the absence of mitigation, the effect on the local and regional environment is likely to be **long-term, significant and negative**.

Operational Phase

The potential impacts on the environment during the operational phase of the proposed development would be caused by improper, or lack of waste management. In the absence of mitigation, the effect on the local and regional environment is likely to be **long-term, significant and negative**.

3.10.3 Mitigation and Residual Effects (Post-Mitigation)

Construction Phase

A Resource & Waste Management Plan (RWMP) has been prepared and is included as Appendix 13.1. During the construction phase, typical construction waste materials will be generated which will be source segregated on-site into appropriate skips/containers, within designated waste storage areas and removed from site by suitably permitted waste contractors as required, to authorised waste facilities, by appropriately licensed waste contractors. While the accurate keeping of waste records will be undertaken. All waste leaving the site will be recorded and copies of relevant documentation maintained.

This will all be overseen by the main contractor, who will appoint a construction phase Resource Manager to ensure effective management of waste during the excavation and construction works. All construction staff will be provided with training regarding the waste management procedures on site.

A carefully planned approach to waste management and adherence to the site-specific RWMP (Appendix 13.1) and chapter 13 during the construction phase, this will ensure that the effect on the environment will be **short-term, neutral and imperceptible**.

Operational Phase

During the operational phase, waste will be generated by the operators and staff. A dedicated waste storage area (WSA) has been allocated throughout the development for the use of staff and operators. The WSA has been appropriately sized to accommodate the estimated waste arisings from the development. The WSA has been allocated to ensure a convenient and efficient management strategy with source segregation a priority. Waste will be collected from the designated waste collection areas by permitted waste contractors and removed off-site for re-use, recycling, recovery and/or disposal.

An Operational Waste Management Plan (OWMP) has been prepared and is included as Appendix 13.2. The new development will give rise to a wide variety of waste streams during the operational phase, i.e. when the project is completed, open and occupied. Operational waste will be generated on a daily basis by the operator including cardboard, plastic, paper, glass, dry mixed recyclables, mixed non-recyclables, medical waste, confidential paper, cooking oil, lightbulbs, batteries, WEEE waste, and organic waste.

All recyclable materials will be segregated at source where possible to reduce waste contractor costs and ensure maximum diversion of materials from landfill in line with the development OWMP. This strategy will be supplemented, as required, by the operator as required with any new information on waste segregation, storage, reuse and recycling initiatives that are subsequently introduced.



Provided the mitigation measures in the development OWMP (Appendix 13.2) and in Chapter 13 are implemented and a high rate of reuse, recycling and recovery is achieved, the predicted effect of the operational phase on the environment will be **long-term, neutral and imperceptible**.

3.10.4 Cumulative Impact of the Proposed Development

Construction Phase

There are existing residential and commercial developments close by, along with the multiple permissions remaining in place in the area. In a worst-case scenario, multiple developments in the area could be developed concurrently or overlap in the construction phase. Due to the high number of waste contractors in the DCC region, as provided from the National Waste Collection Permit Office and the EPA, there would be sufficient contractors available to handle waste generated from a large number of these sites simultaneously, if required. Similar waste materials would be generated by all of the developments.

Other developments in the area will be required to manage waste in compliance with national and local legislation, policies and plans which will mitigate against any potential cumulative effects associated with waste generation and waste management. As such the cumulative effect will be **short-term, imperceptible and neutral**.

Operational Phase

There are existing residential and commercial developments close by, along with the multiple permissions remaining in place. All of the current and potential developments will generate similar waste types during their operational phases. Authorised waste contractors will be required to collect waste materials segregated, at a minimum, into recyclables, organic waste and non-recyclables. An increased density of development in the area is likely improve the efficiencies of waste collections in the area.

Other developments in the area will be required to manage waste in compliance with national and local legislation, policies and plans which will mitigate any potential cumulative impacts associated with waste generation and waste management. As such the cumulative effect will be a **long-term, imperceptible and neutral**.

3.11 Archaeology and Cultural Heritage

Steven McGlade, BA, MIAI of Archaeology Plan Heritage Solutions undertook prepared this chapter of the EIAR which EIAR assesses the impact of the development on the Cultural Heritage of the site and its environs. The report includes a desktop assessment and a site inspection and assesses the potential significance and likely impact of the proposed development, and of the cumulative development, on cultural heritage, including archaeological and architectural heritage.

3.11.1 Potential Construction and Operational Phase Impacts

This section provides a description of the specific, direct and indirect, impacts that the proposed development may have during both the construction and operational phases of the infrastructural elements of the proposed project. This is provided with reference to the Characteristics of the Receiving Baseline Environment and



Characteristics of the Proposed Development sections.

The following impact assessment is based on the results of the preceding sections (desktop study, site inspection and previous investigations). The Impact Assessment is divided both into three sections, and is summarised as follows:

Impacts on Recorded Monuments and Protected Structures

The Proposed Development will not impact directly or indirectly upon any previously recorded site or monument listed in the RMP or the RPS. The closest Recorded Monument, St Pappan's church, graveyard and ecclesiastic enclosure is over 100m away, and the constraint zone surrounding the monuments is 58m to the east of the Study Area.

The desktop assessment did not identify any features of archaeological potential within the boundary of the Study Area. A pump is depicted in the southeast corner of the Study Area on the 1910s Ordnance Survey map, however, it is no longer present.

Impacts on unknown/potential archaeological sites

The Proposed Development will have a widespread, profound permanent negative impact on any previously unidentified sub-surface archaeological remains that may survive on the development site.

The western portion of the Proposed Development is of low archaeological potential. The eastern portion of the Proposed Development has a moderate archaeological potential. This is due to it fronting onto the Swords Road and proximity to the medieval boundaries and drainage channels uncovered on the opposite site of the road to the south of St Pappan's Church in 2003, along with its closer proximity to the ecclesiastic foundation itself. The location of the existing building, set back from the road frontage, increases the likelihood that any belowground archaeological features located within this part of the site would survive. It should be noted that no archaeological remains were identified fronting onto the Swords Road in the monitoring works for the site to the south in 2019 and that the area is depicted as agricultural fields throughout the post-medieval period.

Construction Stage

The Construction Stage (without appropriate ameliorative measures) will have no impact on known archaeological features and deposits within the Proposed Development.

The Construction Stage, without appropriate ameliorative measures, will have a profound, permanent negative impact on unknown archaeological features and deposits within the footprint of the Proposed Development.

Operational Stage

As there are no known archaeological features within the Proposed Development, the Operational Stage of the residential development would have no impact on known archaeology.

It is envisaged that any unknown potential archaeological features within the Proposed Development would not survive the Construction Stage, without appropriate ameliorative measures. Nevertheless, the Operational Stage of the residential development would have an imperceptible long-term neutral effect on any remnants of the known archaeology. Furthermore, there is a possibility for an imperceptible long-term neutral effect of preservation in situ for unknown archaeological features and/or deposits that potentially

survive within the proposed green areas of the development.

3.11.2 Recommendations

In the event of a grant of planning permission it is recommended that the removal of the concrete slab be monitored under licence and, after the demolition of the existing structure, a programme of archaeological testing be carried out across the site prior to any further groundworks on site.

Time should be allowed between the monitoring works and any construction or service laying in case archaeological features are uncovered.

These recommendations have been made in consultation with the Archaeology, Conservation & Heritage Department of Dublin City Council.

A report on the results of the monitoring programme should be submitted to the City Archaeologist and the National Monuments Service following the completion of the works. All recommendations are subject to the approval of the City Archaeologist and the National Monuments Service.



Figure 10 - Summary of the findings of the assessment and recommendation for monitoring of concrete slab removal within the entire footprint of the site (highlighted in blue)

3.12 The Landscape

This Landscape and Visual Impact Assessment (hereafter “LVIA”), prepared by Teodora Karneva, MLI and Jim Bloxam, MLI, of Dermot Foley Landscape Architects.

This LVIA describes the existing receiving environment, contiguous landscape and the methodology utilised to assess the potential impacts of the proposed development (Proposed Development) on the application site (Site). First, this LVIA describes the landscape character of the application site and hinterland, together with the visibility of the site from key views in the locality. It then assesses the visual extent of the Proposed Development and its effects on landscape character and key views throughout the study area. The report

summarises the impact of the Proposed Development on the visual and landscape amenity of the Site and contiguous area or receiving landscape.

The subject site is located on the lands which previously operated as a hardware and building supplies outlet (Chadwicks Builders Merchants), at the junction of Santry Avenue and Swords Road, Santry, Dublin 9. It is bounded to the north by Santry Avenue, to the east by Swords Road, to the west by Santry Avenue Industrial Estate, and to the south by the recently constructed Santry Place development.



Figure 11 - Satellite image of site with red line boundary showing surrounding context

The subject site is located immediately south of Santry Demesne Park, a regional park owned and managed by Fingal County Council and separated from the site by Santry Avenue. A private lane forms the western boundary and separates the site from the IDA industrial estate to the west. A new mixed-use development is being constructed to the south. The eastern boundary is formed by a row of trees which edge the Swords Road. Commercial units line the Swords Road to the east of the site.

The site is dominated by 1 no. double-height, large scale building, punctuated with loading bays. Car parking, vehicle access zones and external storage bays occupy the space between the building and the site boundary.

A low brick wall, topped with steel railing exists on the northern, western and eastern boundary of the site, while a metal palisade fence runs along the full length of the southern boundary. A small number of shrubs planted in planters on the northern boundary and a small number of trees, planted at the north-western boundary appear to be the only vegetation within the site and constitute little value due to their size and condition.



3.12.1 Potential Construction and Operational Phase Impacts

Potential effects

The potential effects are those that the Proposed Development and its impacts could have without consideration of landscape and/or public realm mitigation or amelioration—i.e. without landscape works. These effects have been compiled to identify any areas where the Proposed Development may be injurious to the landscape or visual character of the area.

For this section, it is assumed that no specific landscape works are carried out with the construction of the development. This enables recognition of potential, rather than actual, effects to facilitate the identification of suitable landscape mitigation measures.

Potential effect on existing vegetation

Construction phase

Existing vegetation on the site is very limited and the value of what is present is negligible and recommended for removal as per the Arboricultural Assessment. Demolition and construction works will result in the removal of all existing vegetation on the site.

Trees adjoining the boundary of the site may be faced with a degree of disturbance, particularly where any Root Protection Areas are encroached on by the construction works. For further details refer to the Arboricultural Assessment. Site hoarding, construction traffic, ground disturbance and temporary structures required for construction will have a *negative, moderate and short-term* impact.

The effect on existing vegetation will be *moderate, negative and permanent* while the effect on contiguous trees will be *negative, moderate and short-term*.

Operational phase

There are no predicted impacts on the existing vegetation in the operational phase.

Potential effects on landscape character

Construction phase

Site hoarding, construction traffic, ground disturbance and temporary structures required for construction will have a *negative, moderate and short-term* impact.

Operational phase

The proposed landscape design will likely have a *positive, moderate and permanent* impact, due to the conversion from a vacant site to usable high quality public realm and amenity spaces, allowing for permeability through the site and significant new planting throughout.

Potential effects on views

Construction phase

Site hoarding and temporary structures required for construction will have a *negative, moderate and short-term* impact on views.

Operational phase

Fourteen key views were chosen to illustrate the visual impact of the Proposed Development – refer to the Photomontage Report produced by 3D Design Bureau. The Photomontage Report includes a view location plan showing the points the views were taken from. Each view is illustrated as existing and proposed and the views are numbered 1 to 14. The views include long, mid and short-distant views.



Figure 12 - View location map, an extract from the Verified Photomontage and CGI Report by 3D Design Bureau.

Each Photomontage view includes the following versions:

- 'Existing' view
- 'Proposed' view showing the Proposed Development
- 'Proposed and Permitted' view showing the Proposed Development and the adjacent development permitted under An Bord Pleanála, Reg. Ref. No. 307011-20, which is located approximately 250 metres south of the subject site.

View 1 From junction of Shanliss Way and Shanliss Avenue looking east towards the subject site

The proposed development will be blocked by existing residential units on Shanliss Avenue. The impact



will be *imperceptible, neutral, and permanent*.

View 2 From Santry Avenue, looking east towards the subject site

The proposed development will be predominantly blocked by existing trees and buildings associated with the IDA estate. However, the taller element of the proposed development will be visible as it meets Santry Avenue. The development will also be partially visible above the existing fence line in the centre of the view. The character and composition of the view is altered, however not inappropriately, and is consistent with emerging trends. The impact will be *moderate, neutral and permanent*.

View 3 From Santry Demesne, looking south east towards the subject site

The proposed development will be predominantly screened by the existing trees along Santry Road and Santry Demesne boundary. However, the upper floors of the proposed development will create a visual intrusion about the existing tree line. The character and the composition of the view would be altered, however it is consistent with other existing boundary views elsewhere in Santry Demesne. The valued features of the view would remain. The impact is considered to be *moderate, negative and long term*. The duration is considered long term (fifteen to sixty years) as when the existing tree planting within Santry Demesne in the middle-ground of the view matures, it will provide further screening of the development.

View 4 From Santry Demesne, looking south towards the subject site

The proposed development will be screened at the lower levels by the existing trees along Santry Road and Santry Demesne boundary. However, the upper floors of the proposed development will be visible above the existing tree canopies. The character and the composition of the view would be altered, which reflects a more urban context as demonstrated by emerging developments in the area. The impact is considered to be *moderate, negative and long term*. The duration is considered long term (fifteen to sixty years) as when the existing tree planting within Santry Demesne in the middle-ground of the view matures further, it will add to the screening of the development.

View 5 From Swords Road (R104), looking south towards the subject site

The proposed development will be predominantly blocked by existing vegetation and stone wall associated with the boundary of Santry Demesne. There will be a slight visual intrusion through and above the tree line. The character and composition of the view would be altered, but not inappropriately and the valued features of the view would remain. The impact will be *slight, negative, and permanent*.

View 6 From Swords Road (R104), looking south towards the subject site

The proposed development will be visible due to the open character of this section of the Swords Road (R104). There will be partial screening of the proposed development by existing trees associated with the south east of Santry Demesne and existing trees associated with the open space in front of Santry Villas. The character and the composition of the view would be altered, however it is consistent with emerging trends. The impact will be *moderate, negative and permanent*.

View 7 From Coolock Lane, looking west towards the subject site

The proposed development will be partially blocked by the existing residential units in Santry Villas estate and existing trees associated with Oak Park Avenue. However, the upper floors of the proposed development will be partially visible in the background, and above the existing tree line. The character of



view remains unchanged. The composition is altered slightly, but not inappropriately. The impact will be *slight, neutral and long term*. The duration is considered long term (fifteen to sixty years) as when the existing tree planting in the middle-ground of the view matures it will provide further screening of the development.

View 8 *From Coolock Lane, looking west towards the subject site*

The proposed development will be predominantly blocked by the tree line associated with the M50 motorway planting. The impact will be *slight, neutral and long term*. The duration is considered long term (fifteen to sixty years) as when the existing tree planting in the middle-ground of view matures it will provide screening of the development almost in its entirety.

View 9 *From Santry Villas, looking west towards the subject site*

The proposed development will be blocked to some degree by existing warehouse buildings on Santry Villas, in the left of the view. The northern frontage of the proposed development to Santry Road will be largely visible in the view. The eastern frontage of the proposed development to Swords Road (R104) will be partially visible. The character and composition of the view is altered, but is consistent with existing and emerging trends in the area. The impact is considered *moderate, negative and permanent*.

View 10 *From Swords Road (R104), looking north towards the subject site*

The proposed development will be predominantly blocked by the existing development in the middle-ground of the view and trees on Swords Road (R104). However, the upper levels of the proposed development will be visible in the long distance, where the proposed development is located at the junction of Santry Road and Swords Road. The impact will be *slight, neutral and permanent*.

View 11 *From Burnside estate, looking west towards the subject site*

The proposed development will be completely screened by existing trees associated with open space in Burnside estate. The impact is considered *imperceptible, neutral and permanent*.

View 12 *From Swords Road (R104), looking north towards the subject site, at Lorcan Road junction*

The proposed development will be blocked to some degree by existing commercial units in the Santry Hall Industrial Estate and existing trees on the access road of the industrial estate. However, the upper levels of the proposed development will be visible in the long distance, where the proposed development is located at the junction of Santry Road and Swords Road. The composition and character of the view remains unchanged. The impact will be *slight, neutral and permanent*.

View 13 *From Swords Road (R104), looking north towards the subject site*

The proposed development will not be visible due to the rising topography and curvature of the Swords Road. Existing housing and vegetation associated with housing completely block the views of the development. There will be *no impact*.

View 14 *From Santry Demesne, looking south east towards the subject site*

The development will be mostly screened by the existing trees which form part of the southern boundary of



Santry Demesne. The upper storeys of some of the blocks will be partially visible through the tree canopies. The character of the view is unchanged. The composition of the view is altered slightly, however is consistent with other boundary views from within Santry Demesne. The impact will be *slight, negative and long term*. The duration is considered long term (fifteen to sixty years) as when the existing tree planting in the middle-ground of the view matures it will provide further screening of the development.

3.12.2 Mitigation measures

Given the overall lack of significance of any effects on the landscape or views, which range from moderately negative to slightly positive as outlined by this LVIA, mitigation measures are not strictly determined necessary. However, the Proposed Development's activities may mitigate some effects as described below.

Mitigating effects on existing vegetation

Construction phase

Existing vegetation on the site is limited and the value of what is present is negligible and therefore proposed for removal. There are no mitigation measures required for on-site vegetation.

However, attention should be given to any Root Protection Areas outlined for trees along the boundary with the Site, as detailed in the Arboricultural Assessment. This will help to ensure that there are no negative effects on existing vegetative screening contiguous to the site.

Operational phase

Similar to the construction phase, there are no mitigation measures required to reduce impacts on the very limited and low-value existing vegetation. The overall effect on vegetation is positive due to the introduction of significantly more trees and planted areas than which currently exist on the Site.

To further mitigate any potential effects on vegetation, including surrounding vegetation, the Site is to be monitored for indicators of invasive species.

Mitigating effects on landscape character

Construction phase

The use of appropriate hoarding, including of an appropriate colour, during the construction phase can mitigate effects on landscape character during the construction phase (*short-term*). Near the end of the construction phase, the installation of planting and landscape design in accordance with the proposed Landscape Plan by DFLA will have a positive effect on the townscape character (*long-term*).

Operational phase

The following mitigation measures are proposed:

- Maintain all proposed planting and landscape design in accordance with best practice and the Landscape Plan by DFLA to help ensure the development of habitats and their associated biodiversity;
- The site is to be monitored for indicators of invasive species, which can have a negative effect on landscape character through density, competition with other species or removal phases;



- Installed trees will be maintained in line with industry best practice to help ensure maturation and a long-term positive contribution to landscape character.

Mitigating effects on views

Construction phase

The following mitigation measures are proposed:

- Restrict hours of construction activity in accordance with local authority guidance;
- Extend hoarding to appropriately restrict views of construction activities on the site;
- Install boundary walls and planting to ensure that sight lines and areas of privacy are retained across the site and footpaths along Santry Avenue and Swords Road as appropriate;
- Install tree species as per the proposed Landscape Plan by DFLA to screen the development and create an appropriate landscape at ground level.

Operational phase

The proposed vegetation, including trees, will be maintained to keep sight lines open across the site and footpaths as appropriate. Similarly, areas of buffer planting within the site will be maintained to provide the requisite privacy screening. Finally, installed trees will be maintained in line with industry best practice to help ensure maturation and a *long-term* positive contribution to views.



4.0 Identification of Significant Impacts / Interactions

Chapter 16 of the EIAR (Volume II) provides detail on the interaction and interdependencies in the existing environment. Armstrong Fenton Associates Planning and Development Consultants, in preparing and co-ordinating this EIAR, ensured that each of the specialist consultants liaised with each other and dealt with the likely interactions between effects predicted as a result of the proposed development during the preparation of the proposals for the subject site and this ensures that mitigation measures are incorporated into the design process.

This approach is considered to meet with the requirements of Part X of the Planning and Development Act 2000, as amended, and Part 10, and schedules 5, 6 and 7 of the Planning and Development Regulations 2001 (as amended). The detail in relation to interactions between environmental factors is covered in each chapter of the EIAR.

All environmental factors are interlinked to a degree such that interrelationships exist on numerous levels. Interactions within the study area can be one-way interactions, two-way interactions and multiple-phase interactions which can be influenced by the proposed development. As this EIAR document has been prepared by a number of specialist consultants, an important aspect of the EIA process is to ensure that interactions between the various disciplines have been taken into consideration. This chapter of the EIAR was prepared by Tracy Armstrong, BA, MRUP, MIPI, MRTPI, Planning Consultant of Armstrong Fenton Associates Planning and Development Consultants.

All of the potential significant effects of the proposed development and the measures proposed to mitigate them have been outlined in the preceding chapters of this EIAR. However, for any development with the potential for significant environmental effects, there is also the potential for interaction amongst these potential significant effects. The result of interactive effects may exacerbate the magnitude of the effects or ameliorate them, or have a neutral effect.

The purpose of this requirement of an EIAR is to draw attention to significant interaction and interrelationships in the existing environment. Armstrong Fenton Associates Planning and Development Consultants, in preparing and co-ordinating this EIAR ensured that each of the specialist consultants liaised with each other and dealt with the likely interactions between effects predicted as a result of the proposed development during the preparation of the proposals for the subject and ensuring that appropriate mitigation measures are incorporated into the design process.

Having regard to the approach taken, the aspects of the environment likely to be significantly affected by the proposed development, during both the construction and operational phases, have been considered in detail in the relevant Chapters of this EIAR document. In addition, likely interactions between one topic and another have been discussed, where relevant, by the relevant specialist consultant(s).

The primary interactions can be summarised as follows:

- Noise, air, waste, water and traffic with population and human health;
- Land and soils with traffic, water, resource management, noise, air and biodiversity;
- Water with biodiversity;
- Waste with biodiversity;
- Cultural heritage and the landscape and
- Air quality and climate and traffic.



The relevant consultants liaised with each other and the project architects, engineers and landscape architects where necessary to review the proposed scheme and incorporate suitable mitigation measures where necessary. As demonstrated throughout this EIA, most inter-relationships are neutral in impact when the mitigation measures proposed are incorporated into the design, construction or operation of the proposed development.

4.1 Other Impacts

4.1.1 Direct and Indirect Effects Resulting from the Use of Natural Resources

Schedule 6 Item 2 (c) of the Planning and Development Regulations, 2001 - 2015 requires that an EIA contains a description of the likely significant effects (including direct, indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative) of the proposed development on the environment resulting from the use of natural resources. No likely significant effects (including direct, indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative) of the proposed development on the environment are expected to arise from the use of natural resources.

4.1.2 Direct and Indirect Effects Resulting from Emission of Pollutants, Creation of Nuisances and Elimination of Waste

Schedule 6 Item 2 (c) of the Planning and Development Regulations, 2001 - 2015 requires that an EIA contains a description of the likely significant effects (including direct, indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative) of the proposed development on the environment resulting from the emission of pollutants, the creation of nuisances and the elimination of waste. No likely significant effects on the environment are expected to arise from the emission of pollutants, the creation of nuisances or the elimination of waste.

4.2 Residual Impacts and Cumulative Impacts

Residual impacts can be defined as the final impacts that occur after proposed mitigation measures have taken effect. Many of the findings of the EIA have been incorporated into the design of the development and have contributed to the reduction or amelioration of potential impacts. Where residual impacts arise, they are detailed in the relevant chapters and further mitigation measures detailed where necessary.

Cumulative impacts are defined as: *“The addition of many small impacts to create one larger, more significant, impact”* (EPA 2002). Cumulatively, these impacts may be significant if they occur close together in terms of location and time. The cumulative impact of the proposed development is categorised as neutral and moderate.

As outlined in Chapter 3 the EIA, where relevant, the EIA also takes account of other development(s) within the area. These impacts have been addressed in the relevant chapters of the EIA.

To determine traffic impacts in Chapter 12, the traffic generated by the proposed development is combined with the baseline traffic generated by the traffic on the road network in the area. The potential traffic impacts from other developments were also considered in the assessment (e.g. residential developments - adjacent



to the site to the south and east).

Each of the relevant specialists has considered the potential for cumulative impact in preparing their assessments. While there is the potential for negative impacts to occur during the construction stage of the scheme, with the implementation of the appropriate mitigation outlined in the EIAR, the residual cumulative impact is not considered to be significant.

4.3 Environmental Commitments and Mitigation Measures

Mitigation measures to be adopted during the construction and operational phases of the proposed development are detailed within each chapter. These measures should be implemented through planning conditions imposed by the Planning Authority / An Bord Pleanála, as appropriate/necessary.

Mitigation measures will be managed by the contractor(s) as part of the Construction Management Plan and by the developer/ landowners thereafter.

4.4 Conclusion

The EIAR (Volume II) has regard to and builds on the Strategic Environmental Assessment prepared with the Dublin City Development Plan 2022-2028.

The EIAR has considered the likely, significant, adverse effects of the proposed project on the receiving environment.

Mitigation measures are included, to avoid and / or reduce impacts on the environment where considered necessary. This includes mitigation measures incorporated into the design of the proposed development.

The EIAR concludes that there are no material or significant environmental issues arising which were not anticipated by the Dublin City Development Plan 2022-2028 and considered in its Strategic Environmental Assessments.

5.0 Summary of EIA Mitigation and Monitoring Measures

Chapter 17 of the EIAR (Volume II) provides a summary of all the mitigation and monitoring measures proposed throughout the EIAR document for ease of reference for the Board and all other interested parties.

