

ENVIRONMENTAL IMPACT ASSESSMENT REPORT

VOLUME I NON-TECHNICAL SUMMARY



**PROPOSED RESIDENTIAL DEVELOPMENT
AT
Folkstown, Balbriggan, Co. Dublin
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July 2024**

DOCUMENT CONTROL SHEET

RECEIVED: 06/08/2024

Client:	Marshall Yards Development Company Limited
Project Title:	Folkstown LRD, Balbriggan, Co. Dublin
Document No:	23146 EIAR Volume I

Rev.	Status	Author(s)	Reviewed By	Approved By	Issue Date
D01	Draft	EIAR TEAM	RK	RK	14-7-2024
F01	FINAL	EIAR TEAM	AT	RK	30-7-2024

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LIST OF ABBREVIATIONS

AA	Appropriate Assessment	IEEM	Institute of Ecology and Environmental Management
ABP	An Bord Pleanála	IFI	Inland Fisheries Ireland
CDP	County Development Plan	NHA/pNHA	Natural Heritage Area / proposed Natural Heritage Area
CMP	Construction Management Plan	NIAH	National Archive of Architectural Heritage
CSO	Central Statistics Office	NPWS	National Parks and Wildlife Service
DAHG	Department of Arts, Heritage and the Gaeltacht	NRA	National Roads Authority
DCENR	Department of Communications, Energy and Natural Resources	NPF	National Planning Framework
DEHLG	Department of Housing, Planning and Local Government	OPW	Office of Public Works
EIA	Environmental Impact Assessment	RMP	Record of Monuments and Places
EIAR	Environmental Impact Assessment Report	RPG	Regional Planning Guidelines
EMP	Environmental Management Plan	RPS	Record of Protected Structures
EPA	Environmental Protection Agency	SAC	Special Area of Conservation
ESRI	Economic and Social Research Institute	SMR	Sites and Monuments Record
FMP	Forest Management Plan	SPA	Special Protection Area
FCC	Fingal County Council	SHD	Strategic Housing Development
GDP	Gross Domestic Product	SUDS	Sustainable Drainage System
GSI	Geology Survey Ireland	TMP	Traffic Management Plan
IAA	Irish Aviation Association	WFD	Water Framework Directive

GLOSSARY OF TERMS¹

Alternatives A description of other options that may have been considered during the conception of a project; these include alternative locations, alternative designs and alternative processes.

Baseline Scenario The current state of environmental characteristics – including any evident trends in its status.

Competent Authority (CA) The term ‘competent authority’ means the Minister or public authority to which an EIAR is required to be submitted, i.e. the authority charged with examining an EIAR with a view to issuing a consent to develop or operate.

Development A project involving new works [including alteration and/or demolition] or altered patterns of activity.

‘Do-nothing’ Scenario The situation or environment which would exist if a proposed, development, project or process were not carried out. This scenario needs to take account of the continuation or change of current management regimes, as well as the continuation or change of trends currently evident in the environment.

Effect / Impact A change resulting from the implementation of a project.

Environmental Impact Assessment – EIA The process of examining the anticipated environmental effects of a proposed project – from consideration of environmental aspects at design stage, through consultation and preparation of an Environmental Impact Assessment Report (EIAR), evaluation of the EIAR by a competent authority, and the subsequent decision as to whether the project should be permitted to proceed, encompassing public response to that decision.

Environmental Impact Assessment Report – EIAR A report or statement of the effects, if any, that the proposed project, if carried out, would have on the environment. EPA The Environmental Protection Agency.

Impact / Effect A change resulting from the implementation of a project

Impact Avoidance The modification of project decisions (about site location or design, for example) having regard to predictions about potentially significant environmental effects.

Infrastructure The basic structure, framework or system which supports the operation of a project, for example roads and sewers, which are necessary to support development projects.

Land Use The human activities which take place within a given area of space.

Likely Effects (or Likely Impacts) The effects that are specifically predicted to take place – based on an understanding of the interaction of the proposed project and the receiving environment. (See also Potential Effects and Residual Effects.)

Methodology The specific approach or techniques used to analyse impacts or describe environments.

Mitigation Measures Measures designed to avoid, prevent or reduce impacts. These measures can mitigate impacts: \ by Avoidance When no impact is caused (often through consideration of alternatives).

¹ Selected – From Guidelines on the information to be contained in Environmental Impact Assessment Reports – EPA, May 2022

\ by Prevention When a potential impact is prevented by a measure to avoid the possibility of the impact occurring. \ by Reduction When an impact is lessened.

Monitoring The observation, measurement and evaluation of environmental data to follow changes over a period of time, to assess the efficiency of control measures and to record any unforeseen effects in order to be able to undertake appropriate remedial action. This is typically a repetitive and continued process carried out during construction, operation or decommissioning of a project.

Pathway The route by which an effect is conveyed between a source and a receptor.

Planning Application Report Documentation that accompanies the planning application which describes the conformity of the proposal with relevant legislation and planning matters – such as the County, City or Local Area Plans – and sectoral policies, as well as social and economic activity.

Pollution Any release to the environment which has a subsequent adverse effect on the environment or man.

Potential Effect/ Impact The effect / impact that would occur without mitigation.

Processes The activities which take place within a project.

Project For the purposes of the Guidelines, the term project is used to encompass all of the various forms of development, works and activity which are subject to EIA requirements, as set out in the relevant legislation and as understood by the Directive.

Sensitivity The potential of a receptor to be significantly affected. **Significance (of impact)** The importance of the outcome of the impact (or the consequence of change) for the receiving environment. **Source** The activity or place from which an effect originates.

1.0 INTRODUCTION & METHODOLOGY

1.1 Introduction

This '*Non-Technical Summary*' (NTS) relates to a planning application for the construction of 197 no. residential units comprising 129 no. houses (55 no. 2 bedroom, 67 no. 3 bedroom & 7 no. 4 bedroom), 18 no. 3 bedroom townhouses, 16 no. duplex apartments (8 no. 1 bedroom & 8 no. 3 bedroom) 12 no. 1 bedroom maisonette dwellings, 4 no. 1 bedroom apartments, 18 no. 'later living' dwellings (8 no. 1 bedroom and 10 no. 2 bedroom bungalows) along with 1 no. retail/café unit (c. 165 sq. m) and 1 no. retail/medical unit (c. 185 sq. m). In addition, the development includes c.0.85 ha of Public Open Space, 0.76 hectares of riparian open space, 660 sq.m of Communal Open Space, car parking, bicycle parking and all associated site development works all on a site of c. 7.15 hectares.

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 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 2 Volume II of the EIAR document.

The development will consist of the construction of 197 no. dwellings, open space, and ancillary infrastructure will facilitate Phase 4 of the lands at Ladywell in Balbriggan as follows:

- A) 129 no. terraced and semi-detached houses comprising 55 no. 2-bedroom houses (2 storey), 67 no. 3-bedroom houses (2 storey) and 7 no. 4-bedroom houses (3 storey) [house types with variants];
- B) 18 no. terraced and semi-detached 3 bedroom townhouse dwellings; 18 no. Later Living Units (8 no. 1 bedroom & 10 no. 2 bedroom – all bungalows) [house types with variants];
- C) 12 no. 1 bedroom Maisonettes in 6 no. 2-storey semi-detached buildings, and 4 no. 1 bedroom apartments in a 3-storey building (all apartments with terraces) along with 1 no. retail/café unit (c.165 sq. m) and 1 no. retail/medical unit (c. 185 sq. m) [including '*back of house area*' & both units to be able to be sub-divided and amalgamated];
- D) 16 no. duplex apartments (comprising 8 no. 1 bedroom [with terrace] and 8 no. 3 bedroom units) in 4 no. 3 storey buildings;
- E) Public open space c.0.85 hectares (with an additional c.0.76 hectares of riparian corridor open space), hard and soft landscaping (including public lighting & boundary treatment) and communal/semi-private open space (c. 660 sq. m) for the proposed townhouse, duplex and apartment units;
- F) Vehicular access will be provided via the Boulevard Road along with the provision of car parking spaces (280 no.), bicycle parking spaces and all internal roads and footpaths and bicycle and bin stores;
- G) Provision of surface water attenuation measures, (including widening of Clonard Brook), connection to water supply, provision of foul drainage infrastructure to Irish Water specifications and all ancillary site development, construction, and landscaping works [and temporary construction access from local road L1130];
- H) The proposal will also amend the layout to elements of the shared layout across the permitted phases to include (Phase 3A [F21A/0055;ABP Ref:312048-21] relating to 29 no. dwellings replaced with 26 no. dwellings, Phase 3B [F22A/0526] relating to layout and Phase 3C [F22A.0670] relating to 3 no. dwellings replaced with 4 no. dwellings and associated amendments to attenuation (Clonard stream) and services.
- I) Provision of signalised upgrade of the junction of Boulevard Road and the Clonard Road (R122).

1.2 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 within categories 10(b)(i) and 10(b)(iv) of Part 2 of Schedule 5 of the Planning and Development Regulations 2001-2015. Category 10(b)(i) refers to 'Construction of more than 500 dwellings'.

Category 10(b)(iv) refers to '*Urban development which would involve an area greater than 2 hectares in the case of business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.*'

The cumulative Phase 3 and Phase 4 development of c. 434 units at Ladywell does not breach the 500-unit threshold for the preparation of a mandatory EIAR. However, the cumulative size of the site is greater than 10 hectares at 14.69 hectares (gross) and therefore an EIAR is being prepared.

While the subject proposal is below both mandatory thresholds, having regard to the cumulative development no. phases it is considered that EIA is required.

1.3 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.

1.4 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 (as amended) as well as the Planning and Development Regulations, 2001, as amended (in particular by the European Union (Planning & Development) (Environmental Impact Assessment) Regulations 2018 (as amended)).

1.5 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 470A 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 Fingal County Council and the previous phases at Ladywell 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 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 volume for clarity. It consists of three volumes as follows:

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

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. Volume III: Technical Appendices (Volume III contains specialists' technical data and other related reports).

1.6.2 EIAR Volume II Structure

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 this 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 this EIAR document. The structure of the EIAR Volume II document is set out in Table 1.1 below.

Table 1.1: Structure of this EIAR

Chapter	Title
1	Introduction and Methodology
2	Project Description and Alternatives Examined
3	Population and Human Health
4	Biodiversity
5	Land and Soils
6	Water
7	Air Quality
8	Climate
9	Noise and Vibration
10	Landscape & Visual Impact
11	Material Assets - Traffic
12	Material Assets – Waste Management
13	Material Assets – Utilities
14	Archaeology and Architectural and Cultural Heritage
15	Risk Management for Major Accidents and / or disasters
16	Interactions of the Foregoing
17	Summary of Mitigation and Monitoring Measures

1.7 Availability of EIAR Doc

A copy of this EIAR document and Non-Technical Summary of the EIAR document is available for purchase at the offices of Fingal County Council (Planning Authority) at a fee not exceeding the reasonable cost of reproducing the document. It can also be viewed on the LRD website: www.FolkstownLRD.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 John Spain Associates, who were responsible for the overall management and co-ordination of the document. The EIAR team is set out in Chapter 1 of Volume II of the EIAR.

2.0 PROJECT DESCRIPTION AND ALTERNATIVES EXAMINED

2.1 Description of the location of the Project

The location of the project is within the administrative area of Fingal County Council. The lands are situated within the development boundary of Balbriggan as identified in the Fingal County Council County Development Plan 2023-2029. The proposed development site is situated within the townlands of 'Clonard or Folkstown Great', 'Clogheder', Balbriggan, Co. Dublin relating to an overall site area of 7.15 hectares.

The site slopes from Northwest 52.15 OD to 34.35 to Southeast and the gradient varies in the boundary line around 1:20 to 1:50 slope.

Figure 2.1: Subject Lands – Location of Project



Source: P McGrail Consulting Engineers

The development site is located approximately 1.5 km east of the Balbriggan district town centre. The Masterplan Phase 4 "Ladywell/Folkstown" site is bound on the south by Clonard Road (regional Route R122), on the east by under construction Phase 3, Boulevard Road and the committed Taylors Hill residential developments (Phase 1 and 2) and on the north by the future development. The subject development is bounded by Bridgefoot Road to the south and west, and Boulevard Road to the southeast and east (respectively) and further east by Taylor Hill Grange Residential Estate. Agricultural land bounds the site to the west and northwest.

2.2 Description of the Physical Characteristics of the Whole Proposed Development

2.2.1 Main Characteristics of the Operational phase of the project

In summary, the proposed development comprises

Table 2.1: Summary of Key Site Statistics

Key Site Statistic	Detail
Site Area	7.15 hectares (gross); 5.26 hectares (net)
Land Use Zoning	RA – Residential Area Objective: Provide for new residential communities subject to the provision of the necessary social and physical infrastructure
No. of Dwellings	197 no. dwellings consisting of 129 no. houses, 18 no. townhouses, 16 no. duplex dwellings, 4 no. apartments, 12 no. maisonette apartments and 18 no. later living dwellings all on a of c. 7.15 hectares
Commercial Floorspace	1 no. retail/café unit (c.165 sq. m) and 1 no. retail/medical unit (c. 185 sq. m) [including 'back of house area']
Open Space	Public Open Space 0.85 hectares, Riparian Corridor Open space 0.76 hectares.
Density	37.4 dph (net)
Building Heights	2 and 3-storeys
Dual Aspect	100%
Car Parking	280 spaces
Vehicular Access	Boulevard Road to the east
Floorspace	17,538 sq. m

2.3 Description Proposed Development

The development will consist of the construction of 197 no. dwellings, open space, and ancillary infrastructure will facilitate Phase 4 of the lands at Ladywell in Balbriggan as follows:

- 129 no. terraced and semi-detached houses comprising 55 no. 2-bedroom houses (2 storey), 67 no. 3-bedroom houses (2 storey) and 7 no. 4-bedroom houses (3 storey) [house types with variants];
- 18 no. terraced and semi-detached 3 bedroom townhouse dwellings; 18 no. Later Living Units (8 no. 1 bedroom & 10 no. 2 bedroom – all bungalows) [house types with variants];
- 12 no. 1 bedroom Maisonettes in 6 no. 2-storey semi-detached buildings, and 4 no. 1 bedroom apartments in a 3-storey building (all apartments with terraces) along with 1 no. retail/café unit (c.165 sq. m) and 1 no. retail/medical unit (c. 185 sq. m) [including 'back of house area' & both units to be able to be sub-divided and amalgamated];
- 16 no. duplex apartments (comprising 8 no. 1 bedroom [with terrace] and 8 no. 3 bedroom units) in 4 no. 3 storey buildings;
- Public open space c.0.85 hectares (with an additional c.0.76 hectares of riparian corridor open space), hard and soft landscaping (including public lighting & boundary treatment) and communal/semi-private open space (c. 660 sq. m) for the proposed townhouse, duplex and apartment units;
- Vehicular access will be provided via the Boulevard Road along with the provision of car parking spaces (280 no.), bicycle parking spaces and all internal roads and footpaths and bicycle and bin stores;
- Provision of surface water attenuation measures, (including widening of Clonard Brook), connection to water supply, provision of foul drainage infrastructure to Irish Water specifications and all ancillary site development, construction, and landscaping works [and temporary construction access from local road L1130];

- The proposal will also amend the layout to elements of the shared layout across the permitted phases to include (Phase 3A [F21A/0055;ABP Ref:312048-21] relating to 29 no. dwellings replaced with 26 no. dwellings, Phase 3B [F22A/0526] relating to layout and Phase 3C [F22A.0670] relating to 3 no. dwellings replaced with 4 no. dwellings and associated amendments to attenuation (Clonard stream) and services.
- Provision of signalised upgrade of the junction of Boulevard Road and the Clonard Road (R122).

2.4 Demolition

There is no demolition of habitable or any other structures relating to the proposed development.

Figure 2.2: Site Layout



Source: DCA

The Site Layout Plan shows the main development site.

2.5 Residential Development

The proposed development will provide for 197 no. houses and duplex/apartment units. The overall mix of units within the scheme is noted as follows:

Table 2.2: Overall Mix of Units

	1-bed	2-bed	3-bed	4-bed	Overall
Houses		55	67	7	129
Townhouses			18		18
Duplex Apartments	8		8		16
Maisonettes	12				12
Apartments		4			4
Later Living Dwellings	8	10			18
	28	69	93	7	197
Mix Overall Phase 4 %	14.2%	35.0%	47.2%	3.6%	

The proposal will include significant areas of open space and landscaping in accordance with the objectives of the Fingal County Development Plan 2023-2029. These will include a combination of pocket parks, neighbourhood park and interlinked shared surfaces which will enhance pedestrian movement and permeability.

2.5.1 Houses

The 129 no. houses are designed as two and three-storey family dwellings, in a wide mix of units comprising 55 no. 2-bedroom houses, 67 no. 3 bedroom houses and 7 no. 4 bedroom houses, in terraced and semi-detached. Individual plot layouts provide good separation to ensure privacy and minimise overlooking. The end-row and end terrace house types have been used to turn corners, with front doors and windows giving activity and passive supervision to the sides and avoiding large blank gables. All houses are 2 no. storeys (with the exception of the 4 bed dwellings) and include private amenity space in the form of a rear garden. Individual plot layouts provide good separation to ensure privacy and minimise overlooking to the adjoining residences along the Clonard Road and also to the permitted Phase 3 dwellings to the east.

The variety of house types provides for a wide choice to suit all potential occupiers and many household types, as well as permitting a very efficient site layout. The mix of house type in the street frontage creates visual interest and contributes to the specific character of the development, both overall and in each street. The overall provision of 7 no. house types adds positively to the variety for potential occupiers and contributes to a development which provides high quality family homes in a legible and efficient layout which is easily navigable.

Figure 2.3: CGI South Western Portion of Subject Lands

Source: DCA

2.6 Townhouses

It is proposed to provide 18 no. 3 bedroom townhouse dwellings (House Types G1, G2, G3), in 3 no. locations along the external frontage of the subject site, with 2 locations on the Boulevard Road, and the 3rd location to front onto the western side of the site.

Figure 2.4: CGI Three Storey Townhouses fronting onto Western Boundary

The 3-bedroom Townhouse types are generous in size comprising 122.7 sq. m (compared to a requirement of 110 sq. m). The DCA document A507-DCA-XX-XX-DR-A-303 provides a full Housing

Quality Assessment of the units. In all metrics the townhouses exceed the internal requirements of the Fingal County Development Plan.

With regard to private open space the dwellings are in compliance with the provisions of SPPR2 the Compact Settlement Guidelines which allows for a minimum of 40 sq. m of private open space for 3 bedroom dwellings and a *“further reduction below the minimum standard may be considered acceptable where an equivalent amount of high quality semi-private open space is provided in lieu of the private open space, subject to at least 50 percent of the area being provided as private open space.”*

The townhouses include a range of private open space areas of between 23-27 sq. m, with the remainder provided in high quality communal open space areas.

Figure 2.5: CGI Townhouses



2.7 Duplex Units

It is proposed to provide 16 no. duplex apartments (Duplex Types J, K, JM, KM comprising 8 no. 1 bedroom and 8 no. 2 bedroom units) in 4 no. 3 storey buildings which are located along the Clonard Road to create a stronger frontage onto the Clonard Road to the east and west. Three-storey duplex units act as bookends along the streetscape. Parking for the two-storey units fronting onto the Clonard Road is located to the rear which helps provide an attractive and uncluttered streetscape.

Figure 2.6: CGI 3 Storey Duplex Buildings Southwestern Corner of Subject Lands

The layouts and private open space of the units are in accordance with the provisions of the Apartment Guidelines 2023.

2.8 Later Living Units

Located within the southern part of the subject site it is proposed to provide 18 no. Later Living Units (8 no. 1 bedroom & 10 no. 2 bedroom – all bungalows);

Figure 2.7: Location of Later Living Accommodation.

The design of the Later Living Units means that all sides provide an active frontage which improves passive surveillance along the riparian corridor and onto areas of Open Space. The single-storey nature of the units allows them to sit comfortably within the existing hedgerows which flank the dwellings to the north and south and provide residents with an attractive amenity on their doorstep.

All will be accessed via a Part M compliant stair which have been designed in accordance with the Universal Design Guidelines for Homes in Ireland.

In addition to the later living units the development includes 6no. ground floor 1-bed maisonettes which equates to 12% of the units on site which is in compliance with Objective DMSSO37 of the FCC Development Plan which requires the provision of 10% of a development over 100 units to be age friendly accommodation.

Overall, the development provides 38no. universally accessible units which equates to 19% of the total units proposed.

Figure 2.8: CGI Later Living Accommodation



Source: DCA

2.9 Maisonettes

It is proposed to provide 12 no. 1 bedroom Maisonettes [Apartment Types P1, P2, P3, & P4] in 6 no. 2-storey semi-detached buildings interspersed throughout the site. 4 no. are located in the northern cell and 2 no. located in the southwestern portion of the subject site.

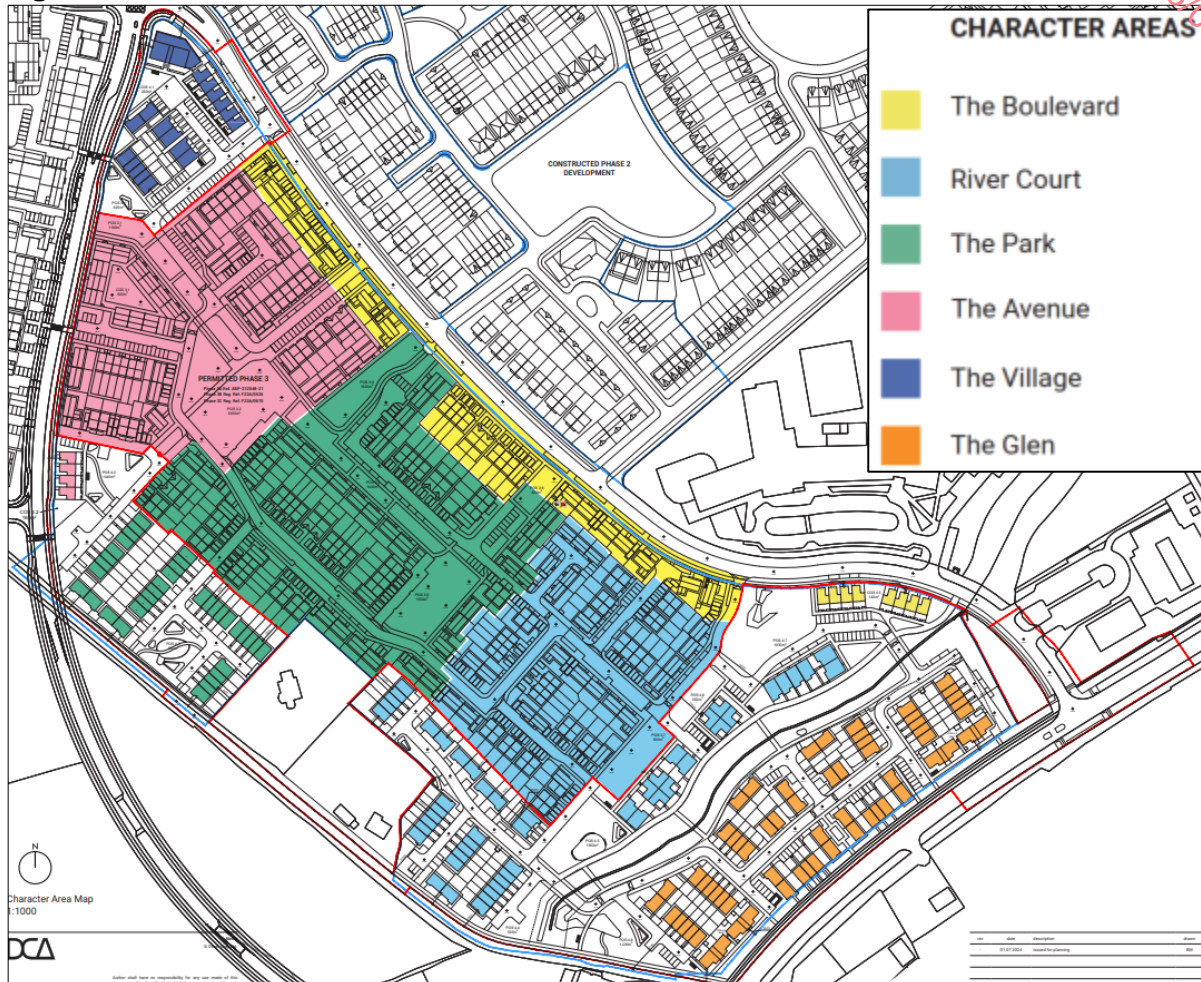
Generous areas of private open space are provided to the rear for each unit as indicated in the images opposite. Ground floor units are afforded direct access to their areas of private open space to the rear. First floor units are provided with a detached area of open space to the rear for the purpose of providing a secure area for bins, bikes and a garden shed for ancillary storage.

The upper floor unit provides the living room to the front of the building, which avoids the main living area overlooking the private open space of the ground floor unit to the rear. Only the bedroom will overlook the ground floor amenity space which is no different to the typical and accepted arrangement that exist within all residential schemes.

2.10 Character areas

The scheme layout is designed to integrate into the adjoining character areas of the permitted Phase 3 development at Ladywell.

Figure 2.9: Character Areas



Source: DCA Drawing no. A507-DCA-XX-XX-DR-A-024

As set out in the Doran Cray Architectural Design Statement, careful consideration has been given to the materiality of the buildings to create distinctive character areas and good quality open spaces, thereby encouraging social interaction. Density and scale, open space landscaping and building material choice all contribute to creating distinct character areas.

The masterplan is divided in six main character areas, five of which have already been permitted within the previous Phase 3 applications. While the design of the units proposed differs from those already permitted, their inclusion as part of 'The Avenue', 'The Boulevard', 'The Park' and 'The River Court' character areas will continue the materiality language of the permitted scheme to help create a unified appearance across the entire development.

A new character area is proposed along Clonard Road to the south, 'the Glen'.

The design of the proposed units provide flexibility to vary the materiality to respond to the character area they are located adjacent to, as is illustrated below. The range of materials proposed in the permitted Ladywell development will enable the design to accommodate different architectural expression while maintaining visual coherence with the permitted scheme. This ensures that the proposed units not only

enhance the overall visual appeal of the development but also contribute to a sense of continuity and harmony within the community.

2.10.1 Northern Part of Subject Site – The Village

The northern part of the subject site includes The Village and is to be accessed from the Boulevard Road located to the east and comprises 4 no. 1 bedroom apartments (Type A1) in a 3-storey building (all apartments with private open space) along with 1 no. retail/café unit (c.165 sq. m) and 1 no. retail/medical unit (c. 185 sq. m) [both units to be able to be sub-divided and amalgamated].

In addition, it is proposed to provide 6 no. 3 storey townhouses fronting onto the Boulevard Road all to provide a strong urban edge – these units are dual fronted so that the rear area is also overlooked. To the rear it is proposed to provide 8 no. Maisonettes dwellings in 4 no. 2 storey semi-detached buildings and 7 no. terraced/semi-detached dwellings.

Figure 2.10: Northern ‘Village’ Area



Source: DCA

Within the northern part of the layout, it is proposed to provide a public open space area of some 625 sq. m which includes natural play areas and is overlooked by dwellings to the east and to the west (as part of the permitted Phase 3C).

In addition, it is proposed to provide a communal open space area of c. 250 sq. m which will augment the private open space serving the townhouses (in accordance with the Compact Settlement Guidelines 2024).

Figure 2.11: CGI Northern Frontage of Local Centre

Source: DCA

2.10.2 Western Part of Subject site - 'The Avenue' and 'The Park' Character areas

The Western portion of the subject lands includes dwellings located in 'The Avenue' and 'The Park' Character areas.

The area includes 4 no. 3 storey 3-bedroom townhouse dwellings (which are to replace the 3 no. previously permitted courtyard dwellings).

The remainder of the northern parcel of land includes a series of 36 no. 2 storey houses. Vehicular access will be from the permitted road layout of the adjoining Phase 3 Ladywell development (under Phases 3A-3C).

The dwellings located at the end of the row of houses front onto the local road providing passive surveillance but are accessed from the east (vehicular).

In addition, it is proposed to provide open space in 2 main locations, c.0.14 hectares in the northern part of the cell, and an open space area of c.0.08 hectares in the southern part of the cell. Both of the open space areas are fronted onto by dwellings providing appropriate passive surveillance.

Figure 2.12: Western Portion of Subject Lands

Source: DCA

2.10.3 Southwestern Part of Subject site – River Court Character Area

Located to the south of the existing dwellings on the Clonard Road, is a new area of dwellings which will link into the proposed entrance to the south as well as to the permitted layout under Phases 3A-3C.

Overall, it is proposed to provide 31 no. houses along with 4 no. 1 bedroom Maisonette dwellings.

Figure 2.13: Southwestern parcel



Source: DCA

This area includes open space areas located immediately to the south which are fronted onto by dwellings providing passive surveillance.

2.10.4 Lands to the north and south of the Clondard Brook – Character Areas ‘River Court’, The Boulevard, & the Glen.

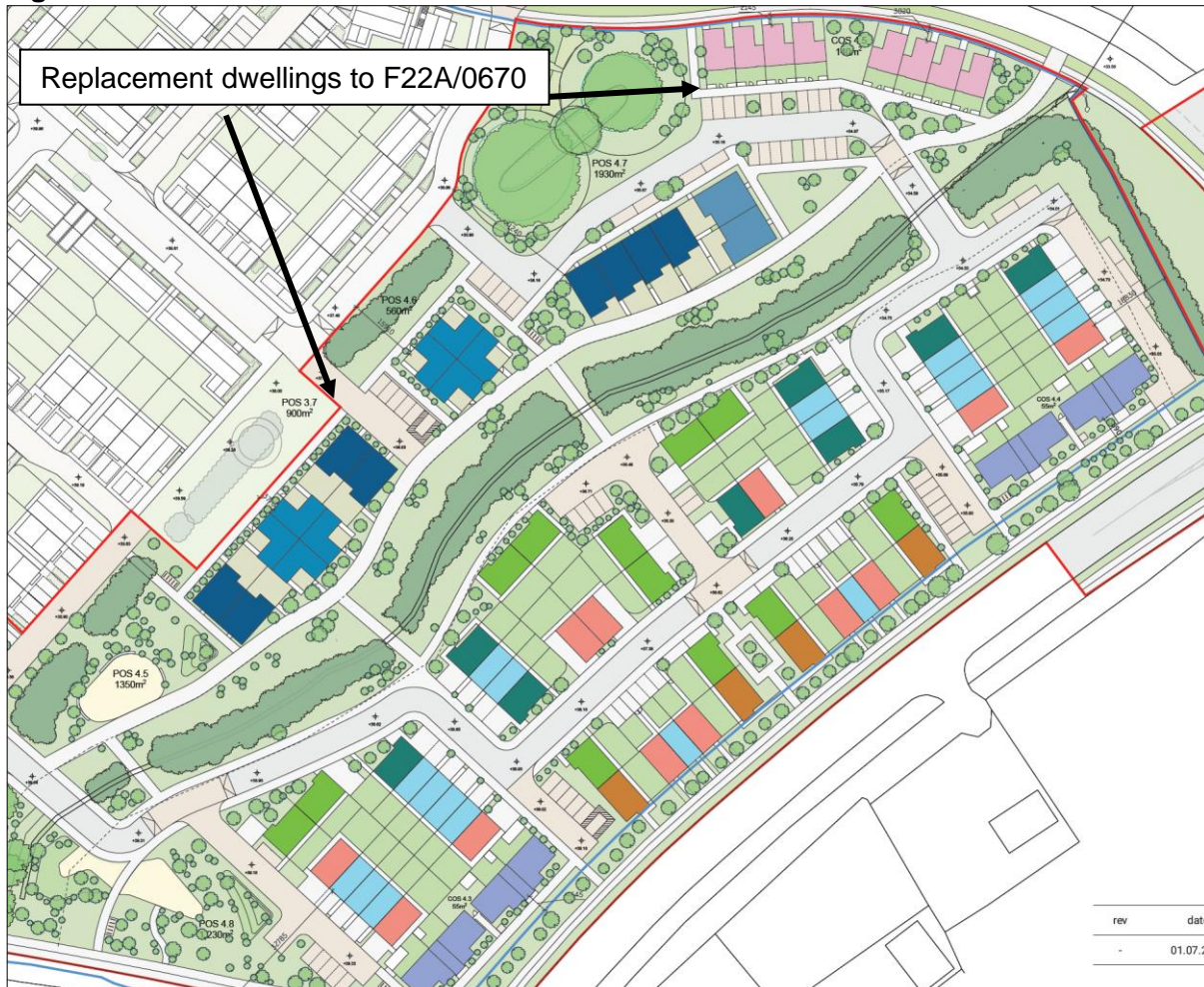
Located to the north of the Clondard Brook – there are 2 no. Character Areas ‘River Court’ & The Boulevard, which link into the permitted River Court area to the north. This includes 18 no. Later Living Units (8 no. 1 bedroom & 10 no. 2 bedroom – all bungalows) as well as 8 no. 3 storey duplex townhouses located along the Boulevard Road.

The remainder of the subject site comprises 2 elements consisting of amendments to the permitted Phase 3A [F21A/0055; ABP Ref:312048-21] relating to 29 no. dwellings replaced with 26 no. dwellings which are located to the north of the riparian corridor.

It is proposed to retain the trees (as per the previous permission) located at the entrance from the Boulevard.

In addition, to the south of the riparian corridor, it is proposed to provide a new character area ‘The Glen’ comprising a mixture of 58 2 and 3 storey no. houses and 16 no. duplex apartments (Duplex Types J, K, JM, KM comprising 8 no. 1 bedroom and 8 no. 2 bedroom units) in 4 no. 3 storey buildings.

Figure 2.14: Southern Parcel



Source: DCA

Figure 2.15: Internal CGI View of Townhouses

Source: DCA

Figure 2.16: CGI View towards Later Living Units

Source: DCA

Figure 2.17: CGI View towards Later Living Units

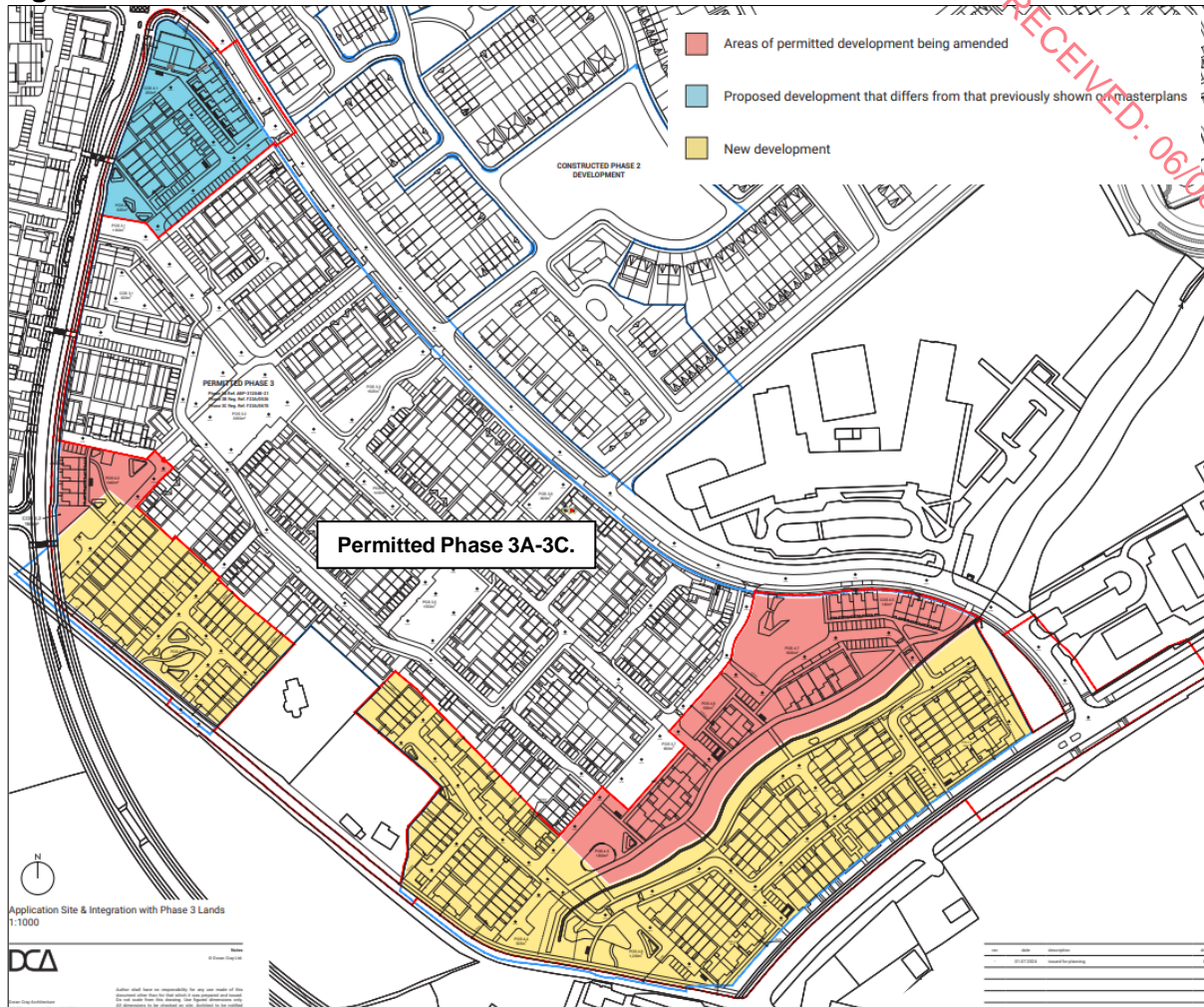
Source: DCA

Figure 2.18: Internal CGI View 'The Glen'

Source: DCA

2.11 Integration and proposed amendment to Phase 3

The application proposes to amend areas permitted previously in Phase 3A and 3C (areas shaded red in the drawing below). The area shaded blue represents proposed development that differs from that previously shown in masterplans submitted in applications for Phase 3A, 3B and 3C. Areas shaded yellow represents proposed development on lands to be acquired by the applicant.

Figure 2.19: Phase 3 Amended Areas

Source: Doran Cray Drawing no. A507-DCA-XX-XX-DR-A-010

When completed, Phase 4 will result in an increase in the total number of residential units across the Ladywell site from 306 no. (as per the Phase 3 Masterplan altered in accordance with the Phase 3B and 3C applications [FCC Reg. Refs. F22A/0526 and F22A/0670]) to 434 no. units (an increase by 128 no. units or 42%). The overall design approach in respect of landscaping, drainage, and SUDs is fully consistent with that applied for the preceding Phase 3B and 3C applications.

2.12 Car/Bicycle Parking

Car & Bicycle Parking		
	No	Rate
In-Curtilage Residential Parking	178	1.4 per unit
On-Street Residential Parking	58	
Visitor Parking	27	
Car Club	4	
Commercial	4	1 per 88m ²
Later Living Units Parking	9	0.5 per unit
TOTAL CAR PARKING	280	
Secure Private Bicycle Parking*	196	
Visitor Bicycle Parking	40	

*provided for apartments; duplexes; townhouses; and terraced houses that do not have direct access to their private open space

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2.13 Landscaping

2.13.1 Introduction

The proposed development will provide 0.85 hectares of open space for Phase 4 which is c. 16.1% of the net site area (as per Sustainable Compact Guidelines 2024) or 14% of the site area of 6.03 hectares (excluding road junction upgrade). It is noted that there is a substantial area of amenity space in the form of the riparian corridor (0.76 hectares) which has been excluded from the calculations, but which could be included in the overall total (in part – excluding water channel), due to the additional amenity afforded by that particular space. The open space provision is considered appropriate and within the range of the Fingal CDP which requires between 12%-15% of the site area.

Within the northern part of the layout, it is proposed to provide a public open space area of some 625 sq. m which includes natural play areas and is overlooked by dwellings to the east and to the west (as part of the permitted Phase 3C).

In addition, it is proposed to provide a communal open space area of c. 250 sq. m which will augment the private open space serving the townhouses (in accordance with the Compact Settlement Guidelines 2024).

Noting the commercial function of the northern building, there is a hard landscaped area located to the north and west which will provide an attractive feature and demarcate the local centre as a place to visit.

Figure 2.20: Landscape Masterplan North

Source: SRLA

Figure 2.21: Landscape Masterplan Central

Source: SRLA

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Figure 2.22: Landscape Masterplan South

Source: SRLA

2.13.2 Communal Open Space

The quantum of space for each apartment is in accordance with the DoHPLG Planning Guidelines for Design Standards for New Apartments 2023 and the Compact Settlement Guidelines 2024 in respect of the Townhouses. Drawing no., A-009 prepared by Doran Cray, provides detail of the Communal Open Space for the overall Phase 4 lands.

Proposed Communal Open Space	m ²
COS 4.1	250
COS 4.2	160
COS 4.3	55
COS 4.4	55
COS 4.5	140
Total	660m² (0.07ha)

2.13.3 Class 1 Open Space

The previous phases of development by Glenveagh Homes (of which the applicant Marshal Lands Development Company Ltd., is a subsidiary) provided separate site of Class 1 Public Open Space of c. 0.65 hectares in the adjoining townland of Flemington to the north (accessed from Hamlet Lane, Bremore Pastures Drive. The Class 1 Open Space will integrate into the existing Glenveagh Class 1 POS comprising sports pitch, access, parking and associated development), which Glenveagh has worked with Fingal County Council and the adjoining landowner to provide, and work has commenced and nearing completion.

Figure 2.23 – Class 1 Open Space Context

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Source: Doran Cray Architects

Glenveagh have commenced work on the Class 1 public open space which is nearing completion. The POS Class 1 area will serve *inter alia* the Class 1 requirements of all its 3 no. phases of development (including an additional 0.65 hectares adjoining to the south of the Stage 1 carpark).

Figure 2.24: Main Development Site Open Space Areas

Source: Doran Cray Architects

2.14 Access and Road Layout

Due to the extent of the Ladywell site and the current proposed development being distributed between its different parts, the proposed development will include multiple access points for motorised vehicles and/or active travel.

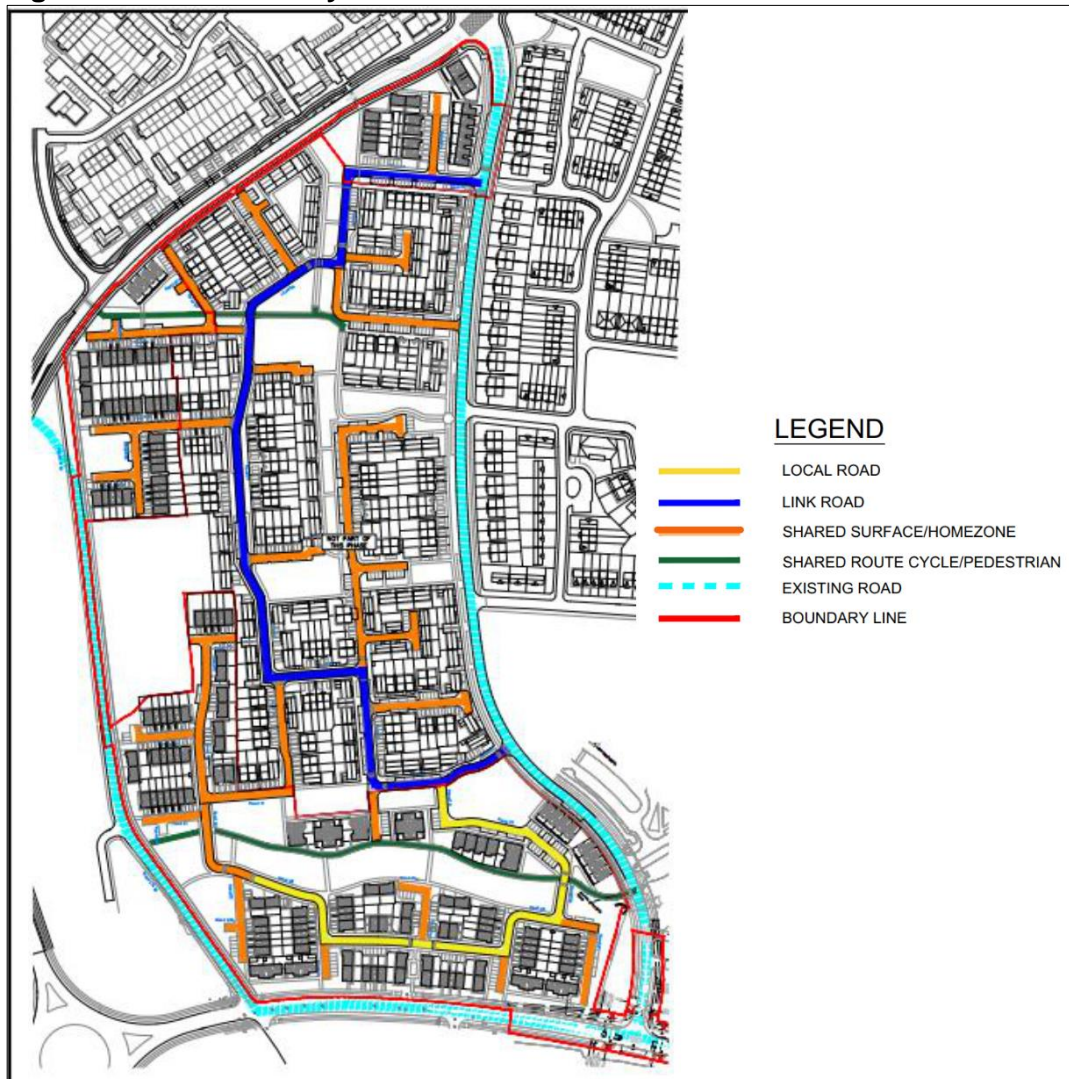
Vehicular access points can be summarised as follows:

- 1 no. direct access off Boulevard Road; and
- 2 no. indirect accesses off Boulevard Road via Phase 3 lands.

As detailed above, 2 no. new public road accesses will be created as part of the current proposed development. All of those accesses shall be via priority-controlled junctions. The proposed Phase 4 development road network will be fully integrated with the permitted Phase 3 roads with respect to road hierarchy and signage. As detailed above, Phase 4 shall to a significant degree rely on the public road accesses provided as part of the permitted Phase 3.

In keeping with the DMURS manual the longest section of a straight road without traffic calming or horizontal deflection is 70m.

Figure 2.25: DMURS Layout

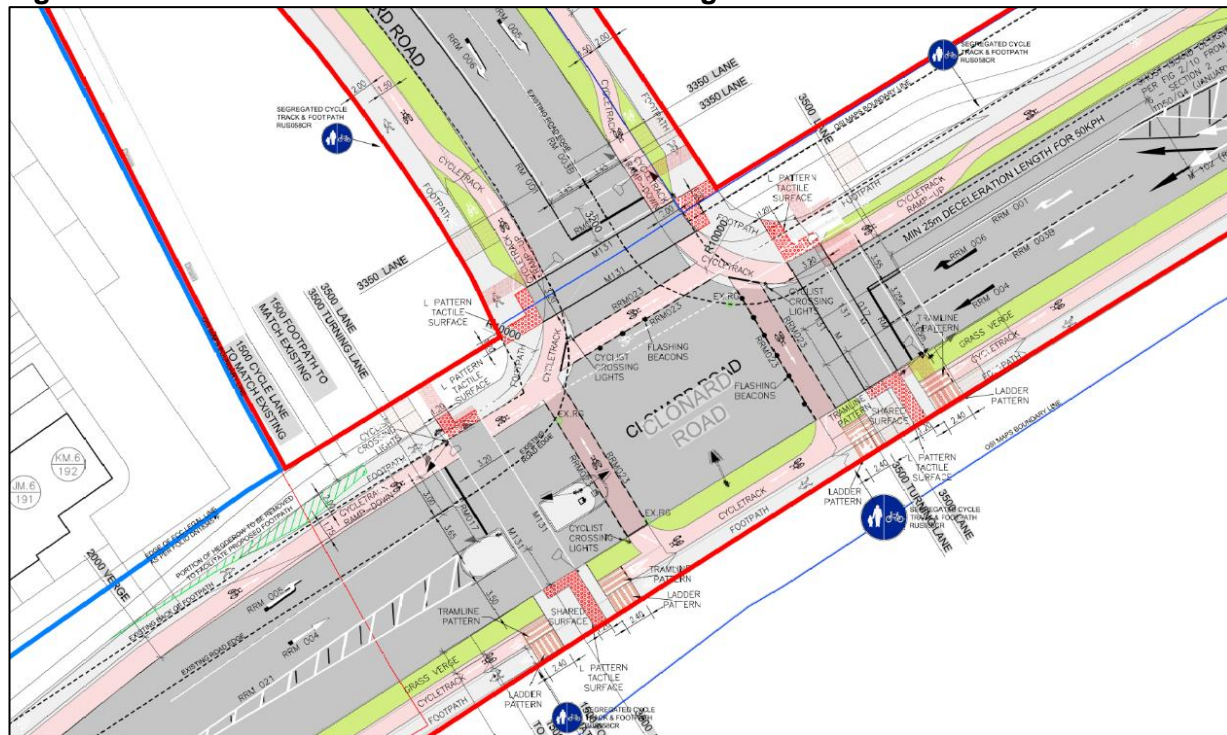


Source: PMcGrail DMURS Consistency Statement

Figure 2.26: Signalised Junction

Source: PMcG Consulting Engineers

The proposal includes an alternative arrangement for the Boulevard Junction and the regional road (within the footprint of the red line) which is as per updated guidance in respect of cycling layout. The applicant would be happy for the inclusion of a condition, if the Planning Authority deemed this alternative arrangement to be preferable.

Figure 2.27: Alternative Boulevard Junction Arrangement

Source: PMcG Consulting Engineers

2.15 Services

2.15.1 Foul Sewer

The proposed network will connect to the existing Ø225mm Irish Water Wastewater Clonard Road Junction and Boulevard Road.

The Proposed Phase 4 Development will connect into the foul sewer arrangement permitted under the previous 3no. phases under reference F21A/0055.

The foul water drainage system for the proposed development has been designed in accordance with the Irish Water Code of Practice and will be separate to the surface water drainage system. The foul water from the development will discharge via soil vent pipes within the buildings by gravity flow before connecting into the existing separate foul sewer network within the development. The foul sewerage for each house will have a separate connection to the proposed 225mm and 150mm diameter foul sewer along the road.

2.15.2 Surface Water Drainage & Attenuation/SuDs

The surface water connection for the site will be into the Clonard Brook at the southern end of the site. The existing stream eastern of the development had been widened to form a riparian corridor as part of the permitted Phase 3A-3C developments. For continuity it is intended to be widened the existing brook at the southern end of the site to form a riparian corridor.

It is proposed to use a sustainable urban drainage system (SuDS) approach to stormwater management throughout the site where possible. The overall strategy aims to provide an effective system to mitigate the adverse effects of urban stormwater runoff on the environment by reducing runoff rates, volumes and frequency, reducing pollutant concentrations in stormwater.

The SUDs features proposed in our development are as follows:

- Modular Permeable Paving
- Swales
- Bioretention Systems
- Tree pits
- Detention Basins
- Petrol interceptor
- Hydrobrake flow control.

Surface water runoff from the development would be attenuated to greenfield runoff (Qbar), in accordance with the recommendations of the GDSDS. Surface water run-off from each surface water catchment will be attenuated using a Hydrobrake on the surface water outlet from each catchment.

2.15.3 Water Supply

The connection points will be into an existing 300mm watermain pipe at Boulevard Road and under construction 100mm watermain pipes from Phase 3 granted permission ref. F21A/0055.

The proposed network has been designed to comply with Irish Water specification. Individual houses will have their own connections to the distribution main via service connections and boundary boxes. Individual service boundary boxes will be of the type to suit Irish Water and to facilitate possible future domestic meter installation.

The water main layout and details are in accordance with Irish Water Connection and Developer Services, 'Code of Practice for Water Infrastructure' and 'Water Infrastructure Standard Details'.

2.15.4 ESB Supply

Electricity Supply Board Networks drawings show a number of assets on and adjacent to the site. A medium/low voltage underground cable serves the existing Ceol na Mara Colaiste school in the north-western and eastern boundary of the site.

Along the south-western and western boundary of the site are low voltage overhead lines serving detached housing and a preschool along Bridgefoot/Clonard A formal application cannot be made at this stage but will be made as soon as the planning permission is granted.

2.15.5 Creche

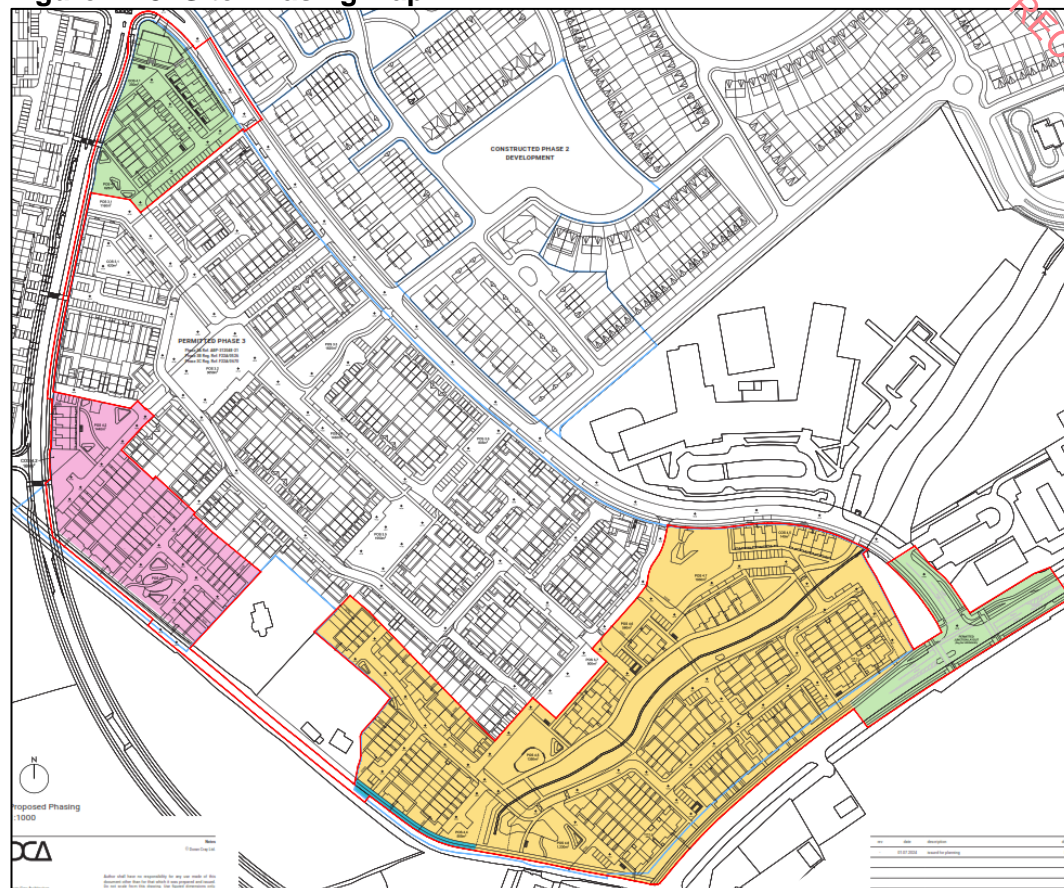
An expanded creche (currently under construction) of 1,025 sq. m was permitted in Phase 2D (F20A/0026) of the adjacent Taylor's Hill Grange and Taylor Hill Park, in close proximity to the Boulevard Road and is conveniently located to serve Phases 3A-3D at Ladywell. This 2-no. storey building extends to c. 1,025 sqm and includes a play area, as well as pedestrian access, a vehicular set down area and 5 no. car parking spaces. The creche is of a sufficient size to cater for Phase 3.

2.16 Construction Management Strategy

It is envisaged that the development of the lands will occur in a single phase. Given the nature of the project and the need for flexibility to respond to market demand, the development phases are indicative. A Construction Management Plan prepared by Paul McGrail Consulting Engineers has included the relevant EIAR mitigation measures in the EIAR and is included in the application. This EIAR presents proposed mitigation measures to ensure that the planned development of the lands does not generate significant adverse impacts for residential and working communities in the vicinity of the site, including adjacent educational facilities.

In summary the construction of the development will involve the following:

- Phase 1a – Site Set Up c.3 months to complete with approximately up to 20 staff employed
- Phase 1b – Setting out of sites and provision of services - 4-5 months and will run in tandem with phase
- 1d below and will involve up to 40 construction staff
- Phases 1-5 – Construction of Residential Units
- The construction of the residential units will, to a certain degree respond to the demand/sale of the units involved, however our client has already had a significant number of enquiries from prospective purchasers, and it is anticipated that the construction progress will reflect this strong demand and will involve up to 100 no. construction staff (depending on the number of units being constructed at any one time). The Ladywell Phase 4 will be developed in 3 no. phases (with a phase for the Boulevard junction) and it is expected to take up to four (4) years to complete (subject to planning and market demand).

Figure 2.28: Site Phasing Map

Source: DCA

2.16.1 Construction Traffic

All construction traffic will access the site from Boulevard Road and through its junction with Clonard Road (R122).

Figure 2.29: Construction Access

Access to be agreed with FCC

Glenveagh Homes has advised that the majority of the construction traffic will approach and depart the site from / to the west via Naul Road and the M1. Construction traffic will consist of the following categories:

- Private vehicles owned and driven by site staff and management;
- Construction vehicles e.g. excavation plant, dump trucks and material delivery vehicles, involved in site development works;

2.16.2 Hours of Working

Working hours will be strictly in accordance with the granted planning conditions with no works on Sundays or Bank Holidays. If work is required outside of these hours, written approval will be sought by the contractor from the Local Authority.

It is anticipated that normal working hours may be 7am to 7pm Monday to Friday and 7am to 2pm on a Saturday. However, it may be necessary to work outside of these hours at night and at weekends during certain activities and stages of the development (e.g. concrete pouring) which will be subject to agreement with the Local Authority.

Deliveries of material to site will be planned to avoid high volume periods. There may be occasions where it is necessary to have deliveries within these times. The Contractor will develop, agree and submit a detailed Traffic Management Plan for the project prior to commencement.

2.16.3 Construction Traffic Management Plan

A Construction Traffic Management Plan (CTMP) will be prepared by the main contractor and agreed with the Planning Authority prior to commencement of development in the event of a grant of permission. An outline CTMP, prepared by MPA Consulting Engineers is included with the planning application. The main construction access route will be from the Boulevard Road for all Phases.

The CTMP will provide details of intended construction practice for the development, including:

- Location of the site and materials compound(s) including area(s) identified for the storage of construction refuse.
- Location of areas for construction site offices and staff facilities.
- Details of site security fencing and hoardings.
- Details of on-site car parking facilities for site workers during construction
- Details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site.
- Measures to obviate queuing of construction traffic on the adjoining road network.
- Measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network.
- Alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public road or footpath during site development works.
- Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels.
- Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall be roofed to exclude rainwater.

- Off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil.
- Means to ensure that surface water run-off is controlled such that no silt or other pollutants enter local surface water sewers or drains.

The contractor will incorporate specific measures as discussed with the Roads and Transport Section of FCC including:

- Defined access routes;
- Location of site access junctions in each phase;
- Restrictions to work hours;
- Any other items required by FCC.
- The CTMP will be agreed with both Fingal County Council prior to commencement of works.

2.16.3.1 Traffic Management & Construction Access

The following measures are envisaged:

- No parking on access routes. No unloading or blockages of access routes. Such vehicles will be immediately requested to move to avoid impeding works;
- In accordance with the CTMP, the contractor must appoint a Traffic Management Coordinator responsible for the management of traffic management related activities on site
- Contractors must adhere to the overall traffic management measures for the internal road network from the preferred construction traffic entrance road to their site. This shall include the following as a minimum:
 - Speed limits;
 - Parking restrictions; and
 - Safe access/egress to existing internal Hospital access roadway.

2.17 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 3-15 which deal with '*Aspects of the Environment Considered*'. No significant adverse impact is predicted to arise from the use of natural resources.

2.18 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 in the relevant in Chapters 3-16 which deal with '*Aspects of the Environment Considered*'. There will be no significant direct or indirect effects arising from these sources.

2.19 Forecasting Methods Used for Environmental Effects

The methods employed to forecast the 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.

2.13 Alternatives Considered

Chapter 2 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.

2.13.1 Do-nothing Alternative

The site is zoned for residential development under the Fingal County Development Plan 2023-2029 and as such, consideration of alternative sites is not necessary. In effect, an alternative location in this instance i.e., a ‘do- nothing’ alternative for the subject site, would mean that these residential zoned lands would not be utilised for the purposes of meeting the need for new residential accommodation within Balbriggan. If development does not occur sequentially from the existing development footprint, it is likely that pressures for the development of land which is either un-zoned or un-serviced and not as close to the town centre would be greater. This would lead to a dispersed and unsustainable form of development.

A “do-nothing” scenario was considered to represent an inappropriate, unsustainable and inefficient use of these residential zoned lands. The suitability of the lands for development, is an important consideration, in this regard.

2.13.2 Alternative Designs

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 Compact Settlement Guidelines 2024 as well as where relevant the Fingal County Development Plan 2023-2029 and has been the subject of a number of pre-application meetings with the Planning Authority prior to lodgement of the LRD planning application.

The key environmental and practical considerations which have influenced the design of the proposed development and the alternative layouts on the subject lands have been influenced by the following:

- The need to achieve an appropriate density in the context of the Compact Settlement Guidelines 2024 having regard to the location of the site in Balbriggan at the edge of settlement.
- The need to ensure any residential development provides a good mix of housing typologies which meet current market demand and which are deliverable in the short to medium term.
- The need to provide an appropriate level of housing provision on the residential zoned lands.
- Alternatives in relation to permeability.
- Alternative road junction design
- The need to deliver good quality open space in appropriate locations with a clear hierarchy
- To have regard to the site’s topography and to ensure the design the residential development and associated infrastructure respects the existing features and limits the impacts on the land.
- The quality of the urban environment to be delivered and the associated positive impact on human health.

Alternative site layouts and siting progressed throughout the design process in order to minimise the impact on the receiving environment at the earliest opportunity. The initial stage involved a constraints analysis of the land within the proposed development site to identify all high-level constraints and aggregate them against the site to allow a suitable layout to be developed.

2.13.3 Final Layout Alternative

With regard to the submitted layout, the iterative process set out above, which 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.

3.0 NON-TECHNICAL SUMMARY OF EIAR CHAPTERS

3.1 Population and Human Health

It should be noted that there are numerous inter-related environmental topics described throughout this EIAR document which are also of relevance to Population and Human Health. Issues such as the potential likely and significant impacts of the proposed development on landscape and visual impact, biodiversity, archaeology, architectural and cultural heritage, air quality and climate, noise and vibration, water, land and soils, material assets including traffic and transport impacts, residential amenity etc. are of intrinsic direct and indirect consequence to human health. The specific chapters of the EIAR (3-15) assess the environmental topics outlined in the EIA Directive.

The site is located on the western edge of Balbriggan, a coastal town situated on the northern edge of Fingal's administrative area and is accessed from the national and regional road network via the M1 Dublin-Belfast motorway and R132 corridor. Balbriggan and its environs are well serviced in terms of access to educational, community and retail facilities, as well as public transport provision in the form of multiple bus services and an Irish Rail commuter service (Dundalk – Drogheda – Dublin – Bray). A circular bus service also operates in the Town between Balbriggan Railway Station via Drogheda Street.

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 5 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 construction of the sewerage connection to facilitate the proposed development will require works to the public road will likely entail some localised impacts to residents. The Construction Management Plan will ensure that disruption and nuisances will be kept to a minimum.

The proposed development will result in a generally positive alteration to the existing undeveloped site in terms of the provision of residential units to serve the growing residential population of the area in accordance with the objectives of the Fingal County Development Plan 2023-2029. 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 routes, a highly permeable layout which connects to adjacent development.

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.

3.2 Biodiversity

The development site is composed of fields which were until recently entirely in agricultural production but are now a combination of disturbed ground associated with encroaching development to the east as well as remnants of pasture and tillage land.

Only small areas, which have remained undisturbed, are dry meadow – GS2 while Some areas of arable crops – BC1 remain to the north.

To the south there is a field of improved agricultural grassland – GA1. A new road has been constructed along the eastern boundary and some of the adjacent land is bare soil – ED2, along with lands in the central portion of the site. These are habitats of low or negligible biodiversity value.

The hedgerows to the north as well as along the western roadside have few or no tall trees and are species poor and so these are assessed as of 'lower significance'. One stretch of hedgerow around a residential home is dominated by non-native Cypress *Cuprocyparis* sp. and this is of negligible wildlife value.

The drainage ditches are not suitable for salmonid or migratory fish as the Bremore Stream is extensively culverted as it flows through Balbriggan. There are no plants growing on the site which are protected or threatened.

There is no suitable habitat on the lands for Otter.

There was no evidence of Badger activity during any of the surveys and no sett is present.

Features on the site are mostly sub-optimal for bat roosting, with no buildings however there are some old trees with cracks and crevices to the south-east which may be suitable. An assessment of the site for bats was originally carried out by Brian Keeley of Wildlife Surveys Ireland in January 2020. It identified the large trees to the south of the site as having bat roost potential. This was followed in June 2020, August 2022 and May 2024 by a full, detector-based survey. This found no bats roosting on the development site.

The development site is in the catchment of no water course of fisheries significance. The Bremore Stream is unlikely to be of significance for salmonid fish due to its small size and the presence of numerous culverts along its length. There are no habitats on the development site suitable for migratory fish.

In summary, it has been seen that the application site is within an area of disused land. There are no examples of habitats listed on Annex I of the Habitats Directive or records of rare or protected plants. There are no alien invasive species as listed under Schedule 3 of SI No. 477 of 2011.

Hedgerows and the native treeline provide habitats for nesting birds while drainage ditches provide some habitat for aquatic vegetation and amphibians.

Following the implementation of the mitigation measures set out in the Biodiversity chapter of the EIAR, there is no likely significant impact on the natural heritage, sensitive species or the qualifying interest

(habitat/species) of any Natura 2000 site in the vicinity of the proposed development site. The implementation of the mitigation measures highlighted in Section 4.8 will ensure that the predicted impacts of the development on flora and fauna are reduced during the construction phase.

During the operational phase, with mitigation, there are expected to be no residual negative effects to biodiversity which can be considered to be significant.

3.3 Land and Soils

The development site is located approximately 1.5 km east of the Balbriggan district town centre. The Masterplan Phase 4 “Ladywell” site is bound on the south by Clonard Road (regional Route R122), on the east by under construction Phase 3, Boulevard Road and the committed Taylors Hill residential developments (Phase 1 and 2) and on the north by the future development. The subject development is bounded by Bridgefoot Road to the south and west, and Boulevard Road to the southeast and east (respectively) and further east by Taylor Hill Grange Residential Estate. Agricultural land bounds the site to the west and northwest.

The topography is relatively consistent with the site falling in elevation from north-west to south-east and characterized by minor localized undulations.

no geological heritage site has been identified in the vicinity of the proposed development site. The closest County Geological Site is Laytown to Gormanstown Coastal Plain, including sea cliffs, which is located c. 2.3 km north-northwest of the site

According to the EPA website, the nearest licenced facility in the vicinity of the site is Padraig Thornton Waste Disposal Limited (IEL facility active licence number P1014-01), which is located circa 1.2 km southeast, thereby hydrogeologically cross gradient of the proposed development.

The predominant subsoil type present across the site is Till derived from sandstones and shales. This till is made up of glacial Clays which are less permeable than alluvium subsoils indicated in the southern portion of the site adjacent to the onsite stream / watercourse.

Topsoil was encountered in all the exploratory holes and was present to a maximum depth of 0.3m below ground level.

During the Ground investigation undertaken by GII (2024), samples were selected from the exploratory holes for a range of geotechnical and environmental testing to assist in the classification of soils and for laboratory analysis focusing on potential contamination and the classification of the materials for waste disposal purposes

Generally, the soil results were at or below the limit of detection for most parameters and which was generally below the relevant generic assessment criteria. In line with the historic use and function of the site for agricultural purposes, there was no evidence of contamination noted in during site investigation.

The implementation of the mitigation measures outlined in Section 5.5 of this chapter will ensure that targeted rates of impact to land, soils and ground water are achieved at the site of the Proposed Development during construction and operational phases. When mitigation measures are implemented throughout construction the predicted impact on the environment will be short-term, imperceptible, and neutral. With the measures outlined in the EIAR and CEMP, the predicted impact will be long-term, imperceptible, and neutral.

There are appropriately designed mitigation measures which will be implemented during the construction phase to protect the hydrogeological environment. There is a potential of accidental discharges during the construction phase, however these are temporary short-lived events that will not impact on the water status

of groundwater bodies long-term and as such will not impact on trends in water quality and over all status assessment.

The residual effect on human health and populations during the construction phase is considered to be neutral, imperceptible and short-term.

There are appropriately designed mitigation and design measures which will be implemented during the construction and operation phase to protect the hydrogeological environment. There is a potential of accidental discharges during the construction and operational phases, however these are temporary short-lived events that will not impact on the water status of underlying aquifer long-term and as such will not impact on trends in water quality and over all status assessment.

Following the implementation of the mitigation measures, there will be no long-term residual impact on land soil geology and hydrogeological receptors, either within or in the vicinity of the proposed development as a result of the proposed development.

3.4 Water

The topography is relatively flat across the site with gentle / minor localised undulations and a slight gradient to the southeast and localised slopes falling towards the Clonard Brook Stream which traverses the site, flowing in an east-northeast direction through the southern parcel of the site.

According to the EPA maps, the proposed development site lies within the Nanny-Delvin Catchment. The current EPA watercourse mapping shows one watercourse within the proposed development site. The site comprises multiple fields separated by hedgerows. Site drainage is towards the Clonard Brook Stream.

The main hydrological feature of the area is the Clonard Brook stream, the Clonard or Folkstown Great and the Bremore River. The former is a tributary to the Clonard or Folkstown Great stream and ultimately the Bremore River Waterbody which flows in an easterly / northeasterly direction through the southern portion of the site. The Bremore River discharges to the Irish Sea north of Balbriggan Town Centre approximately 1.85 km northeast of the subject development (Hydrological distance).

Currently, the EPA classifies the Water Framework Directive Ecological Status for the Bremore waterbody as having 'Poor' (2016-2021) status with a current WFD River Waterbody risk score of 1a, 'At risk of not achieving good status'. This rating and the main pressures identified on the Bremore river waterbody are attributed to poor ecological and biological status or potential (Catchments.ie, 2023).

In relation to the subject site, there are no EPA quality monitoring station points in close proximity or within any of the previously mentioned watercourses in hydrological connection to the site.

The subject lands are located in area identified as being low from a flood risk perspective. Tidal flooding is not relevant as the site is approximately 40m above sea level. The site location is such that it is not affected by tidal water bodies and as such tidal flooding is negligible. The site location is such that it is not affected by coastal water bodies and as a result coastal flooding is negligible. A review of the historic flood information did not highlight historical flood events (single or reoccurring) onsite or the immediate vicinity surrounding area. Floodinfo.ie (formerly floodmaps.ie) was consulted to identify historical flooding events within the vicinity of the site. No historical flooding has been documented within the extent of the site or within the immediate vicinity.

There is an indirect hydrological pathway to nationally designated sites in North-West Irish Sea via the Clonard Brook Stream and Bremore River which flow in an east/northeasterly direction before its outfall to the Irish Sea over a kilometre downgradient of the site.

The implementation of the mitigation measures detailed in Section 6.6 of Volume II of the EIAR, will ensure that the potential impacts on surface water quality during the construction phase are adequately mitigated.

The residual effect on surface water quality during the construction phase is considered to be neutral, imperceptible and short-term.

The implementation of the mitigation measures detailed in Section 6.6 of Volume II of the EIAR, will ensure that the potential impacts on surface water flow and quantity during the construction phase are adequately mitigated. The residual effect on surface water flow and quantity during the construction phase is considered to be neutral, imperceptible and short-term.

The implementation of the mitigation measures detailed in Section 6.6 of Volume II of the EIAR, will ensure that the potential impacts on human health and populations (and material assets) during the construction phase are adequately mitigated. The residual effect on human health and populations during the construction phase is considered to be neutral, imperceptible and short-term.

There are appropriately designed mitigation measures which will be implemented during the construction phase to protect the hydrological environment. There is a potential of accidental discharges during the construction phase, however these are temporary short-lived events that will not impact on the water status of waterbodies long-term and as such will not impact on trends in water quality and over all status assessment.

The implementation of the mitigation measures detailed in Section 6.6 of Volume II of the EIAR, will ensure that the potential impacts on surface water quality once the proposed development is constructed and operational are adequately mitigated. The residual effect on surface water quality during the operational phase is considered to be neutral, imperceptible and long-term.

There will be no impact to the quality of downstream designated sites due to the lack of direct hydraulic connectivity, the significant distance between the subject development and designated areas, and the mitigation measures cited. In addition, the overall management of the riparian zone, improvement measures to the stream and SuDS for the project and installation of petrol / hydrocarbon interceptors / separators will improve habitat requirements in the stream, flood management and water quality.

The implementation of the mitigation measures detailed in Section 6.6 of Volume II of the EIAR, will ensure that the potential impacts on human health and populations (and material assets) once the proposed development is constructed and operational are adequately mitigated. The residual effect on human health and populations during the operational phase is considered to be neutral, imperceptible and long-term.

There are appropriately designed mitigation measures which will be implemented during the operational phase to protect the hydrological environment. There is a potential of accidental discharges during the operational phase, however these are temporary short-lived events that will not impact on the water status of waterbodies long-term and as such will not impact on trends in water quality and over all status assessment.

In summary, there will be no long-term residual impact on hydrological receptors, either within or in the vicinity of the proposed development as a result of the proposed development.

3.5 Air Quality

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.

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 medium sensitivity to dust soiling and of low sensitivity to dust-related human health 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, 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 direct, short-term, negative and imperceptible impact on air quality.

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 not significant impact on air quality.

Detailed dust mitigation measures are outlined within Section 7.8 of Chapter 7 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).

As the predicted concentrations of pollutants will be imperceptible no mitigation is required. The impact to air quality has been assessed as long-term, direct, negative and not significant.

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 500m 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 medium risk of dust impacts associated with the proposed development. The dust mitigation measures outlined in Section 7.8 of Chapter 7 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.

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

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). Data published by the EPA indicates that Ireland exceeded (without the use of flexibilities) its 2022 annual limit by 3.54 Mt CO₂e. For 2022 total national emissions (excluding LULUCF) were 60.6 Mt CO₂e. 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.

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.

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 and the online Transport Infrastructure Ireland Carbon Assessment 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 CO₂e each. The proposed development will incorporate some mitigation measures which will aim to reduce climate impacts during construction and once the development is operational.

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 considered direct, long-term, negative and imperceptible, which is considered overall not significant with regard to the construction and operational phase.

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

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. The residual effect of climate change on the proposed development is considered direct, long-term, negative and imperceptible, which is overall not significant in EIA terms.

Cumulative Impact

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 and Vibration

A noise survey was conducted in proximity to the nearest noise sensitive locations to the site in order to establish the current noise climate and the main contributors to the noise environment in these areas. This was done in conjunction with an unattended survey, which was carried out on the site itself for a period of over 24 hours.

Location ATT1 Attended survey location, located to the northwest of the site, this location characterises the noise environment at the western end of Taylor Hill Gardens Road. It is representative of noise levels outside the houses of the Taylor Hill estate, far away from Clonard road, with a direct line of sight to the proposed development.

The results of the baseline survey at this location were measured in the range of 52 to 53 dB LAeq with background noise levels measured in the range of 50 to 51 dB LA90. Construction Noise was noted to be the main source of noise at this location with occasional aircraft noise as well as birdsong and continuous distant traffic noise.

Location ATT2 This attended survey location, located to the northeast of the site on of Taylor Hill boulevard characterises the noise environment incident on Coláiste Ghlór na Mara.

Noise levels measured at this location were in the range of 60 to 65 dB LAeq. The main noise source noted at this location was construction noise with activity directly 20 to 50m from the survey location. Passing road traffic was also audible. The background noise environment was measured in the range of 34 to 58 dB LA90.

Location ATT3 This attended survey location, located to the South of the site on Clonard road, represents the noise environment incident on Helga’s Pre-School.

Noise levels measured at this location were in the range of 70 to 71 dB LAeq. The main noise source noted at this location was passing road traffic. Birdsong and continuous distant car traffic were also audible, construction noise was not. The background noise environment was measured in the range of 54 dB LA90.

Location UN1 Unattended survey location, located to the southeast corner of the site at the junction where Clonard road merges with the R122. It represents the noisiest environment due to traffic adjacent the site.

When carrying out the install and collection of the unattended survey kit, traffic noise was dominant and construction noise was distant and only audible at times.

It is not expected that vibration would be measured of a magnitude to exceed the building damage criteria, or that vibration will be perceptible on site with the potential to cause adverse comment.

Due to the minimal distances between construction works and receptor locations it is predicted that construction noise levels will at times exceed the recommended BS5228 criteria at receptor locations, and hence impacts will range from slight to significant and temporary at these locations.

Residual effects from noise as a result of a change in traffic volumes is predicted to be negative, **imperceptible and long-term**. Noise levels associated with building services plant are expected to be within the adopted day and night-time noise limits at the nearest noise-sensitive properties taking into account the site layout, the nature and type of units proposed and distances to nearest residences. Assuming the operational noise levels do not exceed the adopted design goals, the resultant residual noise impact from this source will be of **negative, not significant and long-term**.

Inward noise impacts are mitigated through installation of upgraded acoustic glazing and ventilation where specified resulting in a **neutral, not significant and long-term impact**.

3.8 Landscape and Visual

The site is located at the western edge of Balbriggan in an area undergoing transformational landscape change, from its previously rural/agricultural condition to an urban landscape – or townscape. The process has been plan-led, with the area having been zoned for residential development for several cycles of the Fingal Development Plan (FDP). The land use zoning maps from the 2005 and 2023 Development Plans

The subject site is the remaining land in this parcel, lying between the three Ladywell Phase 3 developments and the surrounding roads. This gives the site (and the proposed development) particular importance in the future townscape, as it will form the urban edge of a part of Balbriggan, as seen from key roads approaching and accessing the urban area.

In addition to the three Ladywell Phase 3 developments immediately adjacent to the site, in July 2024 permission was granted for a Large-scale Residential Development of 564 no. units on the lands to the north of the site across the C Ring Road (Flemington Lane LRD, Reg. Ref. LRD0006/S3; Bord Pleanála LH06F.319343). This development, which straddles a section of the C Ring Road to the north, includes houses, duplex units and apartments in buildings up to five storeys tall, and nine commercial units. It will also provide a part of the large Class 1 public open space to the north of the site along the L1130.

The FDP 2023 identifies views requiring 'preservation', with the views indicated by green lines with dots on the Green Infrastructure maps (see Figure 10.12). There are no 'Preserve Views' designations in close proximity to the site. The nearest is the local road north of Balcadden/Flemington, over 1km from the site. This elevated stretch of road provides panoramic views east towards the coast. It is the coastal view (as opposed to the view south towards the expanding suburban area of Balbriggan) that the designation seeks to protect/preserve. The site is not visible from the designated stretch of the road.

Eight viewpoints were selected for visual impact assessment informed by verified photomontages (see Figure 10.13 below). The selection of the views took account of the survey and analysis of the site and surrounding landscape (see Sections 10.5.2 and 10.5.3) and review of relevant policy (Section 10.5.4).

The landscape of the 7.15 ha site (mostly greenfield, although disturbed in places by construction on adjoining lands) would be permanently transformed by the construction 197 no. new dwellings, a 'village

centre' (comprised of a shop and café), ancillary infrastructure and a network of open spaces, forming part of a large new residential neighbourhood at the edge of Balbriggan. The site is prominently located adjacent to the Clonard Road at a gateway into the urban area, and alongside the the future C Ring Road, Taylor Hill Boulevard and a stretch of the L1130 local road. However, the receiving environment is already in the process of change, with three permitted developments (known as Ladywell Phases 3A, 3B and 3C) located on the same parcel of land contained between the Clonard Road, the C Ring Road, Taylor Hill Boulevard and the L1130. The development would therefore *contribute* to an ongoing, large-scale landscape change, as opposed to *causing* such a change itself. Therefore, the magnitude of landscape change in the operation phase of the development can be classified 'medium'.

Figure 3.1: Viewpoints for visual impact assessment



The viewpoints were chosen to allow for assessment of the proposal's interface with the surrounding roads and neighbouring developments (planned and existing), its impact on pre-existing houses in the area and its treatment of the site's existing landscape assets.

the predicted impacts are the same as the potential impacts described in Section 10.6.3 above. The impacts are summarised in Table 10.7 overleaf.

Table 3.1: Summary of predicted visual impacts (construction and operational phases)

Viewpoint Location	Viewpoint Sensitivity	Proposed Development CONSTRUCTION PHASE (Temporary)		Proposed Development OPERATION (Permanent)		Cumulative (with permitted Ladywell Phases 3A, 3B and 3C)	
		Magnitude of Change	Significance of Effects	Magnitude of Change	Significance of Effects	Magnitude of Change	Significance of Effects
01 R122/Clonard Road approaching the site (and Balbriggan) from the M1	Medium	Medium	Slight Negative	Medium-High	Significant Positive	n/a	n/a
02 Entrance to house across the R122/Clonard Road from the site	Medium	Medium	Slight Negative	Medium-High	Significant Positive	n/a	n/a
03 Taylor Hill Boulevard approaching site frontage from the Clonard Road to the south	Low-Medium	Low	Slight Negative	Medium	Moderate Positive	Medium	Moderate Positive
04 Taylor Hill Boulevard approaching site from the north	Low-Medium	Low	Slight Negative	Medium	Moderate Positive	High	Significant Positive
05 Taylor Hill Gardens	Medium	Medium	Slight Negative	Medium-High	Significant Positive	High	Significant Positive
06 L1130 at 'House 2'	Medium	Medium	Slight Negative	Medium-High	Moderate Positive	n/a	n/a
07 L1130 at 'House 3'	Medium	Medium	Moderate Negative	Medium-High	Moderate Neutral	Medium-High	Moderate Neutral
08 L1130 approaching the site from the north	Low-Medium	Medium	Slight Negative	Medium-High	Moderate Positive	Medium-High	Moderate Positive

3.9 Material Assets – Traffic

The Ladywell site is located west of Balbriggan, on lands generally bounded by the R122 in the south, a local road, L1130 in the west, the planned Balbriggan Ring Road in the north and Boulevard Road in the east. The site is a ca 12-hectare greenfield site and has been zoned 'RA – Residential' in the Fingal Development Plan 2023-2029. A large part of the site has been granted planning permission for residential development, which has been henceforth referred to as Phase 3. The current proposed development, referred to as Phase 4, shall take up the northern, western and southern extremities of the site, connecting to the respective fringes of the permitted Phase 3 development and partially replacing it.

The proposed residential units will be accompanied by associated pedestrian, cycle, and car circulation and parking facilities (provided in accordance with appropriate Development Plan standards). Figure 11.12 (overleaf) illustrates the current proposed site layout, with a to-scale drawing included in the submission package. The figure provides an overview of the proposed new vehicular site accesses, routes of the internal streets and footpaths and the general location of the various housing types and associated car parking facilities.

It should be noted that Phase 4 development will, if completed, result in an increase in the total number of residential units across the Ladywell site from 306 no. (as per the Phase 3 Masterplan altered in accordance with the Phase 3B application [FCC Reg. Ref. F22A/0526]) to 434 no. units (a net increase of 128 no. units or 42%), while the ancillary local centre (i.e. commercial/ retail) component will be reduced from 540 sqm to 350 sqm.

The delivery of the proposed Phase 4 (including changes to the permitted Phase 3) would result in all-day vehicular trip generation of the residential units at Ladywell to increase from ca. 1,742 no. to ca. 2,475 no. trips on an average day, compared to the previously permitted Phase 3.

Overall, the expected impact of the proposed development, relative to what is currently permitted, is deemed immaterial. Accordingly, the superseding of the previously planned (and partially permitted) Ladywell Phase 3 development by the currently proposed Phase 4 is deemed unlikely to result in a substantially more significant impact on the adjacent road network.

A total of 6 no. committed and proposed developments have been identified within the application site's wider environs, that could potentially generate an impact upon the local road network beyond that captured by the future background traffic growth assumptions.

The Flemington Lane residential scheme (item 4, detailed in Section 11.5.3 of Volume II of the EIAR) has been deemed to generate excess traffic beyond the assumed background traffic growth factors, and therefore it has been individually accounted for in the analysis. The remaining identified third-party developments will not give rise to measurable cumulative impacts.

3.10 Material Assets – Utilities

The site of the proposed development is currently a greenfield site. The land bounded to the East and north (partially) by phase 3 under construction and to the west by the Clonard Road.

There is no existing surface water network with the existing site. It is evident that existing rainwater drainage from the site is by means of direct infiltration and percolation into the existing agricultural ground. It is proposed to use a sustainable urban drainage system (SuDS) approach to stormwater management throughout the site.

The local groundwater flow direction is likely to mirror the site topography and catchment drainage. The greenfield run off from the site travel in a Southern direction.

It is proposed to discharge surface water from the site to the existing surface water field drain which then discharges to the existing Fingal County council surface water network.

The entire development will be constructed as one phase which is under the ownership of the applicant. The current site will be one catchment areas and will be attenuated to reflect the greenfield run off rate.

There are no records or evidence of any foul water infrastructure within the proposed site. There are no records or evidence of any existing watermain pipeline located within the proposed site.

A new substation will be provided to serve this development. The proposed substation will provide power to a few mini pillars which will provide power to the residential dwellings. Refer to Figure 12.5 below for the existing records of ESB.

The foul water drainage system for the proposed development has been designed in accordance with the Irish Water Code of Practice and will be separate to the surface water drainage system.

The proposed watermain network has been designed to comply with Uisce Eireann specification. Individual houses will have their own connections to the distribution main via service connections and boundary boxes. Individual service boundary boxes will be of the type to suit Uisce Eireann and to facilitate possible future domestic meter installation.

The construction stage of the proposed development will comprise of site clearance and preparation, excavation and the construction of the proposed development over three phases of development. The potential impacts associated with the construction stage of the proposed development on material assets are likely to be temporary and will cause minor disturbance. Provided mitigation measures are adhered to the construction phase of the proposed development will likely have a neutral, short-term, moderate impact.

The proposed development will have a positive impact on the surrounding environment by providing much needed housing in the area and meeting the needs of the growing population.

The loading on the wastewater and watermains from the proposed development will be adequately accommodated in the foul and watermain network.

In compliance with the SUDS manual the runoff from the development will mimic the existing greenfield run off therefore, it will likely have a neutral, permeant, imperceptible impact.

3.11 Material Assets – Waste Management

This chapter evaluates the likely impacts, if any, which the proposed development may have on Material Assets (related to waste management) as defined in the EIA Directive (Directive 2011/92/EU as amended by Directive 2014/52/EU) and the Environmental Protection Agency (EPA) Guidelines on the information to be contained in Environmental Impact Assessment Reports (2022).

The assessment of the impacts of the proposed Development, arising from the consumption of resources and the generation of waste materials, was carried out taking into account the methodology specified in relevant guidance documents, along with an extensive document review to assist in identifying current and future requirements for waste management, including national and regional waste policy, waste strategies, management plans, legislative requirements and relevant reports.

A full description of the proposed Development can be found in Chapter 2 (Description of the Proposed Development). The characteristics of the proposed Development that are relevant in terms of waste management are summarised below.

Construction & Demolition Phase

There will be waste materials generated from the demolition and refurbishment of some of the existing buildings and hardstanding areas on site, as well as from the further excavation of the building foundations.

During the construction phase, waste will be produced from surplus materials such as broken or off-cuts of timber, plasterboard, concrete, tiles, bricks, etc. Waste from packaging (cardboard, plastic, timber) and oversupply of materials may also be generated. As well as this waste will also be generated from construction phase workers e.g. organic / food waste, dry mixed recyclables (wastepaper, newspaper, plastic bottles, packaging, aluminium cans, tins and Tetra Pak cartons), mixed non-recyclables and, potentially, sewage sludge from temporary welfare facilities provided on-site during the Construction phase. Waste printer / toner cartridges, waste electrical and electronic equipment (WEEE) and waste batteries may also be generated in small volumes from site offices.

There will be topsoil and subsoil excavated to facilitate construction of new foundations and the installation of underground services. The project engineers, Paul McGrail Consulting Engineers, have estimated that c. 25,939.14 m³ of material (topsoil and subsoil) will need to be excavated to do so. It is currently envisaged that c.12,740.42m³ the excavated material will be able to be retained and reused on site. It is currently envisaged that c. 13,198.72m³ material will need to be removed off-site. When material is required to be taken offsite it will be taken for appropriate off-site reuse, recovery, recycling and / or disposal.

Further detail on the waste materials likely to be generated during the excavation and construction works are presented in the project-specific Construction & Demolition Resource & Waste Management Plan (RWMP) (Appendix E 13.2 Volume III of the EIAR). The RWMP provides an estimate of the main waste types likely to be generated during the Demolition and Construction phase of the proposed development.

Operational Phase

An Operational Waste Management Plan has been prepared (Appendix E Volume III of the EIAR) which provides a strategy for segregation (at source), storage and collection of wastes generated within the development during the operational phase including dry mixed recyclables, organic waste, mixed non-recyclable waste and glass as well as providing a strategy for management of waste batteries, WEEE, printer/toner cartridges, chemicals, textiles, waste cooking oil, furniture and abandoned bicycles (Appendix E 13.2 Volume III of the EIAR). The Plan complies with all legal requirements, waste policies and best practice guidelines and demonstrates that the required storage areas have been incorporated into the design of the development.

The OWMP seeks to ensure the development contributes to the targets outlined in the National Waste Management Plan for a Circular Economy 2024 - 2030 (NWMPE) (2024) Waste Action Plan for a Circular Economy – Waste Management Policy in Ireland and the DLRCC waste Byelaws.

The potential impacts of construction and environmental control measures proposed have been identified as follows:

- Incorrect waste storage - vermin, litter and pollution
- Unauthorised waste contractors and facilities - illegal dumping and pollution
- Incorrect classification of excavated material - pollution of water and soil environments

The potential impacts of operational and environmental control measures proposed have been identified as follows:

- Insufficient waste management and insufficient storage capacity - Increased landfill dependency and unnecessary use of landfills, litter, pollution and vermin.
- Unauthorised waste contractors and facilities - illegal dumping and pollution

A carefully planned approach to waste management as set out in Section 18.5 and adherence to the RWMP (which include mitigation) during the construction phase will ensure that the predicted effect on the environment will be short-term, imperceptible and neutral.

During the operational phase, a structured approach to waste management as set out in Section 13.5 (of Volume II of the EIAR) and adherence to the OWMP (which include mitigation) Appendix E Volume III of the EIAR will promote resource efficiency and waste minimisation. Provided the mitigation measures 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, imperceptible and neutral.

Assuming the full and proper implementation of the mitigation measures set out herein and in the C&D RWMP (Appendix E 13.1) and the OWMP (Appendix E 13.2), which are both contained in Appendix E Volume III of the EIAR, no likely significant negative effects are predicted to occur as a result of the construction or operational of the proposed Development.

3.12 Archaeology, Architecture and Cultural Heritage

The proposed development area is located within the townlands of Clogheder and Clonard or Folkstown Great, Parish of Balrothery and Barony of Balrothery East, County Dublin. It is situated c. 1.5km west of the centre of Balbriggan and located within lands that are zoned for residential development within the Fingal County Development Plan (2023-2029).

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There are no recorded monuments located within the proposed development area. The closest recorded monument comprises the site of a pit (RMP DU001-029) recorded c. 23m to the southeast of the northern site. This site has since been subject to further archaeological investigation and was found to be natural. An enclosure, likely to represent an early medieval ringfort, is located c. 115m to the west (RMP DU001-027). There are no protected structures located within 500m of the proposed development area. Similarly, no structures listed within the National Inventory of Architectural Heritage are located within 500m.

Cultural heritage features within the proposed development area include the townland boundary between Clonard or Folkstown Great and Clogheder traversing the southern site. The townland boundary is largely intact and partially follows the route of the Clonard Stream.

A review of the Excavations Bulletin (1970–2024) has revealed that a geophysical survey was carried out within portions of the proposed development area, followed by an extensive programme of archaeological testing in 2007. This work identified 38 varied archaeological sites including enclosures, pits, linear features, and burnt spreads across the wider landscape, including the enclosure (DU001-027) located to the west. None of the sites identified were located within the proposed development area.

An inspection of the cartographic sources revealed that the proposed development area occupied a rural landscape throughout the post-medieval period. The Clonard Stream traverses a portion of the development area (southern site) and forms part of the townland boundary between Clonard or Folkstown Great and Clogheder. The small settlement of Clonard is also partially within the southeastern extent of the proposed development comprising a number of structures marked on either side of the stream within the historic Ordnance Survey maps. Structures at this location may have related to milling activity, but they have since been removed from the landscape.

Analysis of the aerial photographic coverage of the site failed to identify any previously unrecorded sites within the lands. The northern site experienced ground disturbance associated with the Taylor Hill development in 2019 while the northern extent of the southern site experienced disturbance associated with a school development to the immediate north.

A field inspection has been carried out as part of the assessment. This failed to result in the identification of any previously unrecorded sites of archaeological, architectural or cultural heritage potential. The stream within the southern portion of the proposed development area possesses some archaeological potential, due to the fact that such landscape features often attract activity settlement.

A geophysical survey has been carried out within the previously un-investigated part of the southern site (Leigh 2024, Licence No. 24R0031). This confirmed potential archaeological anomalies that may represent the remains of burnt mounds, adjacent to the stream. Archaeological testing was carried out in this area in June 2024

Following the implementation of mitigation measures, no significant impacts are predicted upon the archaeological resource.

No impacts are predicted upon the architectural or cultural heritage resource as a result of the construction of the proposed development.

There are no impacts predicted upon the archaeological, architectural or cultural heritage resource as a result of the operation of the proposed development.

3.13 Risk Management

The Construction Environmental Management Plan, submitted with the application, as well as good housekeeping practices will limit the risk of accidents during construction. Fire safety will be dealt with under the Fire Safety Code at design and construction stage. The estate management company will have responsibility for fire safety during operations. In relation to falls these have been dealt with during design.

Through the implementation of mitigation measures, there are no identified incidents or examples of major accidents and or natural disasters that present a sufficient combination of risk and consequence that would lead to significant residual impacts or environmental effects.

Works on the public road, and the laying of underground pipes would be carried out on behalf of the relevant statutory undertakers and would be subject to separate construction management plans.

The cumulative interactions with Population and Human Health, Land, Soils, Geology and Hydrogeology, Surface Water, Noise, Climate and Air, Material Assets, Traffic and Transport, Landscape and Visual, and Cultural Heritage. However, subject to implementation of mitigation measures, good working practices and codes, the interactions between these areas have been sufficiently considered in relation to risk management.

3.13.1 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 3-15 which deal with 'Aspects of the Environment Considered'. No significant adverse impact is predicted to arise from the use of natural resources.

3.13.2 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 in the relevant in Chapters 3-15 which deal with 'Aspects of the Environment Considered'. There will be no significant direct or indirect effects arising from these sources.

3.13.3 Forecasting Methods Used for Environmental Effects

The methods employed to forecast the 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.

3.13.4 Technical Difficulties Encountered in compiling any specified information

No particular difficulties, such as technical deficiencies or lack of knowledge, were encountered in compiling any of the specified information contained in this report such as that a prediction of impact has not been possible.

4.0 CUMULATIVE IMPACTS

The EIAR where relevant the EIAR also takes account of other development within the area. These impacts have been addressed in the relevant chapters of the EIAR.

To determine traffic impacts in Chapter 11 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. adjacent to the north).

For the noise impact assessment in Chapter 9 the potential noise emissions arising from the proposed development during construction and operation are combined (using cumulative AADT figures from Traffic chapter) with background noise levels (predominantly road traffic) were assessed.

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.

There will be some short-term impacts during the construction phase as the pipes are laid, particularly in respect of traffic management with regards to sensitive receptors. This may cause local short-term inconvenience and disturbance to residents and business in the vicinity of the works. However, the works would normally be undertaken in sections on a phased/rolling programme so that the number of persons experiencing local inconveniences at any one time is kept to a minimum.

5.0 INTERACTIONS BETWEEN ENVIRONMENTAL FACTORS

Chapter 15 of the EIAR (Volume II) provides detail on the interaction and interdependencies in the existing environment. John Spain Associates 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.

In addition to the individual assessments of impacts on human beings, fauna and flora, soil, water, air, climate factors, the landscape and material assets, including architectural, archaeological and cultural heritage, the inter-relationships between these factors was also taken into account as part of the EIAR scoping and impact assessment. Where the potential exists for interaction between two or more environmental topics, the relevant specialists have taken these potential interactions into account when

making their assessment and, where possible, complementary mitigation measures have been proposed. These are set out in Chapter 16 of the EIAR (Volume II).

The primary interactions can be summarised as follows:

Landscape design, engineering services with biodiversity and archaeology;
Visual impact with biodiversity;
Biodiversity with water and soils;
Noise and vibration and traffic; 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 EIAR, most inter-relationships are neutral in impact when the mitigation measures proposed are incorporated into the design, construction or operation of the proposed development.

6.0 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 Fingal County Council and all other interested parties.

RECEIVED: 06/08/2024