30/04/2024LRD0039/S3
FINGALCOCOPLANN DEPT

BALLYMASTONE PHASE 2 LRD

ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR) VOLUME 1: NON-TECHNICAL SUMMARY (NTS)

BSM Est. 1968
Brady Shipman Martin
Built. Environment.

Environmental Assessment **Built Environment**

Client: Glenveagh Living Limited

Date: 29 April 2024

DOCUMENT CONTROL SHEET

6884_RPEIA01_Environmental Impact Assessment Report (EIAR) Volume 1: Non-technical Summary (NTS)

Project No.	6884
Client:	Glenveagh Living Limited
Project Name:	Ballymastone Phase 2 LRD
Report Name:	Environmental Impact Assessment Report (EIAR) Volume 1: Non-technical Summary (NTS)
Document No.	RPEIA01
Issue No.	01
Date:	29/04/2024

This document has been issued and amended as follows:

Issue	Status	Date	Prepared	Checked
01	Draft	29 Apr 2024	NK; Various	TB

CONTENTS

1 Introduction 1-1

2 The Environmental Impact Assessment Process 2-1

3 Planning & Development Context 3-1

4 Consideration of Alternatives 4-1

5 Description of the Proposed Development 5-1

6 Consultation 6-1

7 Population & Human Health 7-1

8 Biodiversity 8-1

9 Land, Soils, Geology & Hydrogeology 9-1

10 Hydrology 10-1

11 Air Quality 11-1

12 Climate 12-1

13 Noise & Vibration 13-1

14 Landscape & Visual 14-1

15 Cultural Heritage, Archaeology & Architectural Heritage 15-1

16 Microclimate – Daylight & Sunlight 16-1

17 Microclimate – Wind 17-1

18 Traffic & Transportation 18-1

19 Material Assets – Waste 19-1

20 Material Assets – Services 20-1

21 Interactions 21-1

22 Cumulative Impacts 22-1

23 Mitigation Measures & Monitoring 22-1

1 Introduction

An Environmental Impact Assessment Report (EIAR) provides a statement of the effects that the proposed Large-scale Residential Development (LRD) at Ballymastone in Donabate, Co. Dublin ('the proposed development'), if carried out, would have on the environment. It has been prepared in accordance with the provisions of the Planning and Development Act 2000 – 2023 ('PDA 2000'), the Planning and Development Regulations 2001 – 2023 ('PDR 2001') and the relevant guidance documents, as detailed herein.

This document is a non-technical summary (NTS) of the Environmental Impact Assessment Report (EIAR), prepared to facilitate the dissemination of the information presented in the Environmental Impact Assessment Report to the general public. It shall endeavour, insofar as possible, to present a condensed summary of the Environmental Impact Assessment Report, using non-technical terms, but without omitting or understating any environmental effects of note.

1.1 The Proposed Development

The proposed development will consist of the construction of a residential development, which represents Phase 2 of a wider development of the Ballymastone Lands (as identified in the Donabate Local Area Plan 2016 (as extended)) and is a continuation of Phase 1 of the Masterplan lands (permitted under LRD0008/S3). The proposed development ranges in height from 2 to 6 storeys to accommodate 364 residential dwellings (including a mix of apartments, duplexes and houses), and public open space. The site will accommodate car parking spaces, bicycle parking spaces, storage, services, new pedestrian/cycle links, road improvements and plant areas. Landscaping will include communal amenity areas, and a significant public open space provision.

The Applicant is Glenveagh Living Limited.

1.2 Site of the Proposed Development

The proposed development site, which has a stated area of 13.74Ha is situated in the coastal town of Donabate, c. 20 km north-east of Dublin City and 10km north-east of Dublin Airport, on the northern margin of the Dublin Metropolitan Area. The site is situated in the administrative area of Fingal County Council, in the townlands of Ballalease North, Portraine Demesne, Ballymastone and Ballisk.

The site, which is situated on the eastern margin of Donabate town, is predominantly comprised of disused agricultural land, criss-crossed by hedgerows and drainage ditches. The site is bounded to the west and north by existing residential development. The Donabate burial grounds are to the north-west of the site. **Figures 1.1** and **1.2**, below, illustrate the location of the proposed development site. The site is also bound immediately to the south and south-east by lands that form part of a Large-scale Residential Development (LRD) comprising 432 residential units and all associated site works, permitted by An Bord Pleanàla on the 28 March 2023 (FCC Ref. LRD0008/S3 & ABP Ref. 315288). The site is also bound by Recreational Hub (Part 8 – approved) to the east of the site.

The subject lands are undeveloped and greenfield in nature and situated to the west of the Donabate Distributer Road (DDR). St Patrick's GAA complex and a permitted recreational hub at Ballymastone (undeveloped) lie on the opposite side of the DDR and in proximity to the site. Further undeveloped lands which will potentially form Phase 3 of the Ballymastone development lie to the north. Extant

development within the settlement of Donabate lies to the west and comprises the residential estates of The Links, while Priory Wood, Willowbrook.

Figure 1.1 Location of the proposed development

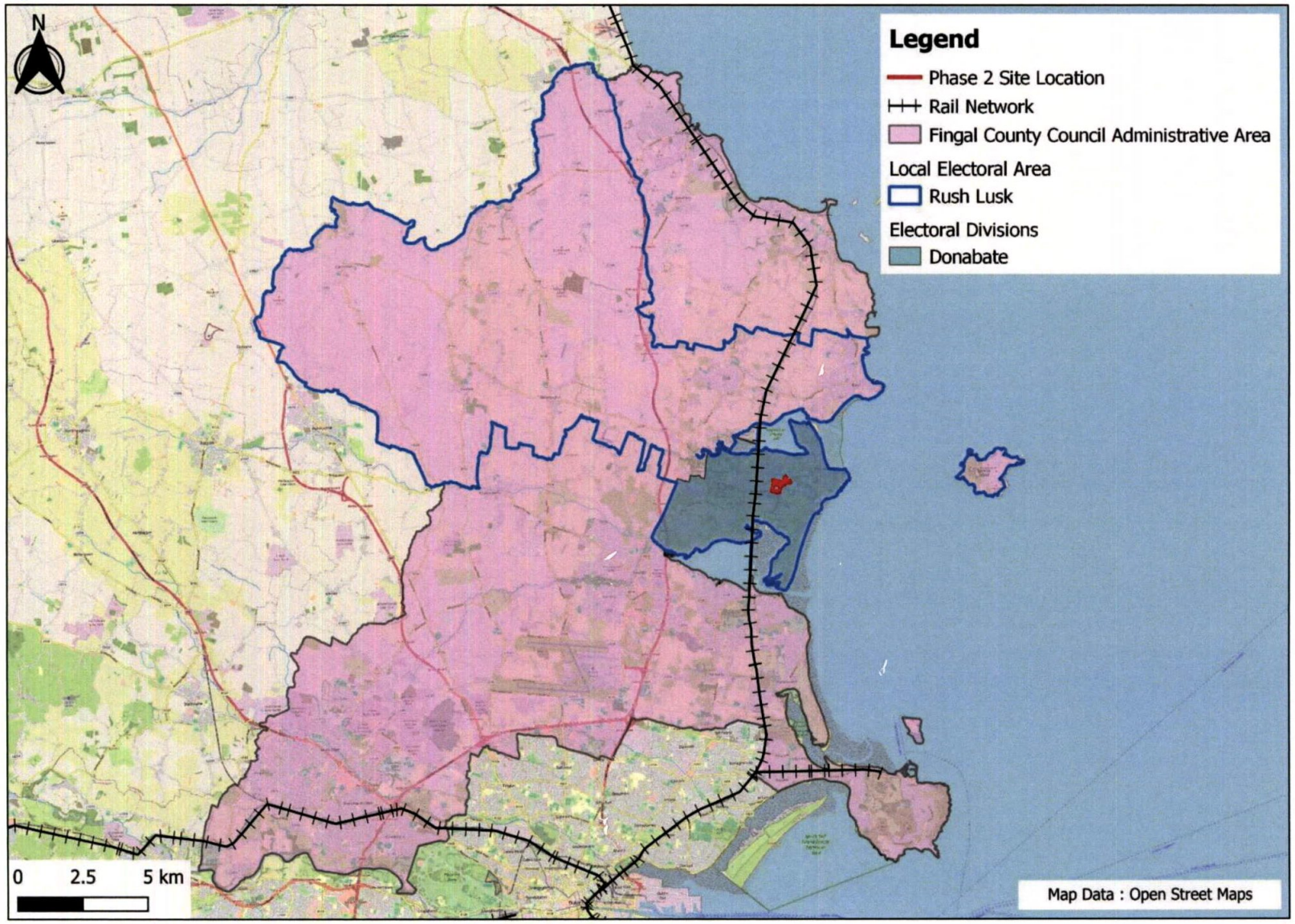
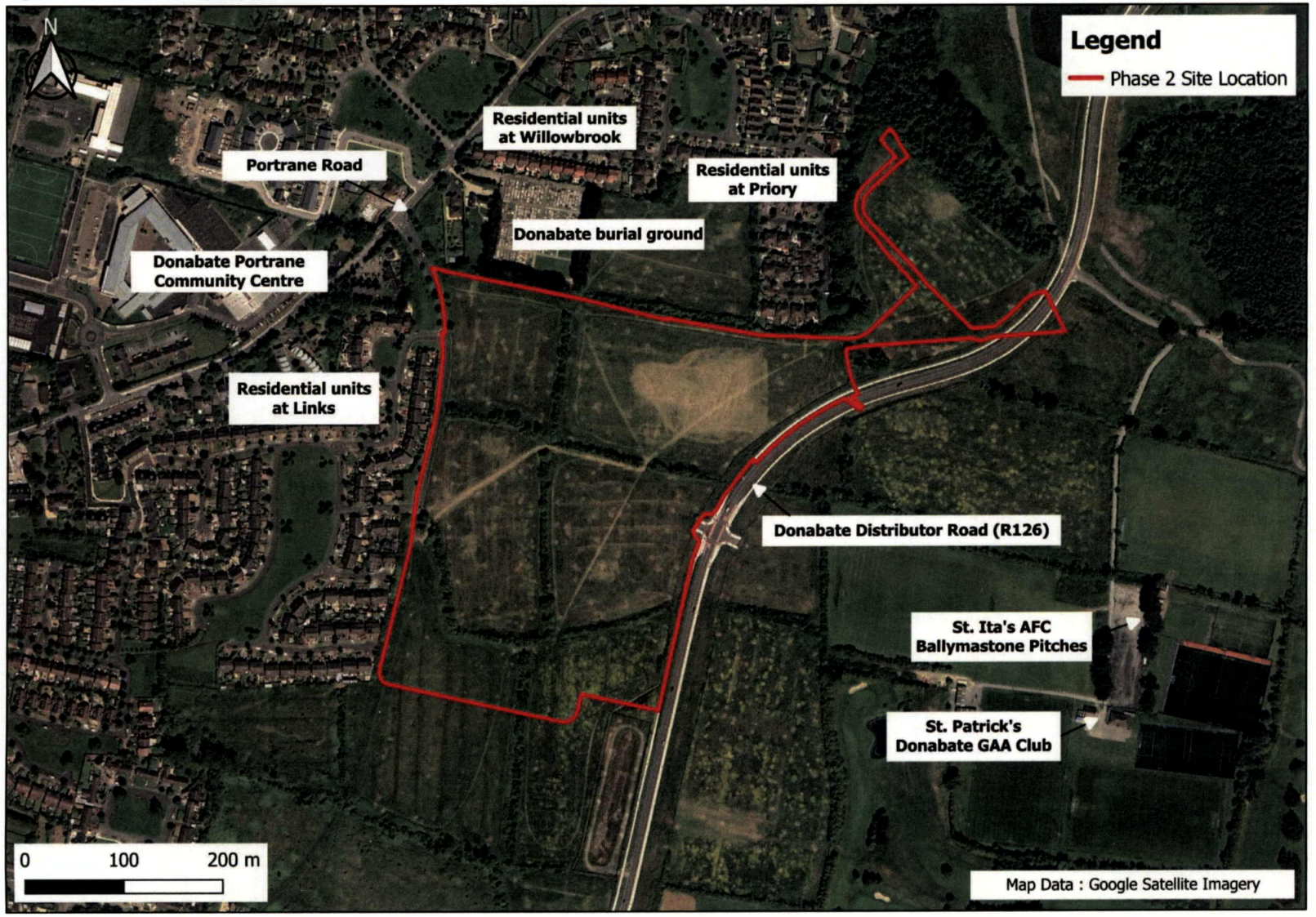


Figure 1.2 Site of the proposed development



1.3 Format & Structure of the Environmental Impact Assessment Report

The EIAR has been completed in accordance with the requirements as set out in the EIA Directive, (2011/92/EU), as amended by Directive 2014/52/EU and relevant guidelines and documentation. The composition of this EIAR is in accordance with EPA Guidelines (2022) which requires that information contained within an EIAR should be in accordance with Article 3(1), Article 5(1) and any additional information specified under Annex IV under the Directive 2014/52/EU. Refer to **Table 1.1** below for the structure of this EIAR.

Table 1.1 Structure of the EIAR

Section	Description
Volume 1:	**Non-technical Summary (NTS)**
A summary of the EIAR in non-technical language	
Volume 2:	**Main Report**
Chapter 1	Introduction
Chapter 2	The EIA Process
Chapter 3	Planning & Development Context
Chapter 4	Consideration of Alternatives
Chapter 5	Description of the Proposed Development
Chapter 6	Consultation
Chapter 7	Population & Human Health
Chapter 8	Biodiversity (Flora & Fauna)
Chapter 9	Land, Soils, Geology & Hydrogeology
Chapter 10	Hydrology
Chapter 11	Air Quality
Chapter 12	Climate
Chapter 13	Noise & Vibration
Chapter 14	Landscape & Visual Impact
Chapter 15	Cultural Heritage, Archaeology & Architectural Heritage
Chapter 16	Microclimate – Daylight & Sunlight
Chapter 17	Microclimate – Wind
Chapter 18	Traffic & Transportation
Chapter 19	Material Assets – Waste
Chapter 20	Material Assets – Services
Chapter 21	Interactions
Chapter 22	Cumulative Impacts
Chapter 23	Mitigation Measures & Monitoring
Volume 3:	**Appendices**
Technical reference material supporting the EIAR chapters	

1.3.1 The Environmental Impact Assessment Team

The EIAR was coordinated by Brady Shipman Martin (BSM). Various environmental specialists were commissioned to complete the specialist chapters of the EIAR, as required by Directive 2014/52/EU on the assessment of the effects of certain public and private projects on the environment. A description of experts who have contributed to this EIAR, their qualifications, experience and any other relevant credentials is provided in **Table 1.2.**

Table 1.2 EIAR contributors

Name	Company	Role / input	Qualifications
Pauline Byrne	BSM	Project Manager	**BSc Mgmt., Adv. Dip. Marketing, MA Regional & Urban Planning** ■ Head of Planning ■ Member of Royal Town Planning Institute (MRTPI) ■ Member of Irish Planning Institute (MIPI) ■ Over 20 years of experience
Thomas Burns	BSM	EIAR technical review	**B.Agr.Sc. (Land.) Dip. EIA Mgmt., Adv. Dip. Plan. & Env. Law** ■ Environmental Planner and Landscape Architect ■ Member of Irish Landscape Institute & Irish Environmental Law Association ■ Over 30 years of experience in EIA and LVIA
Namrata Kaile	BSM	EIAR Co-ordinator; Background chapters; Population & Human Health	**BSc Life Sciences, MSc Env. Sciences** ■ Environmental Consultant & Ecologist ■ Associate Member CIEEM ■ Over 4 years of experience
Matthew Hague	BSM	Biodiversity; Appropriate Assessment Screening & Natura Impact Statement	**BSc, MSc, Adv. Dip. Plan. & Env. Law** ■ Associate & Senior Ecologist ■ Chartered Environmentalist – CEnv ■ MCIEEM ■ Member of Irish Environmental Law Association ■ Over 20 years of experience
Laura Giffney	BSM	Planning & Development Context	**BSc Spatial Planning** ■ Graduate Planner ■ Member of Royal Town Planning Institute (MRTPI) ■ Member of Irish Planning Institute (MIPI) ■ Over 1 year of experience
Chloe Richards	AWN Consulting	Land, Soils, Geology & Hydrogeology;	**BSc in Analytical Science and a PhD in Environmental Chemistry** ■ Senior Environmental Consultant

Name	Company	Role / input	Qualifications
		Hydrology	▪ Member of the International Association of Hydrogeologists ▪ Worked on a wide of range of projects including multi-aspect environmental investigations, geo-environmental impact assessments, environmental impact assessment reports, hydrological and hydrogeological risk assessments, flood risk assessments and ArcGIS mapping.
Luke Maguire	AWN Consulting	WFD Assessment & HRA Assessment	**B.Sc. in Geoscience from Trinity College Dublin** ▪ Environmental Consultant at AWN with over 2 years of experience ▪ Worked on a range of developments including pharmaceutical plants, medical device facilities, ICT facilities and energy projects. ▪ Experience in contaminated soil sampling and analysis, basement impact assessments and largescale dewatering processes.
Teri Hayes	AWN Consulting	Land, Soils, Geology & Hydrogeology; Hydrology	**BSc MSc PGeol EurGeol, Dip Planning & Environmental Law** ▪ Director and Senior Hydrogeologist with AWN Consulting with 25 years of experience in water resource management, environmental assessment and environmental licensing. ▪ Former President of The International Association of Hydrogeologists (IAH, Irish Group) and is a professional member of the Institute of Geologists of Ireland (IGI) and European Federation of Geologists (EurGeol). ▪ She has qualified as a competent person for contaminated land assessment as required by the IGI and EPA. ▪ Project experience includes managing Environmental Impact Statements, Environmental Licences and environmental reports for Industry, Infrastructure and residential developments. Teri has written and provided technical review and training on environmental programmes for both the public and private sector and has considerable experience in public presentations, stakeholder liaison and acting as a legal witness.
Aisling Cashell	AWN Consulting	Air Quality & Climate	**BA, MAI in Civil, Structural and Environmental Engineering from Trinity College Dublin** ▪ Environmental Consultant

Name	Company	Role / input	Qualifications
			▪ She is a Member of the Institute of Engineer's Ireland and has 1 year of experience specialising in the fields of air quality, climate, EIA, and air dispersion modelling.
Jovanna Arndt	AWN Consulting	Air Quality & Climate	**BSc in Environmental Science from University College Cork, PhD in Atmospheric Chemistry from University College Cork.** ▪ Senior Environmental Consultant ▪ She is an Associate Member of the Institute of Air Quality Management and the Institute of Environmental Sciences. She has 7 years of experience specialising in the fields of air quality, climate, EIA, and air dispersion modelling.
Chonaill Bradley	AWN Consulting	Material Assets - Waste	**Bsc ENV,PG Dip Circ Econ** ▪ Principal Environmental Consultant ▪ AssocCIWM ▪ 9+ Years of experience
Mike Simms	AWN Consulting	Noise and Vibration	**BE and MEngSc in Mechanical Engineering, University College Dublin** ▪ Principal Acoustic Consultant ▪ Institute of Acoustic Diploma in Acoustics and Noise Control. Corporate Member of the Institute of Acoustics ▪ Mike has worked in the field of acoustics for over 20 years. He has extensive experience in all aspects of environmental surveying, noise modelling and impact assessment for various sectors including, wind energy, industrial, commercial and residential.
Declan O'Leary	Cunnane Stratton Reynolds	Landscape & Visual	**B.Agr Sc. Land. Hort., Dip LA** ▪ Managing Director ▪ CLI, MILI ▪ Declan has over 30 years' experience in the design and analysis of landscape and the impacts of change, including the preparation of landscape and visual impact assessments for Environmental Impact Assessment Reports.
Prithvi Gowda	Cunnane Stratton Reynolds	Landscape & Visual	**B.Arch., MScUD&P, CPM.Dip** ▪ Assistant Urban Designer & Landscape Architect

Name	Company	Role / input	Qualifications
			▪ Prithvi Gowda has over 5 years experience working in a multi-disciplinary role within landscape and planning teams and has been involved in the preparation of numerous landscape and visual impact assessments over that period.
Ciaran McGuinness	Archer Heritage	Cultural Heritage, Archaeology & Architectural Heritage	**BA** ▪ Archaeologist ▪ Member Institute of Archaeologists of Ireland ▪ Over 20 years of experience
Aidan O'Connell	Archer Heritage	Cultural Heritage, Archaeology & Architectural Heritage	**CPA, MBA, Cert. Proj Mgm** ▪ Role – Project manager ▪ IOSH ▪ Over 26 years in archaeological consultancy
William O'Donnell	IN2 Engineering	Microclimate – Daylight & Sunlight	**BSc (Eng.) (Hons) C.Eng. MIEI, MCIBSE** ▪ Associate Director, Environmental and Sustainability Engineering ▪ Specialist in building simulation, and daylight and sunlight analysis with over 17 years' experience. ▪ Chartered Engineer ▪ Member of Engineers Ireland (IEI) ▪ Member of Chartered Institute of Building Services Engineers (CIBSE) ▪ Director, Board of Irish Green Building Council (IGBC)
Seulgi Lee	IN2 Engineering	Microclimate – Daylight & Sunlight	**BSc (Arch/ Int. Des) PG MA (Arch/ Int. Des.)** ▪ Environmental Engineer, with over 7 years' experience, now specialising in daylight and sunlight analysis. ▪ Member of Engineers Ireland (IEI)
Dr. Cristina Paduano	B-Fluid	Microclimate - Wind	**M.Eng and B.Eng in Aerospace Engineering, PhD in Mechanical Engineering** ▪ Director ▪ Chartered Engineer (CEng) ▪ 18 years in construction industry

Name	Company	Role / input	Qualifications
Dr. Patrick Okolo	B-Fluid	Microclimate - Wind	**M.Sc. and B.Sc. in Mechanical Engineering** ■ Director ■ Chartered Engineer (CEng) ■ Urban environment and wind tunnel measurements
Dr. Guido Lupieri	B-Fluid	Microclimate - Wind	**M.Sc in Physics, PhD in Applied Geophysics and Hydraulics** ■ CFD modelling specialist ■ 20 years in fluid mechanics
Aimee Dunne	DBFL Consulting Engineers	Traffic & Transportation	**Civil & Environmental Engineering (MEng) Heriot-Watt University Edinburgh (2010) Cili Engineering Technology (BEngTech) DIT (2007)** ■ Chartered Transport Engineer ■ CEng MEng BengTech MIEI MIHE ■ 12 years experience
Susan Cormican	Ethos	Material Assets - Services	**MSc Building Services Engineering Brunel University B.Eng Exeter University** ■ Group Director Ethos Engineering ■ Chartered Engineer, Chartered Member of CIBSE ■ Susan's relevant project experience includes Residential schemes including Ballymun Regeneration, Stepaside Residential Development, Kevin St, Naas Road & Grand Canal Harbour. EIAR input on schemes such as DAA Visual Control Tower, National Maternity Hospital
Brendan Curran	DBFL Consulting Engineers	Material Assets - Services	**BEng (Hons) Civil, Structural and Environmental Engineering, University College Cork, 2018** ■ Civil Engineer ■ Chartered Engineer (2023) ■ 5+ years post college work experience

1.4 Impact Assessment Methodology

The assessment of impacts is based on the source-pathway-receptor model, which dictates that, for an environmental impact to occur, there must be a source, a receptor which is sensitive to the effect in question, and a pathway by which the effect can reach the receptor. Unless otherwise stated, the criteria for effect / impact characterisation are as per the Environmental Protection Agency (EPA)'s 2022 *Guidelines on the information to be contained in Environmental Impact Assessment Reports* (as set out in **Table 1.3**).

Table 1.3 Description of effects (adapted from EPA, 2022)

Criteria	Definition
Quality of Effects	
Positive	A change that improves the quality of the environment (for example, by increasing species diversity, improving reproductive capacity of an ecosystem, removing nuisances or improving amenities).
Neutral	No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.
Negative / adverse	A change that reduces the quality of the environment (for example, lessening species diversity, diminishing the reproductive capacity of an ecosystem, damaging health / property or causing nuisance).
Significance of Effects	
Imperceptible	An effect capable of measurement but without significant consequences.
Not significant	An effect that causes noticeable changes in the character of the environment but without significant consequences.
Slight	An effect that causes noticeable changes in the character of the environment without affecting its sensitivities.
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
Significant	An effect that, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.
Very significant	An effect that, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.
Profound	An effect that obliterates sensitive characteristics.
Extent and Context of Effects	
Extent	The size of the area, number of sites, or proportion of a population affected by an effect.
Context	Describes whether the extent, duration, or frequency will conform or contrast with established (baseline) conditions (i.e. *is it the biggest, longest effect ever?*)
Probability of Effects	
Likely	The effects that can reasonably be expected to occur because of a proposed development if all mitigation measures are properly implemented.
Unlikely	The effects that can reasonably be expected not to occur because of a proposed development if all mitigation measures are properly implemented.
Duration, Reversibility & Frequency	
Momentary	Effects lasting from seconds to minutes.
Brief	Effects lasting less than a day.
Temporary	Effects lasting less than a year.
Short-term	Effects lasting one to seven years.
Medium-term	Effects lasting seven to fifteen years.

Criteria	Definition
Long-term	Effects lasting fifteen to sixty years.
Permanent	Effects lasting over sixty years.
Reversible	Effects that can be undone (for example, through remediation or restoration).
Frequency	How often the effect will occur (e.g. once, rarely, occasionally, frequently, constantly, hourly, daily, weekly, monthly, annually, etc.).
Type of Effects	
Indirect / secondary	Impacts that are not a direct result of a proposed development, often produced away from the site or because of a complex pathway.
Cumulative	The addition of many minor or significant effects, including effects of other plans and / or projects, to create larger, more significant effects.
Do-nothing	The environment as it would be in the future should the proposed development not be carried out.
Worst-case	The effects arising from a proposed development in the case where mitigation measures substantially fail.
Indeterminable	When the full consequences of a change in the environment cannot be described.
Irreversible	When the character, distinctiveness, diversity or reproductive capacity of an environment is permanently lost.
Residual	The effect that will occur after the proposed mitigation measures have been implemented.
Synergistic	Where the resultant effect is of greater significance than the sum of its constituents (e.g. combination of SO_x and NO_x to produce smog).

2 The Environmental Impact Assessment Process

2.1 Overview

Environmental Impact Assessment (EIA) is a process involving a systematic analysis and assessment of the potential effects of a proposed development on the receiving environment. The requirement for Environmental Impact Assessment in the European Union stems from the EIA Directive, which aims to provide a high level of protection to the environment and human health. It requires that projects likely to have significant effects on the environment are subject to Environmental Impact Assessment, as part of the development consent process.

The Environmental Impact Assessment Report is the principal document upon which the Environmental Impact Assessment is based. It provides a statement of the effects that a proposed development, if carried out, would have on the environment.

Where required, the Environmental Impact Assessment Report is prepared by a Developer / Applicant for the purposes of a planning application for a proposed development. As part of the planning application, it is submitted to the planning authority (Fingal County Council, in this case), who uses the information provided therein to complete the Environmental Impact Assessment. The assessment, in the context of other considerations, informs the decision to grant or refuse planning permission.

2.2 Requirement for Environmental Impact Assessment

Parts 1 and 2 of Schedule 5 of the PDR 2001 list the classes of development for which EIA is required by default. In Part 1, major project classes (including industrial, chemical, energy, waste, infrastructural and intensive agricultural projects) are identified for the purposes of mandatory EIA. In Part 2, specific thresholds are cited; EIA is a requirement for projects of a class listed here that also meet or exceed the corresponding threshold (e.g. wind farms *"with more than 5 turbines or having a total output greater than 5 megawatts"*).

The proposed development is the second of three planned phases (Phase 2) of development planned on the wider Masterplan site under the ownership of the Applicant at Ballymastone.

The proposed development is not of a class of development listed in Part 1 of Schedule 5 of the PDR 2001 and, therefore, EIA is not a statutory requirement under this provision. However, the proposed development (Phase 2) does correspond with the classes of development listed in paragraphs 10(b)(i) and 10(b)(iv) of Part 2 of Schedule 5 of the PDR 2001. When considered together, the gross quantum of development proposed for Ballymastone Phase 1 (permitted under FCC Ref.: LRD0008/S3 & ABP Ref. 315288) and Ballymastone Phase 2 ('proposed development') exceeds the thresholds specified in relation to these classes of development, as detailed in **Table 2.1**, below.

Table 2.1 Statutory requirement for EIA under Part 2 of Schedule 5 of the PDR 2001

Provision (Part 2 of Schedule 5 of PDR 2001)	Proposed Development (Phase 2)	Previously permitted development (Phase 1)
Paragraph 10(b)(i): *"Construction of more than 500 dwelling units."*	c. 364 units	432 residential units permitted by An Bord Pleanàla (FCC Ref. LRD0008/S3 & ABP Ref. 315288).

Provision (Part 2 of Schedule 5 of PDR 2001)	Proposed Development (Phase 2)	Previously permitted development (Phase 1)
Paragraph 10(b)(iv): *"Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere."*[1]	Total site area c. 13.74Ha	c. 15.02 Ha

Therefore, under the provisions of the PDR 2001, EIA is a statutory requirement for the proposed development, and the Applicant is required to prepare an Environmental Impact Assessment Report.

2.3 Guidelines

This EIAR has been prepared in accordance with the aforementioned legislative provisions and the following guidelines, among others, as specified in the various specialist EIAR chapters:

- EPA (2022). *Guidelines on the information to be contained in Environmental Impact Assessment Reports;*
- EC (2017). *Environmental Impact Assessment of Projects. Guidance on the preparation of Environmental Impact Assessment Report*;
- EC (2017). *Environmental Impact Assessment of Projects. Guidance on Scoping*;
- EC (2017). *Environmental Impact Assessment of Projects. Guidance on Screening*;
- Department of Housing, Planning and Local Government (DHPLG) (2018). *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment;*
- DHPLG (2017). Circular letter PL 1/2017 – Advice on Administrative Provisions in Advance of Transposition;
- European Commission (EC) (1999). *Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions;*
- EC (2013). *Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment.*

In addition to the above-listed, legislation and guidance documents relating to topic-specific environmental assessments have been considered in the preparation of each specialist chapter, as detailed in the respective chapters.

2.4 Appropriate Assessment

A Natura Impact Statement has been prepared by BSM in respect of the proposed development, in accordance with the requirements of the Habitats Directive and the Birds Directive, and the PDA 2000.

The Natura Impact Statement has considered the potential impacts of a proposal by Glenveagh Living Ltd for a residential development at Ballymastone, Donabate, Co. Dublin on the integrity of European sites. This report concludes on the best scientific evidence that it can be clearly demonstrated that no elements of the project will result in any impact on the integrity or Qualifying Interests/Special Conservation Interests of any relevant European site, either on their own or in-combination with other plans or projects, in light of their conservation objectives.

1 Where 'business district' refers to a district within a city or town in which the predominant land use is retail or commercial use.

It is considered that the Natura Impact Statement provides sufficient relevant information to allow the Competent Authority (Fingal County Council) to carry out an Appropriate Assessment, and to reach a determination that the proposed development will not affect the integrity of any of the relevant European sites under Article 6 of the Habitats Directive (92/43/EEC) in light of their conservation objectives.

Please refer to Natura Impact Statement (BSM, 2024), submitted under separate cover as part of the planning application.

2.5 Site Specific Flood Risk Assessment

A Site Specific Risk Assessment (SSFRA) has been prepared in respect of the proposed development by DBFL Consulting Engineers (2024), in accordance with the OPW guidelines *The Planning System and Flood Risk Management – Guidelines for Planning Authorities* (2009). The key findings and conclusions of the SSFRA are summarised as follows:

> *"Following the flood risk assessment stages, it was determined that the Site is within Flood Zone C as defined by the Guidelines.*
>
> *It is concluded that the;*
>
> - *Residential development proposed is appropriate for the Site's flood zone category.*
> - *Planning System and Flood Risk Management Guidelines Sequential Approach is met and the 'Avoid' principal achieved.*
>
> *The development was concluded as having a good level of flood protection up to the 100-year return event. For pluvial floods exceeding the 100-year capacity of the drainage system then proposed flood routing mitigation measures are recommended."*

Please refer to the SSFRA (DBFL Consulting Engineers, 2024) submitted under separate cover as part of the planning application. Refer also to Chapter 10 (Hydrology).

2.6 Water Framework Directive (WFD)

A WFD screening has been undertaken by AWN Consulting Limited (2024), in respect of the proposed development in response to the requirements of the Water Framework Directive. Refer to Appendix 10.1, Volume 3 of the EIAR. The screening assessment concludes:

> *"The WFD assessment indicates that, based on the current understanding of the proposed development, there is no potential for adverse or minor temporary/ long-term or localised effects on the Rogerstown Estuary transitional waterbody. Therefore, it has been assessed that the proposed development will not cause any significant deterioration or change in water body status or prevent attainment, or potential to achieve, future good status or to meet the requirements and/or objectives in the second RBMP 2018-2021 (River Basin Management Plan) and draft third RBMP 2022-2027.*
>
> *The WFD assessment indicates that there is no potential for adverse or minor temporary or localised effects on the Swords groundwater body. Therefore, it has been assessed that it is unlikely that the proposed development will cause any significant deterioration or change on its water body status or prevent attainment, or potential to achieve the WFD objectives or to meet*

the requirements and/or objectives in the second RBMP 2018-2021 (River Basin Management Plan) and draft third RBMP 2022-2027.

No further assessment of WFD is recommended given that no significant deterioration or change in water body status is expected based on the current understanding of the proposed development during construction and operation."

3 Planning & Development Context

This Chapter of the Environmental Impact Assessment Report presents a review of the planning and development policy context at a national, regional and local level. The following policy documents of relevance have been discussed in relation to the proposed development in the main text of the Environmental Impact Assessment Report (Volume 2):

International

- United Nations Sustainable Development Goals (2015)

European

- Environmental Impact Assessment Directive (consolidated 2011/92/EU and 2014/52/EU);
- Birds (2009/147/EC) and Habitats Directive (92/43/EEC);
- EU Water Framework Directive (2000).

National

- Project Ireland 2040 – National Planning Framework and National Development Plan (2018);
- Sustainable Urban Housing: Design Standards for New Apartments (July 2023);
- Urban Development and Building Heights – Guidelines for Planning Authorities (2018);
- Design Manual for Urban Roads and Streets (2019);
- Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (2009);
- Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities (2024);
- The Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009);
- Climate Action Plan (2024);
- Childcare Facilities – Guidelines for Planning Authorities (2001);
- Housing for All – A New Housing Plan for Ireland (2021);
- Cycle Design Manual (2023);
- National Sustainable Mobility Policy (2022).

Regional

- Eastern & Midland Regional Assembly Regional Spatial & Economic Strategy 2019 – 2031;
- Fingal Development Plan 2023 – 2029;
- Transport Strategy for the Greater Dublin Area 2022 – 2042.

Local

- Donabate Local Area Plan (2016-2021, as extended to 2026);
- Ballymastone, Donabate Framework Plan (2018);
- Donabate Urban Framework Plan (2024).

Please refer to the accompanying EIAR and the Planning Report & Statement of Consistency for the proposed development, prepared by BSM and submitted under separate cover as part of the planning application, which details the consistency of the proposed development with the above listed planning and policy documents. The need for the proposed development is set out under national, regional and local policy documents and in summary includes:

- The Government's *National Planning Framework* (NPF) (2018) predicts that there will be a need for at least half a million additional homes in Ireland by 2040, in order to meet the needs of our growing population. In order to promote sustainable development, the NPF sets out a policy of compact growth, targeting 40% of new housing development within and close to the existing footprint of built-up areas;

- More recently (2021), the Government's housing plan, *Housing for All*, targets increased supply of new housing (an average of at least 33,000 per year to 2030) coupled with greater provision of affordable and social housing;

- The *Eastern & Midland Regional Assembly Regional Spatial & Economic Strategy 2019 – 2031* (RSES) targets the delivery of at least 50% of all new homes within or contiguous to the built up area of Dublin City and suburbs, with at least an additional 30% being delivered in other urban areas in the Region – which takes in Counties Longford, Westmeath, Offaly, Laois, Louth, Meath, Kildare, Wicklow and Dublin. The proposed development will contribute to the achievement of the population growth targets in the RSES, by providing a high-quality new residential development on lands zoned for this purpose by the Local Authority (Fingal County Council);

- Under the *Fingal Development Plan 2023 – 2029* the subject lands are located within the settlement boundary of Donabate. Donabate has been identified as a *'Self Sustaining Growth Town'* within Fingal and functions as part of the Dublin Metropolitan Area. As highlighted within the Development Plan, such towns will play a role in offering *'potential for increased residential densities at high quality public transport hubs and can accommodate average or above average growth to provide for natural increase, service and/or employment growth where appropriate'* (p. 83).

- The policies and objectives as stated in the *Fingal Development Plan 2023 – 2029* for Donabate town highlights the compact, sequential, sustainable growth of the area at appropriately identified locations. The Plan ensures the future development of Donabate in a sustainable manner to provide a high quality living environment for the existing and future population;

- Under the Development Plan, the site of the proposed development is predominantly zoned as 'RA – Residential Area' with the corresponding zoning objective to *"Provide for new residential communities subject to the provision of the necessary social and physical infrastructure"*;

- Under the Donabate Local Area Plan 2016-2021 (as extended to 2026), the site of the proposed development falls under the LAP lands. The LAP lands comprise approx. 138 hectares (340 acres) in four land parcels at Corballis (c. 65 ha), Ballymastone (c. 50.2 ha), Rahillion (c. 5.5 ha) and at Turvey (c. 16 ha), zoned 'RA' (to "Provide for new residential communities in accordance with approved local area plans and subject to the provision of the necessary social and physical infrastructure") under the Development Plan. The LAP establishes a framework for the planned, co-ordinated and sustainable development of these lands that is informed by the objectives of the Development Plan. It identifies the quantum, location and phasing of development for the plan period, in accordance with the population targets established under the RSES and the Core Strategy of the Development Plan.

4 Consideration of Alternatives

In accordance with Part 1(d) of Schedule 6 of the Planning and Development Regulations 2001, this Chapter of the Environmental Impact Assessment Report provides a *"A description of the reasonable alternatives studied by the person or persons who prepared the EIAR [Environmental Impact Assessment Report], which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment"*. As per the Environmental Protection Agency's 2022 Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, the alternatives are discussed under headings as follows:

- 'Do-Nothing' Alternative;
- Alternative Locations;
- Alternative Layouts;
- Alternative Designs;
- Alternative Processes;
- Alternative Mitigation Measures.

4.1 Do-Nothing Alternative

The 'Do-Nothing' alternative considers the likely scenario that would arise, assuming the proposed development were not progressed, i.e. if nothing were done. Note that this chapter discusses the Do-Nothing scenario in terms of development (or lack thereof) in the absence of the proposed development. The likely impacts of a Do-Nothing scenario in relation to the various environmental topics (e.g. architectural heritage, biodiversity, traffic and so on) are discussed in the respective chapters of this EIAR.

In this case, the Do-Nothing scenario might feasibly entail:

(a) A continuation of the existing status and use of the lands (predominantly disused agricultural land); or

(b) Development (likely residential) under the scope of a separate proposal and application at some point in the future.

The latter scenario (b) is considered somewhat more likely, taking into consideration the policy context (including the zoning and development objectives for the lands under the Fingal Development Plan 2023-2029 and Donabate Local Area Plan (LAP) 2016-2021 (as extended)) and significant demand for housing in the area.

4.2 Alternative Locations

The proposed development site is zoned as *'RA- Residential Area'* with the corresponding zoning objective to *'Provide for new residential communities subject to the provision of the necessary social and physical infrastructure'*, under the Fingal Development Plan 2023-2029 and the proposed development is consistent with the core strategy of the Development Plan. Taking into account the Local Authority zoning and development objectives, it is concluded that the site is suitable for the proposed development, which has been tailored to deliver site-specific development objectives.

At this location, the proposed development will deliver additional dwellings in a range of house types along with public and private open spaces and links to existing community facilities. The subject lands will gain benefit from existing transport, social and community infrastructure. It is considered that the site is entirely suitable for the nature of the proposed development, and it is not necessary to consider alternative locations or sites.

4.3 Alternative Layouts and Designs

A series of design iterations of the proposed development have been considered, as detailed in the main text of the Environmental Impact Assessment Report (Volume 2):

- Design Alternative 1;
- Design Alternative 2;
- Design Alternative 3;
- Design Alternative 4;
- Design Alternative 5- Final Layout.

The evolution of the design and layout for the proposed development has been an iterative process which involved the entire design team. The design has undergone rigorous appraisal, which has led to a final layout that responds appropriately to the site characteristics, opportunities and constraints. The final layout is presented in the Architectural Drawings and the Architectural Design Statement (McCauley Daye O'Connell Architects, 2024), which have been submitted under separate cover and should be read in conjunction with this chapter.

The subject application (Phase 2) forms part of a wider Masterplan for lands within the Ballisk, Ballymastone, Ballalease North & Portrane Demesne Townlands and is a follow on application to Pl Ref LRD0008-S3 which represents the permitted Phase 1 of the Masterplan. The overall scheme also builds on the Framework Plan for the Ballymastone development lands commissioned by Fingal County Council and prepared by Reddy Architecture (2018).

For the final layout, the positive elements of the previous layouts were maintained and some further amendments were included to improve the proposed development to provide for a new high quality residential development that responds appropriately to the site characteristics, opportunities and constraints. This includes:

- Character areas and neighbourhoods: Three distinct character areas were proposed with consideration given to the creation of smaller neighbourhood areas. The Phase 2 application contains within it 4 neighbourhoods; neighbourhoods B, D, E & G. The overall development is still considered on a masterplan basis, though individual Character Areas unction as standalone elements. Communal Amenity facilities were increased.
- Vehicular links: The Links Road Extension is to be completed as part of Phase 1 that serves Phase 2, in addition to the creation of the main avenue and junction to the DDR. The Links Extension was necessary in terms of 2 access points to the scheme for fire tender access. Construction of the development to the south (a potential third vehicular access point) remains out of Applicant's control / uncertain.
- Pedestrian / cycle links: A number of shared pedestrian and cycle routes were created as follows:
  - Along the Links Road (north-south)
  - From the western most point of phase 2 across to the DDR

- The East-West route to the recreation hub

  This provides good interconnectivity and front loads a number of service requirements that would be integrated into Phase 2. The straight line from the west to Baile Uisce was also restored.

- Density: Density results at 44.7 Units per NET hectare.
- Daylight: Apartments and Duplex comply with the latest regulations. Overshadowing analysis was also undertaken.

4.4 Alternative Processes

Having regard to the nature of the proposed development, this is not considered a relevant class of alternatives in this case.

However, the residential units will be detailed designed to comply with building regulations framework and the requirement to achieve Nearly Zero Energy Building (NZEB) standard for new developments.

4.5 Alternative Mitigation Measures

Where appropriate, alternative mitigation measures will be considered by the relevant specialist contributors to the EIAR.

5 Description of the Proposed Development

This Chapter of the Environmental Impact Assessment Report provides a general description of the site and its surrounds, sets out the need for the proposed development, and describes the proposed development – its design, construction methodology and envisaged operation. In accordance with Article 5(1)(a) of the 2011 EIA Directive, as amended by Directive 2014/52/EU, the description of a proposed development should comprise "*...information on the site, design, size and other relevant features*".

5.1 Overview of the Proposed Development

The application site, with a gross site area of c.13.74ha and a net site area of c. 8.14ha, is bounded by existing residential development of The Priory, Donabate Burial Ground and wider undeveloped Ballymastone lands to the north, the Donabate Distributor Road (DDR) and permitted Ballymastone Recreational Hub to the east (PARTXI/004/21), permitted Ballymastone Phase 1 (FCC. Ref. LRD0008/S3 & ABP Ref. 315288) to the south and existing residential development of The Links, and the Links Road, to the east.

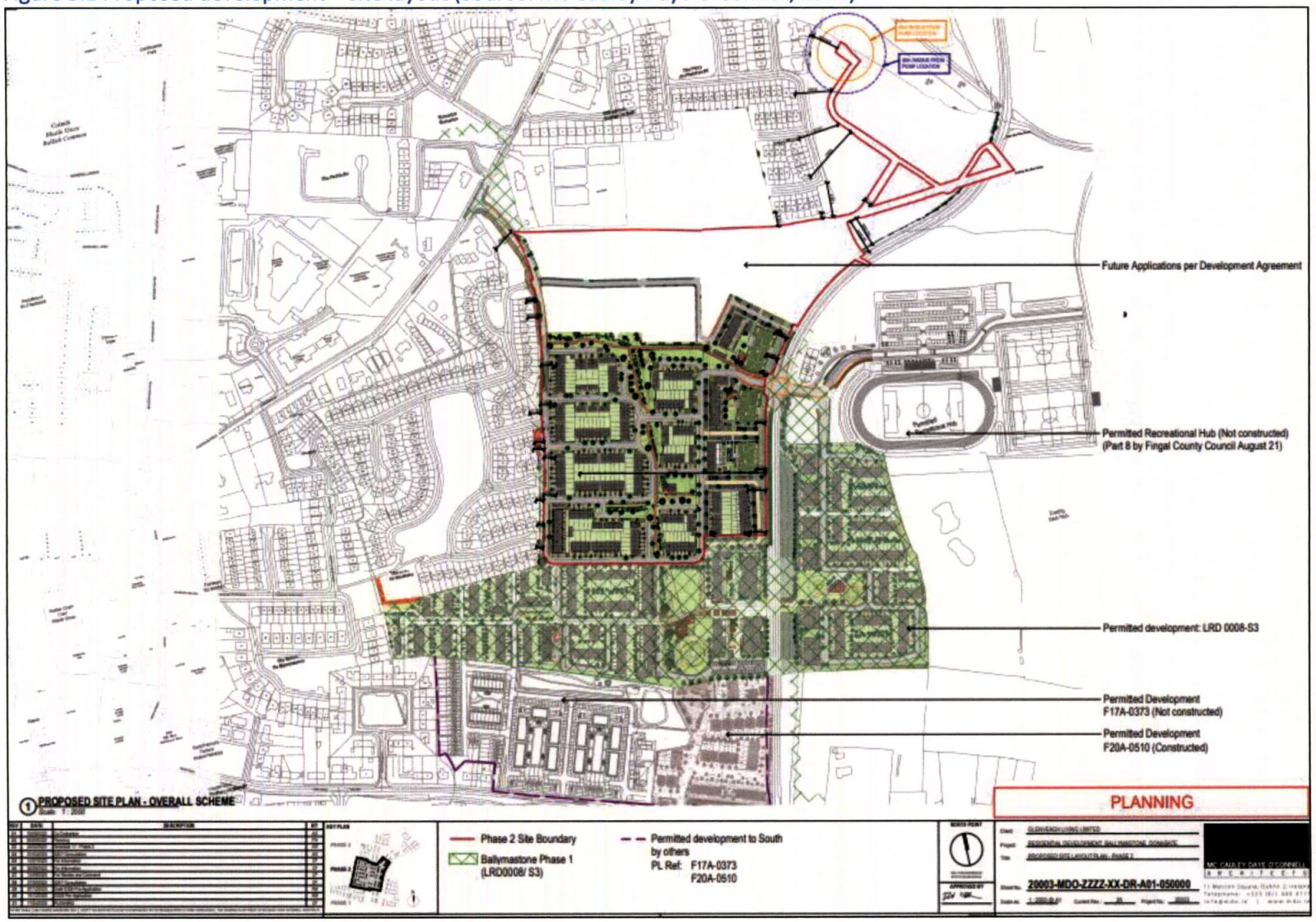
The proposed development will consist of the construction of a residential development, which is a continuation of permitted Ballymastone Phase 1 lands (FCC Ref. LRD0008/S3 & ABP Ref. 315288) and represents Phase 2 of the wider development of the Ballymastone Lands (as identified in the Donabate Local Area Plan 2016 (as extended)), ranging in height from 2 to 6 storeys to accommodate 364 no. residential dwellings (158 no. houses, 82 no. duplex units and 124 no. apartments) and public open space. The site will accommodate 278 total no. car parking spaces, 1,457 total no. cycle parking spaces, new pedestrian/ cycle links, road connectivity enhancements, storage, services and plant areas. Landscaping will include significant public open space provision and communal amenity areas. The proposed development is set out as follows:

- The construction of 364 no. new residential dwellings consisting of 158 no. houses, 82 no. duplex units and 124 no. apartment units set out follows:
  - Construction of 158 no. 2-storey houses (54 no. 2-beds, 99 no. 3-beds, 5 no. 4-beds).
  - Construction of 82 no. 2 to 3 storey duplex units (8 no. 1-beds, 33 no. 2-beds, 41 no. 3-beds), with balconies on all elevations.
  - Construction of 3 no. apartment blocks, ranging from 3 to 6 storeys in height, with balconies on all elevations, green roofs, and external amenity courtyards, providing a total of 124 no. apartment units (48 no. 1-beds, 66 no. 2-beds, 10 no. 3-beds).
- The scheme provides c. 17% public open space of the net site area comprising 2 no. small parks and 1 no. pocket park which total c. 13,646 sq.m. These parks are located centrally within the site providing a series of north-south linear spaces linking to permitted Ballymastone Phase 1 (FCC Ref. LRD0008/S3 & ABP Ref. 315288) to the south.
- A total of 278 no. car parking spaces are provided (combination of in-curtilage and on-street and communal car parking areas).
- A total of 1,457 no. cycle spaces are provided for residential units (comprising 1,353 long-stay/ resident spaces and 104 no. short-stay/ visitor spaces).
- The development provides for vehicular access from The Links Road, Donabate Distributor Road (DDR) and permitted Ballymastone Phase 1 (FCC Ref. LRD0008/S3 & ABP Ref. 315288).

- A north-south pedestrian/ cycle route is proposed within the site connecting permitted Ballymastone Phase 1 (FCC Ref. LRD0008/S3 & ABP Ref. 315288) and future development lands to the north. A series of east-west pedestrian/ cycle routes are proposed connecting the site to permitted Ballymastone Recreational Hub to the east (PARTXI/004/21).
- Proposed new foul pump station located to the north-east of the site.
- The proposed application includes all site enabling and site development works, infrastructure and utilities, landscaping works, PV panels, bin stores, plant, boundary treatments, ESB Substations, lighting, servicing, signage, surface water attenuation facilities and all site development works above and below ground.

For a full development description please refer to the Planning Report & Statement of Consistency prepared by Brady Shipman Martin.

Figure 5.1 Proposed development – site layout (Source: Mc Cauley Daye O'Connell, 2024)



5.2 Construction of the Proposed Development

The construction phase of the proposed development will include the following elements:

- Site enabling works;
- Sub-structure and superstructure works;
- Infrastructure works;
- Reinstatement.

Standard best practice site management protocols, including good housekeeping and efficient materials management, will be implemented.

5.2.1 Site Enabling Works

It is envisaged that the site enabling works will include (but not necessarily be limited to) the following:

- Securing of site boundary and erecting of fencing or hoarding as required;
- Service terminations and positive identification of any services on the site by the utility providers;
- Provision of temporary power, lighting and water services;
- Set up of site accommodation and welfare facilities;
- Archaeological monitoring in accordance with the recommendations of the Archaeological Assessment;
- Identification of the trees that are required to be removed and the removal of these along with scrub and vegetation, in consultation with the appointed Arborist and the recommendations of the tree survey report;
- Identification of the trees that are required to be protected and the protection of these in consultation with the appointed Arborist and the recommendations of the tree survey report;
- Identification of any hazardous materials on site or in the structures that are required to be removed from the site during the course of the construction;
- Identification of watercourses in the vicinity of the site and measures to be put in place to minimise contamination of same;
- Measures as set in the Hydrology chapter (Chapter 10), Biodiversity (Chapter 8), CEMP and NIS to be undertaken in full to ensure the protection of water quality as well as measures to ensure no impact occurs outside the working area and in particular on the sensitive habitats;
- All works in the vicinity of ESB Networks infrastructure will be carried out in ongoing consultation with ESB Networks and will be in compliance with Health & Safety Authority (HSA) Code of Practice for Avoiding Danger from Underground Services (2016), and the ESB Networks & Health and Safety Authority Code of Practice for Avoiding Danger from Overhead Electricity Lines (2019).
- Excavation and reuse of soil / subsoil on site;
- Construction of a temporary haul road to provide for construction traffic access to the site from Donabate Distributor Road (DDR); and
- Temporary power and water services will be arranged for the site accommodation and welfare facilities along with the provision of temporary surface water and foul water management measures for the construction phase.
    - Lime Stabilisation will be undertaken on the site as follows:
    - Site will be stripped by Excavators to sub formation level;

- Topsoil Layer will be stripped first followed by subsoil, both being stockpiled separately in designated storage area;
- Exposed ground will be rolled;
- Subsoil material will be placed in layers followed by the proposed lime/cement addition being placed across the top. This will then be pulverised and mixed in place;
- Each layer is rolled with a number of passes by rollers;
- Plate tests will be utilised to ensure the required CBR value is achieved at each layer;
- Potential Impacts and mitigation measures are discussed in the further individual chapters and the Construction Environmental Management Plan (DBFL Consulting Engineers, 2024).

5.2.2 Sub-structure and Superstructure Works

It is envisaged that the sub-structure and superstructure works will include (but not necessarily be limited to) the following:

- Excavation of foundations;
- Excavate, lay and test underground drainage;
- Coordinate and install all incoming services;
- Construction of floor slabs;
- Construction of superstructures and roofs;
- Fit out of the residential units will use traditional fit out techniques and finishing trades;
- Gardens, communal open space and public open space areas will be landscaped and planted in accordance with the landscaping proposals for the scheme.

5.2.3 Infrastructure Works

The site infrastructure works include the provision of the permanent entrance to the site and the permanent connection of all the utilities and services required for the site, including the foul outfall sewer for the site.

All works are to be carried out in accordance with Irish Water's Code of Practice for Water and Wastewater and the contractor is to liaise with Uisce Éireann for the duration of the construction phase which is anticipated to last approximately 30 months.

Engagement with the service and utility providers will be entered into early in the design stage to allow for adequate planning of utility infrastructure. Provision of the permanent infrastructure to the site will be carried out as early as possible in the programmed works to incorporate the temporary site requirements with the permanent requirements. The existing GNI gas network and ESB network on site is proposed to be diverted and the diversion will be undertaken in consultation with the service providers.

It is the aspiration of the applicant to minimise disruption of existing services and public roads and pathways in the providing of services to the site, this will be done in consultation with the service providers and Fingal County Council.

5.2.4 Reinstatement

The temporary construction haul route will be reinstated using topsoil stripped at the construction of the haul route. This will meet the design criteria presented in the detailed design stage of the project. All fill material used will be clean and graded to engineers' specifications.

5.2.5 Construction Phasing & Duration

The envisaged duration of the construction phase is 2.5 years (30 months). The duration of the construction phase is, therefore, assumed to be 'short-term', as per the EPA criteria set out in **Table 1.3** (EPA, 2022). The construction phase of the proposed development is expected to be carried out in three sub-phases (as shown in Figure 5.2 of the Volume 2 of the EIAR, below).

5.2.6 Earthworks

The site of the proposed development is predominantly greenfield in nature. In order to facilitate the construction of the proposed development, soil stripping, earthworks and the storage and handling of excavated material will be required.

In order to minimize the volume of material being exported off-site, excavated material will be reused on-site (e.g. as fill material) where feasible. All topsoil is planned to be reused on-site, however where excess topsoil arises it will be removed from site to a suitably licenced facility or where suitable to another site for reuse under Article 27. It is envisaged that a certain volume of excavated subsoil will be unnecessary for on-site use and will need to be disposed of at an appropriately licensed facility. If any of the material (topsoil and/or sub-soil) is to be reused at another site it will be treated as By-product (and not as a waste), this will be done in accordance with Regulation 27 (By-products), as amended, European Union (Waste Directive) Regulations 2011-2020. Site Investigation (SI), Waste Acceptance Criteria Testing (WAC testing) and Soil Analysis will be used to classify and determine the suitability of soil and EPA approval will be obtained prior to moving material as a By-product. If the site requires an importation of material (topsoil/sub-soil) this will be done under Article 27 (By-product) notification to the EPA. A log of all By-Product material movements in/out of site will be recorded and maintained. Any soil (topsoil & sub soil) identified as 'contaminated' or not equivalent to virgin greenfield for by-product soil and stone, will be treated as waste and will be segregated on-site, stored in skips or other suitable receptacles in designated areas and will be removed from site to a suitable waste facility by a registered waste contractor. All waste leaving the site will be transported by suitably permitted contractors and taken to suitably registered, permitted or licenced facilities. A log of all waste leaving site will be recorded and maintained. Indicative earthworks figures are as follows:

- Volume of earthworks – excavated soil / subsoil: 41,000m^3;
- Volume of earthworks – reuse on site: 41,000m^3;
- Volume of earthworks – fill required on site (imported): 16,500 m^3;
- Maximum depth of excavation: 6.7m.

5.2.7 Construction Traffic

A development of this type and scale is anticipated to require an overall average of c. 130 operatives across the programme with a peak of c. 265, subsequently generating, on average, no more than c. 33 two-way vehicle trips during the peak AM and PM periods over the period of the phased construction works. The peak requirement of c. 265 operatives on site is expected to occur over a relatively short period of the programme, potentially generating up to c. 66 two-way vehicle movements in the peak AM and PM periods.

In terms of HGV vehicle movements, typically these are not expected to exceed 4 vehicle movements per hour. This may increase slightly to 6-8 HGV vehicle movements per hour during the busiest period of construction activity.

All construction HGV traffic for the required works will enter the site via construction site access from the Donabate Distributor Road (DDR) with temporary haulage roads provided within the site for access to various areas, refer to **Figure 5.2**. Warning signage will be provided at both haul route locations for pedestrians and other road users on all approaches in accordance with Chapter 8 of the Traffic Signs Manual and the Contractor's Traffic Management Plan.

All construction activities on-site will be governed by the traffic management measures outlined in the Construction & Environmental Management Plan (CEMP) prepared by DBFL Consulting Engineers (2024) and submitted under a separate cover as part of the planning application. The mitigation measures detailed in the CEMP, submitted as part of the planning application, will be implemented through a Construction Traffic Management Plan (CTMP), the details of which will include haul routes, working times etc. This plan will be prepared in consultation with Fingal County Council and agreed in full with the Council prior to commencement of construction activities on site, in order to reach full agreement upon the traffic management mitigation measures and monitoring measures to be adopted during the entire programme of construction activities on-site.

5.2.8 Site Compound and Haul Route

It is envisaged that one construction site compound will be required for the purposes of the proposed development. The precise location of this will be agreed with Fingal County Council prior to the commencement of works, however it will be within the application site. An indicative location for the site compound, proposed haul route and associated soil storage features are illustrated in **Figure 5.2**, below. The construction compound will contain facilities for construction personnel (including parking, welfare facilities and canteen) and waste segregation area.

Surface water and foul water discharge from site will be managed and controlled for the duration of the construction works until the permanent drainage infrastructure is complete.

Please refer to the accompanying Construction Environmental Management Plan prepared by DBFL Consulting Engineers (2024) for further detail.

5.2.9 Working Hours

Envisaged working hours are as follows:

- Monday – Friday: 07:00 – 18:00;
- Saturday: 08:00 – 14:00;
- Weekends / Bank Holidays: No works.

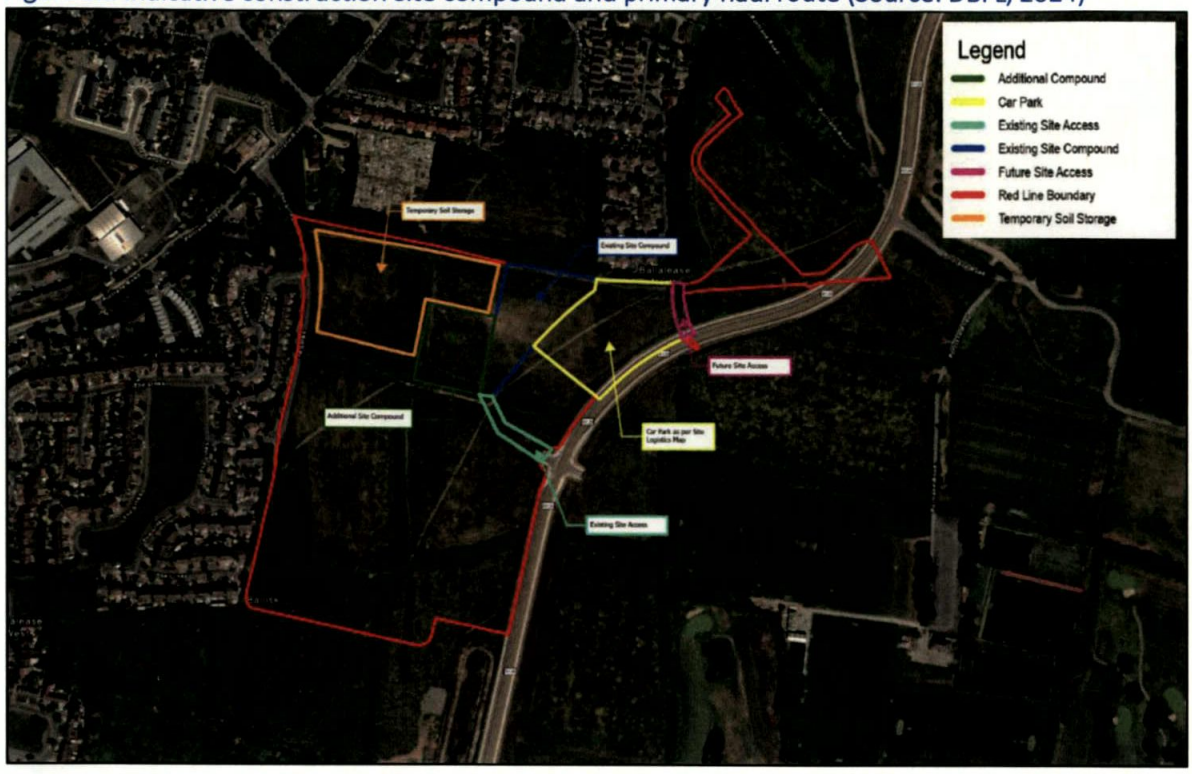
Works outside of these hours will be subject to prior agreement with Fingal County Council.

5.2.10 Construction Phase Plans

A suite of construction plans will also be implemented, including the following:

- Construction & Environmental Management Plan (CEMP);
- Arboricultural Method Statement;
- Construction Traffic Management Plan;
- Resource & Waste Management Plan.

Figure 5.2 Indicative construction site compound and primary haul route (Source: DBFL, 2024)



5.3 Operation of the Proposed Development

The operation of the proposed development will entail the standard operation of a residential development incorporating houses, duplex units and apartment blocks. It will involve the daily activities of residents of the community; their activities in their homes and gardens, their movements to and from and within the site, and the operation of associated supporting infrastructure and services. There will be a new public realm, including a network of roads and streets, featuring a variety of road users, including pedestrians, cyclists and drivers. The specifics of the operational phase will be discussed, where relevant, in the various specialist chapters of the Environmental Impact Assessment Report (Volume 2).

During the operational phase, it is proposed to implement the following plans of pertinence to the Environmental Impact Assessment Report:

- Mobility Management Plan;
- Operational Waste Management Plan.

6 Consultation

Consultation is a key element in the EIA process. The "*carrying out of consultations*" is included in the definition of EIA as set out in Article 1(a) of the amended EIA Directive. Consultation at various stages of the EIA process provides for timely and proportionate consideration of potential significant effects, early identification of stakeholder concerns, and facilitates public participation in the development consent process. Consultations may be statutory (i.e. required by law) or non-statutory / informal. Consultations may be undertaken by the Applicant or the Competent Authority, as appropriate and as required.

The non-technical summary of the Environmental Impact Assessment Report (EIAR) (i.e. this document) is particularly important in disseminating the information contained in the EIAR to the wider public and facilitating public participation in the development consent process.

In addition, where required specialists have consulted relevant Departments and Bodies in order to acquire additional information to undertake the assessment.

6.1 The LRD Process

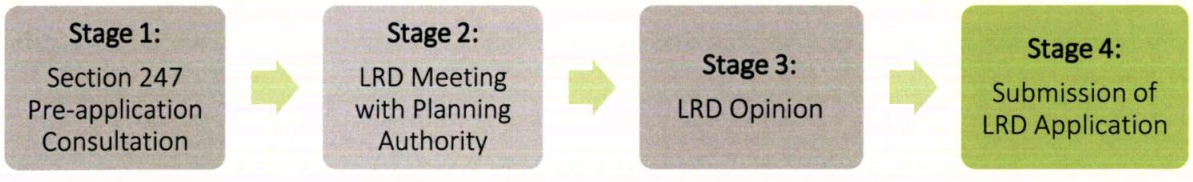
On 17 December 2021, the Large-scale Residential Development (LRD) planning process came into effect under the Planning and Development (Amendment) (Large-scale Residential Development) Act 2021, thereby replacing the previous Strategic Housing Development (SHD) process.

In the Irish planning system, 'Large-scale Residential Development' refers to the following classes of development:

- Housing development of 100 or more units;
- Student accommodation development comprising 200 or more beds; or
- A combination of the two where the threshold is met for either element.

The stages in the LRD application process are outlined **Figure 6.1**, below.

Figure 6.1 Overview of LRD application process



6.1.1 Stage 1: Section 247 Pre-application Consultation

The Stage 1 Section 247 pre-application consultation meeting for the proposed development was held on 24 October 2023 via Microsoft Teams between the Applicant, design team representatives and Fingal County Council (**Table 6.1**). Matters raised by Fingal County Council during the meeting have been taken into consideration in the development of the design for the proposed development.

Under the Section 247 process, an addendum meeting with FCC Transportation Department was held on 14 November 2023.

6.1.2 Stage 2: LRD Meeting

The Stage 2 LRD Meeting for the proposed development was held on 24 January 2024 between the Applicant, design team representatives and Fingal County Council.

6.1.3 Stage 3: LRD Opinion

Following the LRD Meeting, an LRD Opinion was issued by Fingal County Council in February 2024, stating that –

> *'Fingal County Council has considered the documentation submitted with the consultation request under Section 32B of the Planning and Development Act 2000, as amended, and is of the opinion that the documentation submitted constitutes a reasonable basis on which to make an application for permission for the proposed LRD.'*

Pursuant to Article 16A(7) of the PDR 2001, the Opinion set out a list of specific information that should be submitted with the planning application. Reference was made to several items of relevance to the Environmental Impact Assessment Report, including the water services and drainage infrastructure, road hierarchy and pedestrian permeability, cycling infrastructure, road safety audit, assessment of potential impacts on the archaeological landscape, architectural and cultural heritage, design and layout, educational audit, community and social infrastructure audit, climate action energy statement, phasing plan, housing quality assessment, building lifecycle report, construction environmental management plan, sunlight and daylight analysis, parks and green infrastructure and play provision. Regard has been had in the preparation of this Environmental Impact Assessment Report to the matters raised in the LRD Opinion.

6.1.4 Stage 4: Submission of LRD Application

The Stage 4 of the LRD application process, the submission of the planning application to the Planning Authority (Fingal County Council), will allow for public consultation. The Applicant will make copies of the application documents (including this Environmental Impact Assessment Report) available for public viewing on a dedicated website, www.ballymastonelrd2.ie. Members of the public, Prescribed Bodies and elected Council members may submit observations on the proposed development within five weeks from the date when the application was registered.

7 Population & Human Health

This chapter of the Environmental Impact Assessment Report assesses the impacts of the construction and operational phases of the proposed development on population and human health. It has been prepared by Brady Shipman Martin in accordance with the relevant legislation and guidelines, including those from the Environmental Protection Agency (EPA) and Institute of Environmental Management and Assessment (IEMA). It has been informed by extensive desk study of relevant available data, including from the Central Statistics Office and Fingal County Council.

The site is situated in the administrative area of Fingal County Council, in the townlands of Ballalease North, Portraine Demesne, Ballymastone and Ballisk. The site, which is situated on the eastern margin of Donabate town, is predominantly comprised of disused agricultural land, criss-crossed by hedgerows and drainage ditches. The site is bounded to the west and north by existing residential development. The Donabate burial grounds are to the north-west of the site. The site is also bound immediately to the south and south-east by lands that form part of a Large-scale Residential Development (LRD) comprising 432 residential units and all associated site works, permitted by An Bord Pleanàla on the 28 March 2023 (FCC Ref. LRD0008/S3 & ABP Ref. 315288). The site is also bound by Recreational Hub (Part 8 – approved) to the east of the site.

The CSO provides data on population and socio-economic aspects of the population at different levels from the State, county level, Local Electoral Area (LEA), individual Electoral Districts (ED) to Small Areas (SA) within each County. The 2016 Census undertaken by CSO provides detailed results and reports. Most recent census was undertaken in April 2022. CSO published preliminary results for 'Census of Population 2022' on 23 June 2022 (updated September 2022) which have been superseded by the main results published from May 2023 onwards. A series of themed reports, Small Area Population Statistics (SAPS) and Place of Work, School, College - Census of Anonymised Records (POWSCAR) and their detailed statistical tables have been provided as per the schedule set by CSO for May 2023 to December 2023. This chapter uses the most up to date and detailed statistical data that is available at the time of writing this chapter.

In the period between 2016 and 2022, the population in the administrative area of Fingal County Council (FCC) increased by 11.6% as compared to the previous increase of 8% between 2011 and 2016. The site of the proposed development is located in the LEA of 'Rush-Lusk' and the ED of 'Donabate'. The population statistics indicate that growth at the level of the ED between 2016 and 2022 has been significantly more that the growth between 2011 and 2016, and over three times the rate of growth that occurred at the national level.

Data from the Central Statistics Office (2022) indicate a high modal share of private car use in the area. It shows that private car use (~45%) is the principal mode for commuting in the Donabate area, followed by public transport (bus or train) (~ 26%). Donabate is a commuter town, which does not support high levels of employment. Dublin City Centre, Swords and Dublin Airport are the primary employment hubs in the wider area. CSO census data for 2022 indicate a high rate of employment among residents in the ED, at the time of the 2022 census.

For the purposes of the proposed development, Brady Shipman Martin (BSM, 2024) has prepared a Community & Social Infrastructure Report and Schools Demand & Childcare Facilities Assessment Report. These have been submitted under separate cover as part of the planning application.

The duration of the construction phase is anticipated to be in the range of c. 30 months. In the absence of standard good construction practice and mitigation measures, the following potential impacts have been identified during the construction phase:

- Nuisance / health impacts related to exposure to dust;
- Impacts due to greenhouse gas emissions and climate vulnerability;
- Nuisance / disturbance related to elevated noise levels;
- Impacts on traffic / parking due to presence of construction traffic;
- Potential negative impacts on landscape and visual amenity due to presence of construction site and effects of construction activities (e.g. dust, dirt, stockpiling of soils, removal of vegetation, etc.);
- Health impacts related to improper waste management;
- Health impacts related to improper safety protocols, e.g. related to diversions of gas / power lines;
- Nuisance / impacts on residential amenity due to potential service / power outages;
- Impacts due to changes to daylight and sunlight availability on the receiving environment;
- Economic impacts related to construction employment / increased demand for goods and services.

In the absence of mitigation, potential impacts on population and human health as a result of the operational phase of the proposed development may be summarised as follows:

- Potential impacts due to greenhouse gas emissions and climate vulnerability;
- Potential negative impacts on journey characteristics due to additional operational phase traffic generated by the proposed development;
- Positive impacts on journey characteristics due to enhanced permeability across the site;
- Potential visual impacts due to completion of proposed development, establishing substantial new residential development;
- Health impacts related to improper waste management;
- Potential impacts due to daylight and sunlight availability for the proposed development;
- Potential socio-economic impacts due to demand for goods and services locally;
- Positive socio-economic impacts due to provision of significant additional housing.

The effects will constitute nuisance / disturbance during daytime hours only, and will not result in significant negative human health impacts. Assuming the proper and full implementation of the mitigation measures as stated in the Environmental Impact Assessment Report, there will be ***no likely significant effects*** related to population and human health.

There is substantial interaction between Population & Human Health and other environmental topics addressed in the Environmental Impact Assessment Report, and mitigation measures of relevance to this element of the assessment have been set out throughout the report. These include measures in relation to community liaison, dust (Chapter 11 - Air Quality), noise (Chapter 13 - Noise & Vibration), construction site screening and tree protection (Chapter 14 - Landscape & Visual), traffic management (Chapter 18 - Traffic & Transportation), daylight and sunlight (Chapter 16 Microclimate- Daylight & Sunlight), wind (Chapter 17 Microclimate – Wind) and waste management (Chapter 19 - Material Assets Waste). Additionally, a Construction & Environmental Management Plan (CEMP) will be implemented during the construction phase, which will contain a range of measures to avoid / minimise adverse impacts on the local community.

8 Biodiversity

This chapter of the Environmental Impact Assessment Report has been prepared by BSM and assesses the impacts of the proposed development in relation to biodiversity. The assessment involved desk and field studies by qualified and experienced ecologists, over multiple survey seasons. The methodologies used to determine the value of ecological resources, to characterise impacts of proposed development and to assess the significance of impacts and any residual effects are in accordance with the National Roads Authority (NRA) *Guidelines for Assessment of Ecological Impacts of National Road Schemes* ('the NRA guidelines'). This methodology is consistent with the CIEEM *Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland – Terrestrial, Freshwater, Coastal and Marine*.

8.1 Baseline Environment

The proposed development site is not under any wildlife or conservation designation. Furthermore, no rare, threatened or legally protected plant species, as listed in the *Irish Red Data Book 1 – Vascular Plants* (Curtis & McGough, 1988), the Flora Protection Order, 2022, or the Habitats Directive, are known to occur within the site and none were recorded.

No rare habitats or habitats of particularly high ecological value (i.e. International, National or County) are present at the site. The majority of the hedgerows, however, remain of Local (Higher Value) Importance.

The hedgerows are of ecological value for their ecological/habitat connectivity and for nesting birds as well as commuting and foraging bats. The mature hedgerows and trees within the site are of greatest importance as they are relatively diverse and act as significant ecological corridors.

All the hedgerows on site represent 'Heritage Hedgerows' and are of high historical importance. In terms of condition assessment of the hedgerows, all the hedgerows assessed can be considered as hedgerows in 'Unfavourable Condition'.

Despite the ongoing construction activity associated with Phase 1, and the vandalism of the badger setts (located in the Phase 1 development site, to the south of Phase 2) that took place prior to the commencement of construction of Phase 1, there is evidence of some use of the area by badgers on the site. Meadow pipit and yellowhammer were recorded on the lands.

Overall, the site is of **Local Importance (Higher Value)** in accordance with the ecological resource valuations presented in the NRA Guidelines.

Full details of the European sites of the Rogerstown Estuary and Malahide Estuary and further afield protected sites are addressed in the NIS, which accompanies the application under separate cover.

8.2 Predicted Impacts of the Proposed Development

8.2.1 Designated Conservation Areas

Due to close proximity and a potential connection via surface water, the proposed development at Ballymastone, Co. Dublin; individually or in combination with another plan or project, has potential to have significant effects on the following European sites in immediate vicinity and downstream:

- Rogerstown Estuary SAC;
- Rogerstown Estuary SPA;

- Malahide Estuary SAC;
- Malahide Estuary SPA.

Therefore, the proposed development is subject to Appropriate Assessment and an Appropriate Assessment Screening report (AASR) and Natura Impact Statement (NIS) have been prepared and are submitted with the planning application under separate cover.

8.2.2 Construction Phase

Given the nature, scale and duration of the construction phase of the proposed development there is potential for **short-term, moderate, negative** impacts on water and air quality, in the context of biodiversity, during the construction phase of the proposed development.

Given the nature, location, scale and duration of the construction phase for the proposed development there will be **no likely impacts** via disturbance on Rogerstown Estuary SPA and SAC and Malahide Estuary SPA and SAC.

Noise, vibration and visual disturbance may impact on local fauna of the site, for example by reducing feeding time or causing birds / bats / badgers to temporarily avoid certain areas. This could potentially occur during site clearance and construction operations associated with the proposed development.

Given the nature, scale and duration of the construction phase for the proposed development there is the potential for **short-term, moderate, negative** impacts on ecological receptors in the vicinity of the proposed development.

The proposed development will involve the removal of much of the existing area of the site and its replacement with residential development, open space and infrastructure including landscaping.

The majority of the hedgerows internal to the Ballymastone Phase 2 site will be retained and managed within the proposed landscape and biodiversity network, and will be subject to management and enhancement, as set out in detail in the Landscape Strategy and Design Statement prepared by Cunnane Stratton Reynolds and submitted separately. Some sections of hedgerow will be removed in order to facilitate the development. In the absence of mitigation the habitat loss will result in a **permanent to long-term moderate negative** impact at a site level.

Based on the level of activity recorded over several years the active sett to the south of Phase 2 is not a main breeding sett, and there is significant badger activity and evidence of setts in the wider area. Nevertheless, given the nature, scale and duration of the construction phase for the proposed development there is the potential for **long-term, moderate, negative** impacts on the local fauna within the site and in close proximity, including on badgers.

8.2.3 Operational Phase

The proposed development site is of no importance as a feeding site for the bird species (the Special Conservation Interests) associated with Rogerstown / Malahide Estuary SPA. However, the areas of meadow, scrub, mature trees and hedgerows are habitats of importance for the breeding birds present on the site.

The loss of existing vegetation from the site may also affect commuting bats, by removing cover that allows commuting along the unlit field boundaries. It may also affect feeding for bats by reducing the habitat for their invertebrate prey.

The loss of existing vegetation will also reduce commuting and feeding opportunities for badgers via the removal of the existing fields and the introduction of roads, hard surfaces and buildings. Therefore, the loss of vegetation and feeding area has the potential to have a **long-term, moderate to minor, negative impact** on the bat and badger populations at the site.

Given the nature, scale and duration of the operational phase for the proposed development, there is the potential for **permanent** to **long-term, moderate, negative** impacts on the local fauna due to change of land use.

The proposed development will comprise houses and duplexes ranging from 2-3 storeys in height. There will also be three apartment blocks, ranging from height from 3-6 storeys. The risk that migrating birds could collide with these buildings is **negligible.** Unmitigated, lighting from the proposed development during the operational phase may have a **long-term** to **permanent, moderate, negative** impact upon bats and a **long-term** to **permanent, slight, negative** impact upon badgers.

The potential for impacts on European Sites is addressed under the scope of the Natura Impact Statement that accompany the planning application.

Provided that site facilities are correctly designed and proper working procedures are strictly adhered to, **no significant impacts** on existing watercourses are expected during the operation of the proposed development. Wastewater from the proposed development will ultimately be treated at the Portrane wastewater treatment plant. The capacity available at the plant is sufficient to accommodate the foul water arising from the proposed development and it will, therefore, be possible to maintain the unpolluted status of the waters of Dublin Bay / Irish Sea. Therefore, significant effects related to foul water management can be excluded.

8.3 Mitigation Measures

Specific mitigation measures for the European sites are contained within the accompanying Natura Impact Statement (prepared by Brady Shipman Martin) and the Construction and Environmental Management Plan (CEMP) (prepared by DBFL Consulting Engineers) for the proposed development. These include strict measures to ensure the protection of water quality as well as measures to ensure no impact occurs outside the working area and in particular on the habitats and bird species that are the Qualifying Interests and Special Conservation Interests of the Rogerstown Estuary SAC / SPA and Malahide Estuary SAC / SPA.

All site clearance and landscaping works will comply with current legislative requirements and best practice. The clearance of any vegetation that may be suitable for use by nesting birds will be undertaken outside the bird nesting season (avoiding the period 1 March to 31 August). Should the construction programme require vegetation clearance between March and August, and this is unavoidable, bird nesting surveys will be undertaken by suitably qualified ecologists.

Prior to the commencement of any construction works a pre-construction badger survey will be carried out by a suitably qualified badger specialist in order to establish the current status of the badger setts in the wider area. Should any setts be found, within the Phase 2 area, a badger specialist will prepare a construction phase badger management plan to be agreed with NPWS.

No bat roosts will be removed as part of the proposed development and it will not be necessary to apply for a derogation licence under Regulation 54 or 55 of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended). Nevertheless, bats are mobile creatures, and the

absence of bat roosts at the time of surveys does not preclude the presence of future bat roosts at the site. Therefore, as a precautionary measure, any trees to be removed shall be examined for the presence of bats prior to felling.

The planting proposed for the development will, wherever possible, comprise an appropriate mixture of native trees and shrubs, preferably of local provenance. It will take account of and implement the relevant objectives of the All-Ireland Pollinator Plan 2021-2025. All planting plans and landscaping proposals will further ensure that no invasive species are introduced, either deliberately or inadvertently, to the proposed development site.

The lighting design for the proposed development includes measures to prevent any impacts on commuting or foraging bats, and bat boxes will be installed to provide new roosting opportunities for bats. Provision will also be made for bird boxes and insect hotels.

8.4 Cumulative Impacts

Post application of appropriate mitigation measures during construction and operation phase, neither the development proposed nor any other developments will give rise to any significant impacts on biodiversity and there are no predicted cumulative impacts in relation to biodiversity, for example in terms of habitat loss or disturbance to protected species, as a result of the proposed development in combination with existing / proposed plans or projects.

8.5 Residual Impacts

With the implementation of proposed mitigation measures in place for the protection of surface water, air quality, noise and vibration and visual effects the residual impact of the construction phase is assessed to be **short-term**, **imperceptible** and **negative**.

There will be a limited loss of foraging habitat within the site for bats, badgers and birds, and a loss of nesting areas for birds. Vegetation will establish over time and these losses will be reduced considerably. There will still be less cover for birds relative to the baseline following the implementation of all mitigation.

There is the potential for slightly less bat activity within the area where the cover is reduced by tree removal and lighting has increased. Bats will avail of bat boxes or other modifications within the site to roost over a period of time once the siting, lighting and absence of disturbance is observed.

The residual impact of the proposed development in this regard is assessed to be **long-term, imperceptible** and **negative**.

There will be a **slight, negative, long-term** residual impact upon badgers within the site due to the overall reduction in the suitability of the area for badgers.

Given the nature, scale and duration of the construction phase of the proposed development there is potential for impacts on Rogerstown Estuary. This issue is fully addressed in the NIS that accompanies the planning application. There are no other indirect and/or secondary impacts as a result of the proposed development.

Overall, while the proposed development may have some **temporary negative** impacts at the **local level**, these impacts will in general be fully mitigated over time to be rendered **negligible**.

9 Land, Soils, Geology & Hydrogeology

9.1 Introduction

This Chapter of the EIAR has been prepared by AWN Consulting and evaluates the likely significant impacts of the proposed development on the land, soil, geological and hydrogeological aspects of the site and surrounding area.

9.2 Baseline Environment

The site is currently in agricultural use with the Donabate Distributor Road (DDR) recently constructed to the east of the site. The site is bound to the west by The Links development with the Ballymastone masterplan lands and Willowbrook and The Priory developments to the north. Donabate Golf Club and St. Ita's Demesne are located to the east of the proposed site. A network of hedgerows and drainage ditches are located throughout the site.

According to the GSI map database (2024) and site investigation (S.I.)undertaken by Grounds Investigation Ireland (GII, 2022), at the south of the site bedrock is more shallow with S.I. showing bedrock depths of 1.5m to a maximum of 3.5m below ground level (BGL) i.e., high – moderate vulnerability. Further north bedrock dips and bedrock was not encountered in the S.I and aquifer vulnerability in this area is low. The subsoil type located at the proposed development is predominantly classified as TLs – Till type subsoil comprising of Limestone till (Carboniferous of variable texture) (Source: GSI 2024).

The bedrock aquifers underlying the proposed development site according to GSI National Bedrock Aquifer Map is classified as (Ll) Locally Important Aquifer, i.e., bedrock aquifer which is moderately productive only in local zones. Soil quality assessment has shown no evidence of any contamination which is in line with its previous use as agricultural land.

According to the EPA (2023), the Swords Groundwater Body (GWB) underlying the site was given a classification of *"Good"* as per the last WFD cycle (2016-2021). Presently, the groundwater body in the region of the site (Swords GWB) is classified as being under 'Not at Risk.'

Although there is a hydrological and hydrogeological pathway to the Estuary, no source pathway linkage has been identified which could result in exceedance of groundwater thresholds (S.I. No 366/2016) at the point of aquifer discharge to the Rogerstown Estuary SAC/SPA and Malahide Estuary SAC/SPA).

There are also no source pathway linkages to any areas of geological heritage or public water supply zones.

9.3 Potential Impacts of the Proposed Development

9.3.1 Construction Phase

The construction phase presents the following activities which could result in discharge of contaminated water to ground if not mitigated:

- Accidental Spills from construction vehicles and wastewater arising from on site welfare facilities and alkaline run-off from concreted areas.

Without out the consideration and implementation of mitigation measures the potential impacts during the construction phase on land, soils and geology, hydrogeology (groundwater) are **neutral, not significant impact** and **short term.**

9.3.2 Operational Phase

The operational phase has minimal potential for impact as there is no storage of bulk chemicals on site and the paving and drainage will reduce the potential for any localised leaks from cars to migrate to the underlying soils and aquifer. There will be a minor reduction in recharge to the aquifer as a result of the increase in hardstanding. There will be a loss of land for agricultural use but the land is already zoned for development.

The potential impacts during the operational phase on land, soils, geology, and hydrogeology are **neutral, imperceptible impact,** and **long-term.**

9.4 Mitigation and Residual Effects (Post-Mitigation)

9.4.1 Construction Phase

In order to reduce impacts on the soils, geological and hydrogeological environment, construction will be undertaken in compliance with a Construction Environmental Management Plan (CEMP), the contractor will be obliged to incorporate mitigation measures for:

- Control of soil excavation;
- Source of fill and aggregates;
- Fuel and chemical handling;
- Management of Accidental Discharge;
- Implementation of the mitigation measures set out in the EIAR.

The predicted impact on the geological and hydrogeological environment during the construction phase is **neutral, imperceptible,** and **short-term**.

9.4.2 Operational Phase

The proposed development design includes hardstand cover across the site and the proposed/existing surface water drainage system for this development has been designed as a sustainable urban drainage system and uses on-line overground detention basins together with a flow control device, green roofs, swales, detention basins, rainwater harvesting and petrol interceptors. There is no bulk chemical (including fuel) storage planned.

The predicted impact on the geological and hydrogeological environment during the construction phase is **neutral, imperceptible,** and **long-term**, the magnitude of impact is considered **negligible.**

A standalone Water Framework Directive (WFD) assessment and Hydrological and Hydrogeological Risk (HRA) assessment report has been prepared as part of the EIAR submission. The HRA concluded that there is a low source pathway pollutant linkage linkages as a result of the construction or operation of the Proposed Development which could result in a water quality impact which could alter the habitat requirements of the Natura 2000 sites within Rogerstown Estuary. The WFD assessment indicated that there is no potential for adverse or minor temporary/ long-term or localised effects on the Rogerstown Estuary transitional waterbody. Therefore, it has been assessed that the proposed development will not cause any significant deterioration or change in water body status or prevent attainment, or

potential to achieve, future good status or to meet the requirements and/or objectives in the second RBMP 2018-2021 (River Basin Management Plan) and draft third RBMP 2022-2027. There is no potential for adverse or minor temporary or localised effects on the Swords groundwater body. Therefore, it has been assessed that it is unlikely that the proposed development will cause any significant deterioration or change on its water body status or prevent attainment, or potential to achieve the WFD objectives or to meet the requirements and/or objectives in the second RBMP 2018-2021 (River Basin Management Plan) and draft third RBMP 2022-2027.

9.5 Cumulative Impact of the Proposed Development

9.5.1 Construction Phase

The cumulative assessment has considered existing residential and commercial developments close and permitted developments in the local area. In relation to the potential cumulative impact on hydrogeology during the construction phases, the construction works which would have potential cumulative impacts are as follows:

- Stockpiled material will be stored on hardstand away from surface water drains, and gullies will be protected during works to ensure there is no discharge of silt-laden water into the surrounding surface water drainage system;
- Contamination of local water sources from accidental spillage and leakage from construction traffic and construction materials is possible unless project-specific measures are put in place for each development and complied with.

All developments will have to incorporate measures to protect soil and water quality in compliance with legislative standards for receiving water quality (European Communities Environmental Objectives (Groundwater) Regulations (S.I. 9 of 2010 and S.I. 266 of 2016).

The residual cumulative impact of the proposed development in combination with other planned or permitted developments can therefore be considered to be **neutral, imperceptible,** and **short-term.**

9.5.2 Operational Phase

In relation to the potential cumulative impact on hydrogeology during the operational phases, the operational activities which would have potential cumulative impacts are as follows:

- Increased hard standing areas will reduce local recharge to ground. Cumulatively this development and others in the area will result in localised reduced recharge to ground and increase in surface run-off;
- There will be a small loss of greenfield area locally as part of the proposed project.

All developments are required to manage groundwater discharges in accordance with S.I. 9 of 2010 and S.I. 266 of 2016 amendments. As such, there will be no cumulative impact to groundwater quality and, therefore, there will be no cumulative impact on the Groundwater Body Status.

The operation of the proposed development is concluded to have a **long-term, imperceptible significance** with a **neutral** impact on soil and groundwater in combination with other developments in the surrounding area.

10 Hydrology

10.1 Introduction

This chapter of the EIAR assesses and evaluates the likely significant impacts on the surrounding hydrological environment associated with the proposed development.

10.2 Baseline Environment

The proposed development currently comprises a greenfield site of c. 13.74 hectares which is located to the east of Donabate Village, Co. Dublin. The site is currently in agricultural use with the Donabate Distributor Road (DDR) recently constructed to the east of the site. The site is bound to the west by The Links development with the Ballymastone masterplan lands and Willowbrook and The Priory developments to the north. Donabate Golf Club and St. Ita's Demesne are located to the east of the proposed site. A network of hedgerows and drainage ditches are located throughout the site. The phase 1 permitted attenuation pond with interceptor has been designed with capacity for the proposed development and will be utilised for drainage management during construction and operation.

The proposed development site lies within the Nanny-Delvin Catchment (Catchment ID: 08) and the Ballough Stream sub-catchment (Ballough[Stream]_SC_10 WFD Sub-Catchment). There are no notable watercourses within the site. The nearest watercourses to the site are the Rahillion River which resides c. 790m to the west / north-west of the site and the Ballalease North which resides c. 445m to the northeast of the site. Both watercourses are hydrologically connected to the Rogerstown Estuary transitional waterbody (Rogerstown Estuary SAC/SPA, 0.8 km north of the site).

The EPA currently classifies the Rogerstown transitional water body with a 'Poor' status and is 'At risk of not achieving good status'. The 'Poor' status assigned to the Ballyboghil stream (EPA Name: Ballyboghil_010) is due to nutrient conditions and was scored with a 'High' status for "*Other determinant for oxygenation conditions*".

10.3 Potential Impacts of the Proposed Development

10.3.1 Construction Phase

In absence of mitigation measures, the construction phase would present potential impacts associated with the following activities:

- Increased surface run-off and sediment loading in run-off.
- Accidental Spills, discharges and Leaks.

Without the consideration and employment of mitigation measures, the potential impacts during the construction phase on surface water quality are **negative**, **not significant** and **short term**.

10.3.2 Operational Phase

In absence of design and mitigation methods, the operational phase would present potential impacts associated with the following activities:

- Slight increase in hardstanding resulting in increased rate of runoff

- Indirect discharges through storm sewers to the Rahillion River and the Ballalease North and foul discharge following treatment in Portrane WWTP to the Rogerstown Estuary.

In the absence of mitigation measures , the potential impacts during the operational phase are **neutral, imperceptible**, and **long-term** based on the hazard loading and the significant dilution and attenuation within the drainage network and receiving water courses.

10.4 Mitigation and Residual Effects (Post-Mitigation)

10.4.1 Construction Phase

In order to reduce impacts on the hydrological environment, a number of mitigation measures will be adopted as part of the construction works on site.

- Suspended solids management.
- Cement/concrete works.
- Hydrocarbons and other construction chemicals.
- Surface water runoff.
- Water pumped from excavations.
- Wastewater management.
- Implementation of the mitigation measures set out in the EIAR via a Construction & Environmental Management Plan (CEMP).

10.4.2 Operational Phase

There is no bulk chemical storage required for this development. As such the only potential for impact on water quality is a localised release of hydrocarbons from a car leak. In the event of an accidental leakage of oil from the parking areas, this will be intercepted by the drainage infrastructure which includes SuDs measures and oil interceptors. Maintenance of the surface water drainage system, including hydrocarbon interceptors, and foul sewers as per normal urban developments is recommended to minimise any accidental discharges to surface water.

The foul discharge will be required to operate in compliance with Uisce Éireann requirements.

10.5 Cumulative Impact of the Proposed Development

All cumulative developments that are already built and in operation contribute to the characterisation of the baseline environment. An assessment of the cumulative impact of existing and permitted development has been undertaken.

10.5.1 Construction Phase

All developments will have to manage discharges to protect water quality in compliance with legislative standards for receiving water quality (European Communities Environmental Objectives (Surface Water) Regulations (S.I. 272 of 2009 and S.I. 77 of 2019). As a result, there will be minimal cumulative potential for change in the natural hydrological regime. The cumulative impact is considered to be **neutral** and **imperceptible and short-term**.

10.5.2 Operational Phase

All the operational cumulative developments are required to manage discharges in accordance with S.I 272/2009 and S.I. 77/2019 amendments. As such there will be no cumulative impact to surface water quality and therefore there will be no cumulative impact on the Surface Waterbody Status. All development will be required within planning conditions to manage run-off such that there is no potential for offsite impacts. The operation of the proposed development is concluded to have a **long-term**, **imperceptible** significance with a **neutral** impact on surface water.

11 Air Quality

The assessment of Air Quality is contained within Chapter 11 of Volume 2 of the EIAR.

11.1 Existing Environment

Baseline data and data available from similar environments indicates that levels of nitrogen dioxide (NO_2), particulate matter less than 10 microns (PM_{10}) 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.

11.2 Impact Assessment

11.2.1 Construction Phases

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 high 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 high 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.

11.2.2 Operational Phase

Operational phase traffic has the potential to impact air quality due to vehicle exhaust emissions as a result of the increased number of vehicles accessing the site. The change in traffic associated with the operational phase of the proposed development met 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.

11.2.3 Mitigation and Residual Effects (Post-Mitigation)

11.2.3.1 Construction Phase

Detailed dust mitigation measures are outlined within Section 11.8 of Chapter 11 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).

11.2.3.2 Operational Phase

The effect of the operational phase on air quality has been assessed as **long-term, direct, negative** and **not significant.** As the predicted concentrations of pollutants will be not significant no mitigation is required.

11.2.4 Cumulative Impact

11.2.4.1 Construction Phase

There is the potential for cumulative impacts to air quality should the construction phase of the proposed development coincide with that of other developments within 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 high risk of dust impacts associated with the proposed development. The dust mitigation measures outlined in Section 11.8 of Chapter 11 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 **direct, short-term, negative** and **not significant.**

11.2.4.2 Operational Phase

The cumulative impact is included within the operational stage impact for the proposed development, which has assessed operational road traffic emissions generated by the proposed development and committed developments. The significance of the effect on air quality due to the cumulative operational phase impact of the proposed development will be **direct, long-term, negative** and **not significant**.

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

12 Climate

The assessment of Climate is contained within Chapter 12 of Volume 2 of the EIAR.

12.1 Existing Environment

The existing climate baseline can be determined by reference to data from the EPA on Ireland's total greenhouse gas (GHG) emissions and compliance with European Union's Effort Sharing Decision "EU 2020 Strategy" (Decision 406/2009/EC). The EPA estimate that Ireland had total GHG emissions of 60.76 Mt CO_2e in 2022. This is 3.72 Mt CO_2e higher than Ireland's annual target for emissions in 2022. EPA projections indicate that assuming full implementation of the Climate Action Plan and the use of the flexibilities available Ireland can achieve an emissions reduction of 30% by 2030.

12.2 Impact Assessment

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.

12.2.1 Construction Phases

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 CO_2e each. The proposed development will incorporate some mitigation measures which will aim to reduce climate impacts during construction and once the development is operational.

12.2.2 Operational Phase

GHG emissions during the operational phase due to road traffic were assessed. The changes in traffic volumes associated with the operational phase of the development were substantial enough the 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 is not predicted to significantly impact climate during the operational stage. Increases in traffic derived levels of CO_2 have been assessed against Ireland's obligations under the EU 2030 non-ETS target and Ireland's carbon emission ceilings. The proposed development has also incorporated a number of sustainability measures into the design of the development which will aid in reducing impacts to climate once operational.

Impacts to climate are deemed **direct, long-term, negative** and **slight,** which is considered **not significant** with regard to the construction and operational phase.

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 the effect of climate change on the proposed development 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.

12.2.3 Mitigation and Residual Effects (Post-Mitigation)

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

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

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

12.2.4 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.

13 Noise & Vibration

Chapter 13 of the EIAR provides information on the assessment of the noise and vibration impacts on the surrounding environment during both the construction and operational phases of the proposed development.

The study has been undertaken using the following methodology:

- Environmental noise surveys have been conducted at locations representative of the closest noise sensitive locations to the site;
- A review of standards and guidelines has been carried out in order to set a range of acceptable noise and vibration criteria for the construction and operational phases of the proposed development;
- Predictive calculations have been performed to determine the noise and vibration impact on the nearest sensitive locations during the construction phase;
- An assessment of the likely key sources of noise associated with the operational phase are identified and potential impacts calculated; and
- A schedule of mitigation measures has been proposed for both the construction and operational phases to reduce, where necessary, any significant noise and vibration impacts arising from the development.

13.1 Baseline Noise Environment

The baseline noise environment at the closest noise sensitive locations to the proposed development and across the development site is influenced by road traffic along the surrounding road network, activities within neighbouring residential areas and general environmental noise sources. The range of noise levels measured are typical of a suburban environment.

13.2 Construction Phase

Construction noise calculations have been performed representing typical noise levels associated with the construction of the various phases of work on site. The results of the assessment have determined that construction works can operate within the construction noise limits adopted for the project at distances beyond 30m.

For those residential NSLs immediately within 15 m to 30 m of the site boundary, the associated construction noise impact will be negative, significant and short-term when works are carried out along the site boundary. At all other sensitive receptors, the noise impact will be negative, not significant and short-term.

A range of noise mitigation measures have been included to reduce construction noise levels at the closest site boundaries including the inclusion of a solid construction site hoarding along noise sensitive boundaries. The application of binding noise limits and hours of operation, along with implementation of appropriate noise control measures, will ensure that the noise impact is controlled to within the construction significance thresholds.

Vibration impacts during the construction phase of the proposed development are not significant at the nearest sensitive buildings due to the type of construction activity on site, the low levels of vibration

associated with same and the distances to nearest sensitive buildings. Site activities will be managed so as not to exceed the vibration limits set out in Chapter 13.

13.3 Operational Phase

The main potential sources of outward noise from the development during the operational phase relate to traffic flows to and from the development via public roads and any mechanical and electrical plant used to service the proposed buildings. The primary sources of outward noise in the operational context are deemed to be long term in nature. There are no vibration sources associated with the operational phase.

In respect of vehicle movements on public roads, the predicted change in noise levels associated with additional traffic is expected to be neutral, imperceptible and long-term along the existing road network.

In respect of building services, a range of noise mitigation and best practice control measures have been included within the assessment to control noise levels at the closest noise sensitive properties within the development once operational. Taking into account these mitigation measures, the impact from building services and plant is predicted to be negative, not significant and long term.

The assessment has determined that the above sources will not generate any significant noise impact at existing noise sensitive locations in the surrounding environment. Residential properties within the development itself are the closest noise sensitive locations to any noise sources generated within the site.

14 Landscape & Visual

14.1 Landscape Impacts & Effects

The sites enhancement values (as set out in **Section 14.4.4 of the EIAR Volume 2**) reflect a body of policy that is supportive of landscape change at this location (and its environs) as part of general town expansion of Donabate as a self-sustaining growth town, and change that is already underway. Despite its attractive rural qualities, the site is currently surrounded by landscape change and the urbanisation of its setting. Nonetheless, it offers attractive characteristics to contribute to this new environment.

The site's conservation values (as set out in **Section 14.4.4 of the EIAR Volume 2**) predominantly reflect the core elements of the local architectural, heritage and landscape designations and the landscape resource.

Overall, the impact of the proposed development is the change of the site from its current agricultural lands (albeit lands that are currently under-utilised and neglected) to a high-quality residential neighbourhood.

The proposed development directly affects the physical character of:

- LCA – Coastal Character Area; and
- The immediate environs of the proposed development site.

The Coastal LCA is classified to have **'Exceptional' Value and 'High' Sensitivity,**

The immediate environs and the proposed development site is classified as **'Medium' Sensitivity.**

14.2 Construction Phase

Construction Effects on the Landscape: Coastal Character Area (High Sensitivity)

The effects during construction would affect a small geographical extent of the Coastal Character LCA and an area that is nor directly linked to the coast itself. The construction works are expected to last 30 months. The predicted **magnitude of change is 'low'.** This will result in an effect of '**slight** to **moderate significance**'.

Overall, the predicted impacts are **temporary to short-term** and **adverse** in nature.

It should be noted the core coastal part of the LCA would experience no change – see visual assessment Section 14.6 of the EIAR.

Construction Effects on the Landscape: The immediate environs of the proposed development site (Medium Sensitivity)

The effects during construction would be intensive across the Phase 2 site and immediate environs. The **magnitude of change would be 'high'**, resulting in the loss of agricultural lands and some hedgerows across the site. This would change the character of the landscape and generate a landscape effect that would be '**significant**'.

Qualitatively, it is expected that all construction works would have an **adverse** landscape impact. The construction works are expected to take up to 30 months and, therefore, are considered as **temporary to short-term** in duration.

14.3 Operational Phase

Operational Effects on the Landscape: Coastal Landscape Character Area (High Sensitivity)

The site's enhancement values (as set out in **Section 14.4.4 of the EIAR Volume 2**) reflect a significant body of policy that is supportive of major landscape change at this location to form a new residential community.

The impact of the proposed development would be the change of the site from greenfield site to a new residential and urban neighbourhood. Locally, some trees and hedgerows will be affected; however, the proposed development has been laid out to incorporate many of these existing landscape 'green infrastructure' features within its landscape structure of open spaces and networks.

The effects of this, in terms of alteration of the landscape character, are assessed below.

The effects of the proposed development at operation on the Coastal Landscape Character Area would affect a limited geographical extent of this LCA. The proposed development, in general, complements the scale, landform and pattern of the landscape and townscape in most places and is also in keeping with relevant policy objectives. Change is relatively limited in scale resulting in minor alteration to the landscape as the existing urban area incrementally extends further east with localised change to the overall Coastal LCA and its purpose.

The **magnitude of change would be low** relative to the whole LCA. The effect would be of **slight to moderate significance.** This would occur over the short, medium and long term.

Qualitatively, the effect would be **neutral.**

Operational Effects on the Landscape: The immediate environs of the proposed development site (Medium Sensitivity)

In terms of the immediate environs of the proposed development, the proposed development would impact the full extent of the Phase Two site, resulting in the loss of the agricultural lands. The proposal would introduce residential development into the landscape, which, although may be new and prominent, is not uncharacteristic of the area. The proposed development achieves local policy objectives of Fingal County Council and is in keeping with local land use zoning. Its scale and effect would be transformational along the edge of Donabate and the DDR, but important to be so, in order to contribute to local place-making.

The **magnitude of effect would be High**. The effect would be **significant.** This would remain over the short, medium and long term.

Qualitatively, the effect would be **beneficial**, reflecting appropriate change in keeping with development plan objectives.

14.4 Cumulative Impacts

A number of permitted and proposed developments in the vicinity of the proposed development site are listed in **Table 22.1** of the EIAR and same is highlighted in **Section 14.4.3** of the Landscape and Visual chapter.

Nearby approved residential development projects and associated landscape changes are all part of policy to delivery an expanded urban area of Donabate to the east and along the DDR corridor. Currently these lands are in a state of transition. The cumulative effect of all these changes will be

transformational and see the semi-rural current landscape become urban with planned amenities, landscaped streets, and a variety of housing styles and materials. A new place/landscape /townscape is being created here.

Cumulative Effects during Construction Phase

The **cumulative magnitude of change** would be **'Very High'**, i.e, *Change that is large in extent, resulting in the loss of or major alteration to key elements, features or characteristics of the landscape and/or introduction of large elements considered totally uncharacteristic in the context. Such development results in fundamental change in the character of the landscape.*

The **cumulative effect** would be **Significant to Very Significant**, depending on the proximity to the change and stage of development. Qualitatively the landscape effect is **Adverse (negative)** during the construction phase.

Cumulative Effects during Operational Phase

The **cumulative magnitude of change** would be **'Very High'**, i.e, *Change that is large in extent, resulting in the loss of or major alteration to key elements, features or characteristics of the landscape and/or introduction of large elements considered totally uncharacteristic in the context. Such development results in fundamental change in the character of the landscape.*

The **cumulative effect** locally would be **Moderate to Very Significant,** depending on the proximity to the change. (NB the core coastal areas would remain unaffected by the cumulative effects)

Qualitatively the landscape effect is **Neutral to Beneficial** during operational phase.

14.5 Visual Impacts and Effects

Of the 21 viewpoints assessed 8 show no change / no visual effect.

These reflect generally views at some distance from the development with intervening trees, topography and / or buildings. In general most of the existing built up and residential area of Donabate is unaffected by Phase Two as also is the actual coastal areas of the Coastal LCA.

The most significant changes visually are along the DDR corridor where the largest buildings would be located and also where currently the landscape is most open with least cover. Whilst these changes are Very Significant, they are also regarded as placemaking and reflecting local policy objectives and the planned expansion of the town eastwards. In this regard they range from neutral (complementary) to beneficial or positive in quality.

Views from adjacent residential areas to the west and south of Phase Two will have limited visibility of the site, and changes.

Given the planning policy for the area, development of this site is inevitable, and it is considered likely that any proposed viable development will give rise to impacts of a similar nature. While the intensification of land use, as it changes from now neglected farmland into a residential development is a change that cannot be entirely mitigated, the proposals reflect best practice in residential area layout, and the concepts in the wider Masterplan, and will consolidate the urban area here with an overall beneficial effect locally and to the wider surrounding area.

No adverse residual impacts are predicted in relation to landscape and visual amenity.

15 Cultural Heritage, Archaeology & Architectural Heritage

The assessment of Cultural Heritage – Archaeology is contained within Chapter 15 of Volume 2 of the EIAR.

15.1 Baseline Survey

An archaeological, architectural and cultural heritage study was undertaken at the subject site in order to identify and record the location, nature and dimensions of any archaeological or cultural heritage features, fabric or artefacts that may be impacted by the proposed works. This assessment included a desk-based study and collated data from the Record of Monuments and Places (RMP), the Topographical files of the National Museum of Ireland (NMI), cartographic sources, aerial photography, documentary research and relevant on-line databases. In addition to the desktop assessment, test excavation assisted in providing an understanding of the receiving archaeological and cultural heritage environment and potential. The subject site is large in scale and located in proximity to the medieval town of Donabate and numerous recorded monuments. A total of nine archaeological areas have been identified across the wider landholding from analysis of desk-based sources and licensed archaeological test excavations carried out in advance of the proposed development.

- Test trenching undertaken across the wider landholding comprised 90 test trenches with a combined length of 10,191 linear metres with an additional 284 sq. m excavated around archaeological features.
- Nine archaeological areas were identified across the wider landholding (AA1-AA9), including five (AA2, AA3, AA4, AA6 & AA7) within the current application Phase 2 area.
- The five archaeological monuments located within the subject site have all been fully archaeologically excavated (preserved by record) under licence (Licence Refs: 21E0667, 21E0668, 21E0669, 21E0674 & 21E0675) to the DHLGH.

Consequently, there remains high potential for the continued survival of buried archaeological remains at the site.

15.2 Impact Assessment

15.2.1 Do Nothing

If the proposed development were not undertaken, any additional unrecorded buried archaeological features within the subject site would be preserved beneath the existing ground surface. However, the site is zoned for development and it is likely that in the absence of this subject proposal, that a development of a similar nature would be progressed on the site that accords with national and regional policies to promote the provision of high quality new residential environments with good layout and design, with adequate public transport and cycle links and within walking distance of community facilities. The impact on the archaeological environment would likely be similar to this proposed development.

15.2.2 Construction Phase

Buried archaeological sites have been identified at Archaeological Area 2, Archaeological Area 3, Archaeological Area 4, Archaeological Area 6 and Archaeological Area 7. Should development proceed, there are **significant potential direct** or **indirect negative impacts** on additional buried archaeological

sites during the construction phase of the proposed development. The greatest threat to buried archaeological deposits occurs during large-scale removal of topsoil during the initial construction phase groundworks. It is concluded that, in the absence of the mitigation measures described below, **significant impacts** on the potential buried archaeological remains at the site would be **direct**, **negative** and **permanent**.

15.2.3 Operational Phase

No potential negative effects are identified at the operational phase. It is anticipated that issues of archaeological and cultural heritage interest will have been resolved prior to or during the construction phase.

15.3 Mitigation Measures

Mitigation measures shall be undertaken as directed by the DHLGH in compliance with national policy guidelines and statutory provisions for the protection of archaeology and cultural heritage.

15.3.1 Incorporated Design Mitigation

Advance archaeological assessments were commissioned at the site at design stage in order to identify adverse effects on archaeological and cultural heritage sites/features at an early stage and to inform the design process. Archaeological Areas AA2, AA3, AA4, AA6 & AA7 all located within the Phase 2 area have been preserved by record in advance of construction works.

15.3.2 Construction Phase

General Mitigation Measures

The following general mitigation measures are proposed:

All ground disturbance works across the remainder of the development site will be monitored by a suitably qualified archaeologist. In the event that archaeological material is recorded during monitoring, further discussion/consultation with the DHLGH will be sought in order to ascertain the appropriate treatment (i.e. preservation by record/preservation in situ) of any additional archaeological remains. Should the DHLGH recommend preservation by record/full archaeological excavation, this work will be undertaken under the appropriate licence. The DHLGH may recommend preservation in situ, should avoidance of any newly discovered archaeological remains be possible.

15.3.3 Operational Phase

No further recommendations.

15.4 Residual Impacts

It is not anticipated that there will be any residual impacts with the appropriate mitigation measures in place during the construction and operational phases.

15.5 Monitoring

Construction groundworks will be monitored by a suitably qualified archaeologist as per General Mitigation Measures. Any future licensed archaeological works will require an application process including approval of proposed methodologies by the National Monuments Service of DHLGH in consultation with the NMI and notification of works.

16 Microclimate – Daylight & Sunlight

Chapter 16 (Microclimate - Daylight & Sunlight) outlines analysis of the impact of the proposed development on lands at Ballymastone (Phase 2) located in Donabate, Dublin on daylight and sunlight access across the site and the surrounding area.

The analysis was undertaken in accordance with industry best practice guidelines for sunlight in the BRE publication "Site Layout Planning for Daylight and Sunlight – A guide to good Practice (Third Edition): BRE209 (2022)".

The daylight and sunlight impact of the construction phase of the proposed development are likely to be, initially, lesser than those of the completed proposed development. It is noted that temporary structures and machinery (e.g. hoarding, scaffolding, cranes, etc.) have the potential to result in changes to sunlight access in buildings, although any additional impacts arising in this regard will be **brief** to **short-term** and **not significant**.

The proposed development is envisaged to provide well-lit homes and amenity areas. The daylight analysis has determined that 99.8% of the assessed spaces meet or exceeds BRE best practice guidelines.

The analysis considered existing neighbouring buildings, external amenity spaces and neighbouring solar panels. The potential impact of the proposed development on daylight and sunlight access within its surrounding receiving environment determined that there would not be a major impact.

Daylight for the proposed development was found to be **permanently negatively**; however, the impact is **not significant**. The impact on the neighbouring area has been determined to be **neutral**, with **no effects** within the normal bounds of variation. **No significant negative impacts** are predicted in relation to sunlight during the operational phase for both the proposed development and the neighbouring area. Overall, the impact in this regard is predicted to be **permanent, neutral, and imperceptible**.

With provision of mitigation measures, the residual impacts for daylight were determined to be **neutral, imperceptible, and permanent**. The extent of compliance for sunlight was determined, and it was found that there would be no residual impacts.

17 Microclimate – Wind

A wind microclimate study has been carried out to consider the possible wind patterns formed under both mean and peak wind conditions typically occurring on the site area. The study accounts for a scenario where the proposed development (*Phase 2*) is inserted in the existing environment (*Baseline with Phase 1*).

The study also includes a scenario where the proposed development and the existing environment are analysed including any permitted developments not constructed yet but located in a radius of 400m from the centre of the site, as they can be influenced by the wind patterns generated by the ones proposed (*Cumulative impact*).

The potential receptors include the areas in the surrounding of the development which can be exposed to potential risks generated by the elevated wind speed or building massing wind effects. In particular:

- Amenity areas (pedestrian level), areas likely to be utilised for leisure purposes and as such should be comfortable surroundings.
- Pedestrian routes and seating areas – to determine if locations are comfortable for leisure activities.
- Entrance to the buildings – to determine if there is potential for pressure related issues for entrances or lobbies.
- Landscaped areas – where there are sheltered areas.
- Impact to existing or adjoining developments – where the proposed buildings will cause discomfort conditions through proximity related issues.

These areas for the proposed development include sensitive receptors such as the small parks, the proposed pocket park and a proposed play area park. Furthermore, for the off-site receptors, it is relevant to mention the Recreational Hub which hosts sport events and needs to display comfort criteria for spectators/users of different age categories.

The "*Lawson Criteria for Pedestrian Comfort and Distress*" define the acceptable wind velocities in relation to the perception of comfort level experienced while carrying out a specific pedestrian activity. Lawson Comfort and Distress Map have been produced to identify where a specific pedestrian activity can be carried out comfortably during most of the time.

17.1 Methodology

The method for the study of wind microclimate combines the use of Computational Fluid Dynamics (CFD) to predict wind velocities and wind flow patterns, with the use of wind data from suitable meteorological station and the recommended comfort and safety standards (Lawson Criteria). The effect of the geometry, height and massing of the proposed development and existing surroundings including topography, ground roughness and landscaping of the site, on local wind speed and direction is considered as well as the pedestrian activity to be expected (sitting, standing, strolling and fast walking).

The assessment predicts under which wind speeds pedestrians will be exposed and what level of comfort pedestrian will experience when carrying out a specific activity (i.e. walking, strolling, sitting). The results are presented in the form of contours map of the Lawson criteria at pedestrian level.

"Lawson Comfort and Distress Criteria" have been adopted for wind microclimate studies as a means of assessing the long-term suitability of urban areas for walking or sitting, accounting for both microclimatic wind effects (i.e. site location and prevailing winds) and microclimatic air movement associated with wind forces influenced by the localised built environment forms and landscaping effects. To assess the wind microclimate in the proposed development, the study has considered the site exposed to all the wind directions (from 00 to 360o with steps of 22.5o). The method involves the consideration of the following items:

- Topography of the site with buildings (proposed and adjacent existing/permitted developments massing, depending on the scenario assessed *"baseline, proposed or cumulative"*) have been modelled using CFD OpenFOAM Software.
- Suitable wind conditions have been determined based on historic wind data. Criteria and selected wind scenarios included means and peaks wind conditions that need to be assessed in relation to the Lawson Criteria.
- Computational Fluid Dynamics (CFD) has been used to simulate the local wind environment for the required scenarios (*'baseline, proposed, cumulative"*).
- The impact of the proposed development massing on the local wind environment has been determined (showing the wind flows obtained at pedestrian level).
- Potential receptors (pedestrian areas) have been assessed through review of external amenity/public areas (generating the Lawson Comfort and Distress Map).
- Potential mitigation strategies for any building related discomfort conditions (where necessary) have been explored and their effect introduced in the CFD model produced.

The significance of on-site measurement locations is defined by comparing the wind comfort/safety levels with the intended pedestrian activity at each location, using the table provided by the Lawson Comfort and Distress Criteria.

The significance of off-site measurement locations is defined by comparing the wind comfort/safety levels with the intended pedestrian activity at each location, prior and after the introduction of the proposed development.

17.2 Baseline Environment

The wind microclimate of the *original* baseline environment was previously studied and reported. Recently, the baseline environment has included the Phase 1. Therefore, now baseline wind microclimate is defined by the wind patterns that develop on the existing site including Phase 1 buildings. Public areas are now included in the existing context.

The application of the Lawson Criteria is now considered as the potential receptors will use the area for the designated scope, as the Phase 1 development will be constructed. The map of Comfort and Distress shows as the site is indicated for standing or short time sitting.

17.3 Potential Impacts of the Proposed Project

The wind impacts on the proposed development, on the on-site receptors (pedestrian areas, roads, entrances) and on the off-site receptors (roads/ pedestrian areas off-site on the north, south, west and east directions). The impacts are evaluated in comparison with the conditions in the same areas for the baseline scenario including Phase 1. As result of the proposed development construction, the wind in the surrounding urban context is also mitigated when compared with the baseline situation. In this

sense, the proposed development will have a **beneficial effect** on the surrounding wind microclimate and can create comfortable pedestrian areas and public spaces.

17.3.1 Cumulative impact

Furthermore, the assessment demonstrates that wind microclimate conditions will also improve when the proposed development is analysed in conjunction with the existing/approved developments within an area of 400m radius from the centre of the site.

The potential and permitted schemes within the vicinity of the proposed developements are the development ref.F20A/0510, ref.F17A/0373 and the Recreational Hub.

The impact and significance of the proposed development in a Cumulative Scenario on the on-site receptors (pedestrian areas, roads, entrances) and on the off-site receptors (roads/ pedestrian areas off-site on the north, south, west and east directions) is resulting to be "**negligible**" and "**beneficial**" (depending on the on-site and off-site receptors considered). Indeed, because of the proposed development construction in conjunction with the permitted development considered in the Cumulative Scenario, the wind on the surrounding urban context is also mitigated when compared with the baseline situation and the proposed scenario in the existing context. The proposed development therefore has a beneficial effect on the surrounding wind microclimate and can create comfortable pedestrian areas and public spaces.

17.4 Residual Impacts (post-mitigation)

Wind cannot be eliminated or totally mitigated as it depends on weather conditions which could vary. The data of the historical wind conditions collected and reported in the previous sections, show that the wind speeds likely to occur on the site are below critical values and that pleasant and comfortable microclimate can be maintained for most of the time and under the most frequent wind scenarios.

Gusts and storms can still occur however, and they can create unpleasant and sometimes unsafe conditions. The pedestrian activities concerning the Lawson Comfort and Distress Criteria are not in general carried out during those weather conditions.

Having considered the above, no further changes to the development design and further increasing of the landscaping is suggested, as safety and pedestrian comfort is maintained in accordance with Lawson Comfort and Distress Criteria.

18 Traffic & Transportation

This chapter of the EIAR was prepared by DBFL Consulting Engineers and includes an assessment of the likely impact on the existing transport environment as a result of the proposed 54 no. 2-bed houses, 99 no. 3-bed houses, 5 no. 4-bed houses, 8 no. 1-bed duplexes, 33 no. 2-bed duplexes, 41 no. 3-bed duplexes, 48 no. 1-bed apartment units, 66 no. 2-bed apartment units and 10 no. 3-bed apartment units.

The Donabate Distributor Road (DDR) runs in a north-south direction to the east of the site. Travelling west onto the R126 from the DDR; motorists can access the M1 Motorway, which provides convenient access to Dublin City Centre to the south; and the M50, which provides strategic network access across the Greater Dublin Area. Destinations such as Drogheda and Dundalk can be accessed via the M1 to the north. Donabate town centre can be accessed by either Portrane Road to the north of the site, or New Road to the south of the site. The majority of the surrounding roads to the west and north of the site are residential in nature and low speed environments. The signalised junctions in the vicinity of the site are generally not too busy, with minor traffic build up at peak times.

The site of the proposed development is well connected by public transport with both bus and rail services located nearby. The site sits approximately 4 - 7 minutes walking distance from bus stops of four bus routes, one of which offers frequent services (i.e. every 20 – 30 minutes at peak times) between Portrane and Swords. Donabate Railway Station is situated between 850 m – 1,500 m from the site of the proposed Phase 2 development (measured from the nearest and furthest points of the site). The well-established rail infrastructure in Donabate provides linkages to Dublin City Centre to the south, and Drogheda to the north, from where further onwards connections can be made to other destinations. Donabate Railway Station is currently well served by up to 28 no. commuter rail services providing connections to and from Dublin City Centre on a typical weekday, operating at a frequency of 15 – 20 minutes during peak times.

The site is within a convenient 11 – 20 minute walking distance of Donabate town centre as well as a number of leisure, medical and retail facilities (measured from the nearest and furthest points of the site).

The main pedestrian routes to and from the site are generally of very good quality, with wide footpaths and street lighting. There are formal pedestrian crossing points at the site access on the DDR, at the DDR / New Road Junction, at the DDR / Hearse Road Junction, and on the Portrane Road (adjacent to the Portrane Road / The Links junction). It is proposed to upgrade the Portrane Road / The Links priority controlled junction to a signalised controlled junction as part of the permitted Phase 1 development upgrades, which will add an additional Toucan crossing at The Links arm of the junction. The proposed access junction to the DDR, which is being delivered as part of the permitted Phase 1 development, will also be upgraded to a Cycle Protected Signalised Junction and will connect to the main east-west off road pedestrian/cycle route connecting to The Links. Within the site itself is a connected network of paths, including an off-road east-west shared path and north-south shared path for pedestrians and cyclists.

A segregated cycle track and footpath is provided on both sides of the DDR in the vicinity of the proposed development, with street lighting provided on one side of the carriageway. Donabate currently has limited dedicated cycling facilities but has the potential to become a cycling town. The

NTA's Greater Dublin Area Cycle Network Plan (2022) currently proposes a number of cycle route networks within Donabate.

The development comprises a total of 278 no. car parking spaces. A total of 1,457 no. cycle parking spaces are proposed as part of the development (comprising 1,353 no. resident cycle spaces and 104 no. visitor cycle spaces). This level of provision of car parking is in accordance with the FCC Development Plan requirements for Zone 1 developments and the car parking management standards as detailed within Table 14.18 of the FCC Development Plan and also in accordance with the Compact Settlement Requirements. The development proposals regarding the provision of cycle parking for the duplex, apartment and house units is in accordance with the FCC Development Plan standards.

In order to establish the existing local road networks traffic characteristics and subsequently enable the identification of the potential impact of the proposed residential development, traffic surveys were conducted on Tuesday 18 April 2023. These included junction turning counts from eight junctions.

The site's total person trip generation was calculated using TRICS and takes account of trips from the proposed houses, duplexes and apartments. Additionally, six committed developments have been included. These are The Corballis East Development (Ref: LRD0017/S3), located to the south of the proposed Ballymastone development, the Ballisk Development (reg. ref. F17A/0373) located immediately south of the site, the residential development (reg. ref. F20A/0510) for 28 no. apartments/duplexes and 36 no. houses located to the south of the development, the Ballymastone Recreational Hub located to the east of the site, accessed from the signalised DDR junction, the Phase 1 of the wider development of the Ballymastone Lands (Reg. Ref: LRD0008/S3) located immediately south of the proposed Phase 2 site and The residential development (Ref: F22A/0527), located to the south of the proposed Ballymastone development. In addition to these committed developments the future Phase 3 element of the masterplan lands, consisting of approximately 400 no. residential units has been included in the assessment Traffic volumes at outside of peak hours will be low when compared against the peak hour traffic on surrounding roads.

An Opening Year of 2026 was assumed for this assessment as well as future design years of 2031 and 2041. A number of design scenarios were assessed and these included Do Nothing scenarios where the baseline traffic was analysed without the development in place. These Do Nothing scenarios also included committed development within the area. Also assessed were a number of Do Something scenarios which included vehicle trips to and from the proposed development.

The proposed development will affect the levels of queuing and delays at key local junctions. PICADY and TRANSYT analysis was carried out on eight junctions in the vicinity of the site. The analysis shows that six of these junctions will operate well within capacity for all design years.

The results for the Main Street / Chapel View priority junction found that in the 'Do Nothing' scenario for the 2041 Future Year, the junction will operate approaching capacity with a maximum RFC value of 0.87 and a 5.0 pcu queue in the AM peak and a maximum RFC value of 0.81 and a 7.6 pcu queue in the PM peak. This is exacerbated in the 'Do Something' with a maximum RFC value of 1.16 in the AM peak and 1.02 in the PM Peak.

The results for the Main Street / Hearse Road priority junction found that in the 'Do Nothing' scenario for the 2041 Future Year, the junction will operate above capacity with a maximum RFC value of 0.98 and a 20.1 pcu queue in the AM peak and a maximum RFC value of 0.89 and a 9.0 pcu queue in the PM

peak. This is exacerbated slightly in the 'Do Something' with a maximum RFC value of 1.04 in the AM peak and 0.94 in the PM Peak.

In conclusion, it is considered that the residual impact post mitigation on the surrounding road network, as a result of the proposed development will be not significant. This is based on the anticipated levels of traffic generated by the proposed development, the existing and future road infrastructure and the information and analysis summarised in Chapter 18 of the EIAR.

19 Material Assets – Waste

19.1 Introduction

AWN Consulting undertook the waste management assessment. The receiving environment is largely defined by Fingal County Council (FCC) as the local authority responsible for setting and administering waste management activities in the area through regional and development zone specific policies and regulations.

19.2 Baseline Environment

The current site is a greenfield site that is not generating any waste.

19.3 Potential Impacts of the Proposed Development

19.3.1 Construction Phase

During the construction phase the mismanagement of waste, including the inadequate storage of waste, inadequate handling of hazardous waste, the use of inappropriate or insufficient segregation techniques, and the use of non-permitted waste contractors, would likely lead to negative impacts such as waste unnecessarily being diverted to landfill, litter pollution which may lead to vermin, runoff pollution from waste and illegal dumping of waste. In the absence of mitigation, the effect on the local and regional environment is likely to be **short-term, significant and negative**.

19.3.2 Operational Phase

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

19.4 Mitigation and Residual Effects (Post Mitigation)

19.4.1 Construction Phase

During the construction phase, typical construction waste materials will be generated which will be source segregated on-site into appropriate skips/containers, within designated waste storage areas and removed from site by suitably permitted waste contractors as required, to authorised waste facilities, by appropriately licensed waste contractors. While the accurate keeping of waste records will be undertaken. All waste leaving the site will be recorded and copies of relevant documentation maintained.

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

A carefully planned approach to waste management and adherence to the site-specific Resource and Waste Management Plan **(Appendix 19.1)** and chapter 19 during the construction phase, this will ensure that the residual effect on the environment will be **short-term, neutral** and **imperceptible**.

19.4.2 Operational Phase

During the operational phase, waste will be generated by the residents. Dedicated waste storage areas (WSAs) have been allocated throughout the development for the use of residents. The WSAs have been appropriately sized to accommodate the estimated waste arisings from the development. The WSAs have been allocated to ensure a convenient and efficient management strategy with source segregation a priority. Waste will be collected from the designated waste collection areas for shared WSAs and on the curb for individual WSAs by permitted waste contractors and removed off-site for re-use, recycling, recovery and/or disposal.

An Operational Waste Management Plan (OWMP) or Strategy has been prepared and is included as **Appendix 19.2**. The OWMP provides a strategy for segregation (at source), storage and collection of wastes generated within the development during the operational phase including Organic waste; Dry Mixed Recyclables, Mixed Non-Recyclable Waste, Glass, Waste electrical and electronic equipment (WEEE) including computers, printers, cooking oil, cleaning chemicals (paints, adhesives, resins, detergents, etc.), furniture (and from time-to-time other bulky waste) and abandoned bicycles.

This OWMP will be supplemented, as required, by the operator with any new information on waste segregation, storage, reuse and recycling initiatives that are subsequently introduced.

Provided the mitigation measures outlined in the OWMP **(Appendix 19.2)** and in chapter 19 are implemented and a high rate of reuse, recycling and recovery is achieved, the predicted residual effect of the operational phase on the environment will be **long-term, neutral** and **imperceptible.**

19.5 Cumulative Impact of the Proposed Development

19.5.1 Construction Phase

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

Other developments in the area will be required to manage waste in compliance with national and local legislation, policies and plans which will mitigate against any potential cumulative effects associated with waste generation and waste management. As such the cumulative effect will be **short-term, not significant** and **neutral.**

19.5.2 Operational Phase

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

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

20 Material Assets – Services

20.1 Introduction

The subject application (Phase 2) forms part of a wider Masterplan for lands within the Ballisk, Ballymastone, Ballalease North & Portrane Demesne Townlands and represents Phase 2 of a wider development of the Ballymastone Lands (as identified in the Donabate Local Area Plan 2016 (as extended)) and is a continuation of Phase 1 of the Masterplan lands (permitted under LRD0008/S3).

The proposed development, comprises a Large-Scale Residential Development (LRD) including the provision of 364 residential units consisting of:

- 158 No. Houses (54 No. 2 Bed; 99 No. 3 Bed, 5 No 4 Bed),
- 82 No. Duplex in 9 No. Blocks (8 No. 1 Bed; 33 No. 2 Bed, 41 No 3 Bed),
- 124 No. Apartments in No. 3 Blocks (48 No. 1 Bed; 66 No. 2 Bed, 10 No 3 Bed).

This chapter will assess the potential effects associated with the Proposed Development, if any, with regards to the following built services:

- Water Supply Infrastructure
- Surface Water Drainage Infrastructure
- Wastewater Drainage Infrastructure
- Electricity
- Gas; and
- Telecommunications.

20.2 Method

Baseline information on existing services has been obtained from Utility providers.

The methodology is consistent with the relevant guidance as listed within the main report.

Effects and impacts have been characterised in accordance with the criteria set out in the EPA guidelines.

20.3 Baseline Environment

20.3.1 Electrical Power

There is existing Electricity Supply Board Networks (ESBN) medium voltage infrastructure on the site. An application has been formally submitted to ESBN to divert these lines.

Discussions with the ESBN have not indicated any issue with availability of supply. Formal application for supply has been made to ESBN.

20.3.2 Natural Gas

There is existing natural gas infrastructure on the site. An application has been formally submitted to GNI to divert the underground pipework on the site.

The development does not require a supply of natural gas for any of the proposed buildings. No new supply will be taken onto the site as part of the development.

20.3.3 Telecommunications

There is no existing telecommunication infrastructure traversing the site.

There is infrastructure adjacent to the site, which will be brought onto the site to supply all parts of the development. This has been agreed with the utility companies.

20.3.4 Water Supply

There is an existing 400mm diameter water main in DDR and a 225mm diameter watermain also exists within the Links Road to the north-west of the site. Primarily the 400mm watermain on the DDR will be utilised to serve the Phase 2 development.

20.3.5 Surface Water Drainage

The existing site is predominantly greenfield excluding the existing DDR, and the topography of the site is generally flat with a high point in the middle of the site adjacent to the DDR with a slight fall from the east to the west. Currently, the site is drained by a network of drainage ditches which traverses the site and feed into the Beaverstown stream catchment and Portrane Canal catchment.

Surface water runoff from the existing DDR is collected via road gullies into existing carrier drains running along the road and transferred into 5 attenuation ponds along the length of the DDR.

20.3.6 Foul Water Drainage

The subject site has no existing foul loading as it is mainly greenfield. According to the records, there is an existing 300mm foul sewer running through the recently constructed DDR.

20.4 Predicted Impacts of the Proposed Development

20.4.1 Do-Nothing Impact

In the do-nothing scenario (i.e. assuming the proposed development were not progressed), the built services and infrastructure at the site of the proposed development would likely remain unchanged. It is not possible to identify the loadings that would be associated with any alternate future development proposal in the absence of a planned project. However, it is anticipated that it would be similar to the proposed development and the effects would be similar to those described within the main text.

20.4.2 Construction Phase

Electrical Diversions

The proposed development includes the diversion of existing services and the supply of new services to the development as set out below.

Existing Medium Voltage 10kV overhead lines crossing the site will be diverted by ESBN. Without knowing the specific detail of the ESBN diversion design we would anticipate that the impact of this diversion will have **neutral and not significant effect** on the environment.

Natural Gas Diversions

Existing Natural Gas medium pressure lines crossing the site will be diverted by GNI. Without knowing the specific detail of the GNI diversion design we would anticipate that the impact of this diversion will have **neutral and not significant effect** on the environment.

Electrical Proposed new infrastructure

The proposed infrastructure includes ESBN supplies to Substations and ESB Unit Substations located throughout the site.

In the absence of mitigation measures **negative, slight and short-term impacts** are predicted in relation to built services or infrastructure during the construction phase.

The proposed site lighting installation would be considered **not significant** due to the adherence to Fingal County Council requirements in relation to limiting Sky Glow and automatic switchoff in relation to daylight levels.

Telecommuncations Proposed new infrastructure

Connections to the Eir and Virgin Media infrastructure have been agreed with these utility companies with dedicated ducting to all apartment blocks, duplexes and houses. Siro service will also be provided and this runs within the ESB ducting.

In the absence of mitigation measures **negative, slight and short-term impacts** are predicted in relation to built services or infrastructure during the construction phase.

No new gas supply is proposed for the development.

Water Supply & Drainage

The proposed infrastructure includes water supply and foul drainage which have been agreed with Irish Water and the proposed Surface Water Strategy discussed with Fingal County Council

Without the consideration of mitigation measures the construction phase of the proposed development will likely have a **neutral, short-term, moderate impact**.

20.4.3 Operational Phase

Electrical

The likely impact from the operational phase on the electricity supply network is considered to provide a **positive effect** as key infrastructure is provided to the neighbourhood.

The indirect impact will allow ESB Networks to provide additional resilience in their network through the provision of a new sub-stations which in turn should have a **slight permanent impact of positive effect** on the wider area's electrical infrastructure.

Natural Gas

The gas demands during the operational phase on the existing gas network are considered to be none due to no new gas supply being proposed for the development.

Telecommuncations

The Proposed Development will require telecommunication connections during the operational phase of the scheme. As the new services will be located underground this will result in an **imperceptible impact of long term and positive effect**.

The likely impact from the operational phase on the telecoms network is likely to be **imperceptible impact of long term and neutral effect.**

Water Supply & Drainage

Demand from the proposed development during the operational phase is not predicted to impact negatively on the existing water, surface water and foul networks.

Without the consideration of mitigation measures the operational phase of the proposed development will likely have a **neutral, permanent, slight impact**.

20.5 Mitigation Measures

20.5.1 Construction Phase

Electrical

The exact locations of the below ground ESB Networks infrastructure will be confirmed through excavation by the Contractor, including slit trenches, in order to determine the exact location of the below ground network. This will mitigate against the risk of damage to underground electricity network during the excavation phase prior to diverting the ESB network. The ESB diversion shall be carried out by ESB and its new location clearly documented to mitigate the risk of a cable duct damage during the construction phase.

Natural Gas

Existing Gas Networks Ireland gas main requires a diversion as per Section 20.4.2.1 above. This will be carried out by GNI in accordance with *HSA Code of Practice for Avoiding Danger from underground services*.

No new gas supply connection points to the existing infrastructure are being proposed for the proposed development. No construction works relating to new or the existing gas infrastructure are envisioned for the construction phase.

Telecommuncations

Utility Records identify the location of telecommunications infrastructure adjacent to the site and have informed detailed design. Prior to excavation the Contractor will carry out additional site investigation, including slit trenches, in order to determine the exact location of the telecommunications networks in close proximity to the works area. This will ensure that the underground telecommunications network will not be damaged during the construction phase.

Water Supply & Drainage

Specific measures outlined in the site specific Construction and Environmental Management Plan will be implemented to ensure no adverse effects to the existing site are mitigated against.

20.5.2 Operational Phase

Electrical

The ESB review the electrical demand requirements for all proposed developments and confirm if the public network has capacity to cater for same, with or without network upgrades, prior to connection to the public network. This review is undertaken following a grant of planning permission. Should network upgrades be required these would benefit the local community as it would modernise the network in this area.

Natural Gas

The Proposed Development won't be utilising any gas supply, therefore no mitigation is required.

Telecommunications

In relation to telecommunications, no mitigation measures are anticipated during the operational phase.

Water Supply & Drainage

The design of proposed site levels (roads, finished floor levels etc.) was completed to replicate existing surface contours, break lines etc., therefore replicating existing overland surface water flow paths, to minimise changes to the site characteristics and not concentrating water run-off in any particular location(s).

Surface water runoff from the site will be attenuated to the existing greenfield runoff rate as outlined in the Greater Dublin Strategic Drainage Study (GDSDS). Surface water discharge rates will be controlled by Hydrobrake type vortex flow control devices, located at all attenuation areas, in conjunction with attenuation storage in both locations.

All new foul drainage pipes will be pressure tested and will be subject to an internal CCTV survey in order to identify any possible defects prior to being made operational.

No additional mitigation measures are proposed in relation to water supply, however water conservation measures such as dual flush water cisterns and low flow taps will be included in the design.

20.6 Residual Impacts

Electrical

Taking into account the above-mentioned mitigation measures, which are designed to avoid and prevent any adverse issues arising during construction, any residual effects on electrical services during the construction phase are considered to be **unlikely, brief/temporary and imperceptible**, where supply is unavoidably disrupted to facilitate the construction phase

Natural Gas

Neutral Impact -Taking into account the above mentioned mitigation measures, there will be no residual impact to the gas mains following the construction phase. Any residual impacts on the built services during the construction phase is considered to be **temporary in nature and imperceptible**, where service is unavoidably disrupted to facilitate the construction phase.

There will be no residual impact from the operational phase.

Telecommunications

Neutral Impact - Taking into account the above-mentioned mitigation measures there will be no residual impact to the telecommunications infrastructure following the construction phase. Any residual impacts on the built services during the construction phase are considered to be **temporary in nature and imperceptible**, where service is unavoidably disrupted to facilitate the construction phase.

Residual impacts during the operational phase are likely to be imperceptible as the infrastructure in the area will be augmented by the utility company. Any other providers in the area will be able to reconfigure the networks to compensate for any impact.

Water Supply & Drainage

Implementation of the measures outlined will ensure that the potential impacts of the proposed development on water supply, drainage and utilities do not occur during the construction phase and that any residual impacts will be **slight, short term** and will have a **neutral effect** on the proposed development. As surface water drainage, foul water drainage and watermain design have been carried out in accordance with the relevant guidelines, there are **no predicted residual impacts** on the drainage and water supply arising from the operational phase.

20.7 Indirect and /or Secondary Impacts

There are unlikely to be any indirect or secondary impacts as a result of the proposed development as there is no interconnection/interface between the utilities or other utility networks in the area.

20.8 Monitoring

Electrical

All works shall be carried out in accordance with ESB Code of Practice for Electrical Infrastructure. Laying of cables and testing of same will be in accordance with ESB standard details. The works shall be inspected on an ongoing basis during construction by both the applicant's engineers and ESB site Engineer. Applicable testing shall be carried out prior to connection to the electrical Grid. ESB metering will be provided to all units.

Natural Gas

No new natural gas supply is proposed for the development. Diversion of existing natural gas on the site will be carried out by GNI the utility provider.

Telecommunications

All works shall be carried out in accordance with the relevant telecoms providers code of Practice. Building Specification for Open eir's Telecoms Infrastructure requirements Version 2.0 February 2021 and Virgin Media New Development handbook Version 1.63 Dec 2019.

Water Supply & Drainage

Periodic inspections and maintenance of the surface water infrastructure will need to be carried out by the local authority. No specific monitoring is proposed in relation to the Foul and Water supply infrastructure.

20.9 Interactions

There is interaction with Ch 7 Population & Human heath during construction phase. This interaction will likely be neutral as all relevant health and safety guidelines will be put in place.

There is also interaction with Ch 9 Land, Soils, Geology & Hydrogeology & Ch 10 Hydrology due to excavation and laying down of services which will also be neutral post mitigation measures.

There is also interaction with Ch 10 Hydrology due to the development of the site altering the current drainage of the site.

20.10 Cumulative Impacts

Electrical

The ESB review the electrical demand requirements for all proposed developments and confirm if the public network has capacity to cater for same, with or without network upgrades, prior to connection to the public network. This review is undertaken following a grant of planning permission. Should network upgrades be required these would benefit the local community as it would modernise the network in this area. Therefore, it is considered that the likely cumulative impact of the proposed development on electricity supply infrastructure is **not significant, with neutral long-term effects.**

Based on the advice of ESB during two consultation meetings the existing ESB network has capacity to cater for the developments electrical demand without network upgrades and the above-mentioned mitigation measures, there should be **no residual cumulative impact** to the electrical supply network.

Natural Gas

There should be no residual cumulative impact to the gas supply infrastructure. The proposed diversion of GNI is around the proposed buildings and as such there is no expected residual cumulative impact from same. The cumulative impact on the gas supply infrastructure will be **neutral with no long-term effects** or impact.

Telecommuncations

Eir and Virgin Media have been contacted and utility maps received from both utility providers. Eir and Virgin Media have not raised any concerns about availability of network in the area. Therefore, it is considered that the likely cumulative impact of the proposed development on the telecom's infrastructure is **not significant, with neutral long-term effects**.

Based on the advice of the telecommunications providers that the existing networks have capacity to cater for the developments telecommunication demand without network upgrades and the above-mentioned mitigation measures, there should be **no residual cumulative impact** to the telecommunication supply infrastructure.

Eir and Virgin Media have been contacted and utility maps received from both utility providers. Eir and Virgin Media have not raised any concerns about availability of network in the area. Therefore, it is considered that the cumulative impact of the proposed development on the telecom's infrastructure will **not be significant, with neutral long-term effect** Most providers will be able to reconfigure the networks to compensate for any potential impact.

Water Supply & Drainage

The proposed surface water drainage infrastructure has been designed in accordance with the relevant guidelines. Any other future development in the vicinity of the site would have to be similarly designed in relation to permitted surface water discharge, surface water attenuation and SuDS, therefore, no potential cumulative impacts are anticipated in relation to surface water drainage and flooding.

No potential cumulative impacts are anticipated in relation to wastewater as Irish Water have advised that provision of a wastewater connection is feasible.

No potential cumulative impacts are anticipated in relation to water supply as Irish Water have advised that provision.

Without the consideration of mitigation measures the construction phase of the proposed development will likely have a **neutral, short-term, slight cumulative impact**.

Without the consideration of mitigation measures the operational phase of the proposed development will likely have a **neutral, permanent, imperceptible cumulative impact**.

21 Interactions

This chapter of the Environmental Impact Assessment Report provides an overview of the key interactions identified and addressed in the foregoing chapters of the report.

It is a requirement of the EIA Directive that, not only are the impacts in respect of the individual specialist topics (hydrology, biodiversity, air quality and climate, etc.) to be addressed in the Environmental Impact Assessment Report, but so too must the interactions and inter-relationships between these topics be addressed. As stated in the Environmental Protection Agency's 2022 *Guidelines on the information to be contained in Environmental Impact Assessment Reports*:

> *"The interactions between effects on different environmental factors should be addressed as relevant throughout the EIAR. For example, where it is established in the Hydrology section that there will be an increase in suspended solids in discharged surface waters during construction, then the Biodiversity section should assess the effect of that on sensitive aquatic receptors. [...] It is general practice to include a matrix to show where interactions between effects on different factors have been addressed. [...] This is typically accompanied by text describing the interactions." (Section 3, p. 56).*

A matrix of interactions is provided in **Table 21.1,** below, summarising where effects / impacts in relation to one topic (the source) have been found to directly or indirectly result in effects / impacts in relation to another topic (the receptor).

The relevant consultants have liaised with each other and members of the design team, where necessary, to address potential impacts arising as result of interactions between one or more environmental topics or media. Where necessary, corresponding mitigation measures have been prescribed.

Table 21.1 Interactions matrix

Source \ Receptor	Population & Human Health	Biodiversity	Land, Soils, Geology & Hydrogeology	Hydrology	Air Quality	Climate	Noise & Vibration	Landscape & Visual	Cultural Heritage, Archaeology & Architectural; Heritage	Microclimate – Daylight & Sunlight	Microclimate - Wind	Traffic & Transportation	Material Assets - Waste	Material Assets - Services
Population & Human Health					✓		✓	✓		✓	✓	✓	✓	✓
Biodiversity			✓	✓	✓			✓						
Land, Soils, Geology & Hydrogeology		✓		✓	✓				✓				✓	
Hydrology		✓	✓		✓								✓	
Air Quality	✓	✓	✓			✓						✓		
Climate			✓		✓						✓	✓	✓	
Noise & Vibration	✓	✓										✓		
Landscape & Visual	✓	✓							✓					
Cultural Heritage, Archaeology & Architectural Heritage			✓											
Microclimate – Daylight & Sunlight	✓													
Microclimate – Wind	✓													
Traffic & Transportation	✓	✓	✓	✓	✓		✓	✓					✓	
Material Assets – Waste	✓		✓									✓		
Material Assets - Services	✓	✓	✓											

22 Cumulative Impacts

The European Commission *Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions* (1999) define cumulative impacts as *"Impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project"* (p. iii). Similarly, the EPA guidelines define cumulative effects as *"The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects"* (Section 3, p. 52). The EPA guidelines further state that:

> *"While a single activity may itself result in a minor impact, it may, when combined with other impacts (minor or insignificant), result in a cumulative impact that is collectively significant. For example, effects on traffic due to an individual industrial project may be acceptable; however, it may be necessary to assess the cumulative effects taking account of traffic generated by other permitted or planned projects. It can also be prudent to have regard to the likely future environmental loadings arising from the development of zoned lands in the immediate environs of the proposed project."* (Section 3, p. 54)

Cumulative impacts have been assessed by taking account of the baseline environment and the predicted impacts of the construction and operation of the proposed development in combination with those of any other existing and / or permitted projects in the zone of influence. Each of the specialist contributors to this EIAR have considered the potential for cumulative impacts to arise, with particular reference to the projects listed in this Chapter.

Considering the nature and scale of the proposed development, and its likely impacts as assessed in this Environmental Impact Assessment Report, a search for projects that may have the potential to result in cumulative impacts was carried out, with the following principal sources consulted:

- Fingal County Council planning portal;
- Fingal County Council weekly lists of applications received;
- An Bord Pleanála (ABP) website;
- Department of Housing, Local Government and Heritage EIA Portal;
- *Fingal Development Plan 2023-2029;*
- *Donabate Local Area Plan 2016 (as extended).*

Table 22.1 provides a list of relevant permitted and proposed developments in the vicinity of the site, which have been given due consideration in the assessment of potential cumulative impacts. **Figure 22.1** maps these developments in relation to the proposed development site.

Assuming the full and proper implementation of the mitigation measures set out in this EIAR, no significant negative cumulative impacts are likely to arise during the construction or operational phases of the proposed development.

Table 22.1 Permitted and proposed developments to which regard has been had in the assessment of potential cumulative impacts

Ref.	Applicant	Location	Description - overview	Status	Environmental Assessments
Permitted Developments / Under Construction					
F19A/0243/ ABP-307657-20	Irish Water	Balcarrick Road, Ballymastone, Donabate, Co. Dublin.	**Underground Wastewater Pump Station** An underground wastewater pump station (a wetwell) with roof level up to 0.35m above ground level; an underground emergency storage tank, capacity c. 650m^3 with roof level up to 0.35m above ground level; An underground water tank, net capacity c. 6m^3 with roof level up to 0.15m above ground level; valve and flowmeter chambers; a chemical dosing facility for odour control; Kiosks; Landscaping, fencing and access off Balcarrick Road. The proposed development includes all necessary ancillary pipework and manholes, diversion of existing utilities; new power supply and water connection for the pump station, ducting, mechanical and electrical services, plant, instrumentation, automation, controls and equipment. It also includes all associated site development works, hardstanding areas and access, site drainage and lifting arrangements.	Permission granted by An Bord Pleanàla on 23 November 2020.	EIA Screening; AA Screening
LRD0008/S3/ ABP-315288-22	Glenveagh Living Limited	Ballymastone, Donabate, Co. Dublin	**Ballymastone PHASE 1** The development consists of the construction of a residential development, which represents Phase 1 of the wider development of the Ballymastone Lands (as identified in the Donabate Local Area Plan 2016 (as extended)), ranging in height from 2 to 6 storeys to accommodate 432 no. residential dwellings (including a mix of apartments, duplexes and houses), a crèche and public open space. The site will accommodate 554 no. car parking spaces, 831 total no. bicycle parking spaces, new pedestrian/cycle links, road improvements, storage, services and plant areas. Landscaping will	Permission granted by An Bord Pleanàla on 28 March 2023.	EIAR; NIS; SSFRA

Ref.	Applicant	Location	Description - overview	Status	Environmental Assessments
			include communal amenity areas, and a significant public open space provision.		
LRD0017/S3	Aledo Donabate Ltd	Corballis East, Donabate, Co Dublin	**Aledo Donabate Residential Development** The development consists of the construction of 1,020 no. new residential dwellings on the Main Residential Development Site, provision of 2 no. childcare facilities, provision of 3 no. retail units, 2 no. café units, a community use unit and a medical centre at the proposed local centre area, total of 902 no. car parking spaces are proposed, 39 no. on-street visitor parking spaces, together with a total of 3,013 bicycle parking spaces, series of public parks, open spaces, pocket parks and communal open spaces are proposed throughout the Main Residential Development Site, provision of the Corballis Nature Park, vehicular access to the Main Development Site will be via two existing junctions from the DDR to the south and a new vehicular entrance to the north-east at New Road and all other ancillary works above and below ground on a site of approximately 41.9 ha.	Permission granted by Fingal County Council on 23 February 2024.	EIAR; NIS; SSFRA
F22A/0527	Glenveagh Homes Limited	Corballis East, Donabate, Co Dublin	**Residential Development at Corballis East** The development, which will consist of: the construction of 96 No. residential units, 1 No. two storey creche, vehicular access from the Donabate Distributor Road; internal roads, footpaths and a shared pedestrian and cyclist link, 166 No. car parking spaces bicycle and bin stores; hard and soft landscaping; boundary treatments; green roof; solar panels; plant; 2 No. ESB substations; lighting; signage; drainage works; and all other associated site and development works above and below ground.	Permission granted by Fingal County Council on 30 August 2023.	AA; NIS; EcIA; Archaeological Assessment; SSFRA; EIA Screening

Ref.	Applicant	Location	Description - overview	Status	Environmental Assessments
F20A/0510/ ABP-311447-21	Cairn Homes Properties Ltd	Lands at Ballymastone, Donabate, Co Dublin	**Residential Development at Ballymastone – Balcarrick Road** The development comprises construction of 36 no. houses, 28no. apartment /duplex units, 1800sqm public open space area, new vehicular entrance from New Road along the site's southern boundary and all associated site, landscaping and infrastructural works, including tree planting, boundary treatments; street lighting; ESB substations; internal roadways, footpaths and shared surfaces; and foul/SuDS drainage, necessary to facilitate the development.	Permission granted by An Bord Pleanàla on 11 February 2022.	EIA Screening; AA Screening; Bat Assessment; Archaeological Feasibility Assessment; SSFRA.
F20A/0204/ ABP-308446-20	Aledo Donabate Limited	Lands to the South of Main Street, Corballis East, Donabate, Co Dublin	**Residential Development at lands South of Main Street, Corballis East** The development will consist of 55 residential units, 3 no. retail units, public open spaces, upgrades to the public road, reconstruction of the existing car park serving Smyths Bridge House (a Protected Structure), upgrade of the existing entrance onto Main Street, internal access roads, water services including a pumping station, surface water attenuation tank and detention basin, public lighting, 1 no. ESB substation and utilities.	Permission granted by An Bord Pleanàla on 6 September 2021.	AA; Bat Assessment; Archaeological Impact Assessment
F17A/0373	Tilberry Limited	Lands at New Road, Ballisk, Donabate, Co. Dublin.	**Residential Development at Ballymastone – Balcarrick Road** A residential development of 151 no. residential units and 1 no. crèche/childcare facility to include: 41 no. 2.5 storey, 3 bedroom terrace dwellings; 2 no. 2.5 storey, 3 bedroom semi-detached dwellings; 9 no. 2 storey, 2 bedroom detached dwellings; 9 no. 2 storey, 3 bedroom detached dwellings; 90 no. 2 bedroom duplex units arranged in a split level design over three storeys; and 1 no. 2 storey crèche/childcare facility all with associated car parking. Planning permission is also sought for 1 no. new link road with new	Permission granted by An Bord Pleanàla on 17 April 2019. .	EIA Screening, EcIA, AA Screening, SSFRA,

Ref.	Applicant	Location	Description - overview	Status	Environmental Assessments
			pedestrian and vehicular entrance from existing New Road connecting to 'The Links' (existing residential estate to the north) along with 2 no. additional vehicular and pedestrian entrances to the proposed development from New Road and associated upgrade works.		
F23A/0134	St Patrick's GAA Clubhouse Donabate	On lands at, Robbie Farrell Park, Ballymastone, Donabate, Co Dublin	**St Patrick's GAA Clubhouse Donabate** Planning Permission for an extension to their existing detached, single storey clubhouse. The proposed development will see the reconfiguration of the existing building and the construction of an extension to the east, south and west elevations at ground floor level and a new first floor level to provide for additional dressing rooms, shower rooms and toilets, meeting rooms, sports hall/ gymnasium, physio room, club offices and club shop, storage and 2no. balconies at first floor level; along with all associated site, drainage, including new wastewater treatment system and engineering works necessary to facilitate the development.	Permission granted by Fingal County Council on 05 July 2023.	
YA06F.304624	Fingal County Council	Malahide Demesne, Kilcrea, Newbridge Demesne, Donabate, Fingal, County Dublin	**Broadmeadow Way - Greenway between Malahide Demesne and Newbridge Demesne** The greenway would travel along a linear site extending c. 6km in length between Malahide Castle and Newbridge House and their surrounding parklands. The site travels through various landscapes including demesne landscapes and parklands, estuarine/coastal landscape (foreshore), rural/agricultural lands and urban and residential environments. It commences at Malahide Demesne, then travels along the northern side of the R106 regional road, through a residential laneway (O'Hanlon's Lane) and onto Bissets Strand. At that point it rises to the same level as the Dublin to	Permission granted by An Bord Pleanàla on 19 April 2020.	EIAR; NIS

Ref.	Applicant	Location	Description - overview	Status	Environmental Assessments
			Belfast railway embankment and crosses Malahide Estuary alongside the existing railway line. The site continues through agricultural lands at Kilcrea and crosses the River Pill at two locations. It continues onwards to Corballis road and then travels westwards through agricultural lands, after which it crosses the new Donabate Distributor Road (Phase1). Thereafter it crosses Hearse Road and travels onwards to its finishing point at Newbridge Demesne.		
Not available (Part 8)	Fingal County Council	Ballymastone, Donabate, Co. Dublin	**Ballymastone Recreational Hub** This multifunctional campus will provide for an extensive range of sporting and recreational activities as a shared public facility; these include a floodlit 8 lane all-weather athletics track surrounding a grass soccer sized pitch, a full sized all-weather GAA pitch which also provides for 2 all-weather soccer pitches with flood lighting, a combined playground and skate park, car / cycle parking, a 6 meter wide access road, extensive walking and cycling infrastructure, bleacher seating and extensive landscape planting .	Approved on 14 September 2021.	AA Screening; EIA Screening; SSFRA
F22A/0165	Glenveagh Homes Limited	Hearse Road, Donabate, Co Dublin	**Semple Woods, Hearse Road Residential Development** Permission for development at a 3.22 Ha site. The lands are partially bounded to the north-east by an existing residential development at Semple Woods (permitted under FCC Reg. Ref. F17A/0113 and subsequently amended under FCC Reg. Ref. F21A/0056), to the south by the Donabate Distributor Road and to the west by Hearse Road. The development will consist of amendments to the permitted residential development as granted under FCC Reg. Ref. F21A/0113 comprising - increase in the number of residential dwellings by 4 No. (2 No. 2 bed units and 2 No. 3 bed units ranging in size from 81 sq m to 114 sq m) from 65	Permission granted by Fingal County Council on 24 August 2022.	NIS, EcIA

Ref.	Applicant	Location	Description - overview	Status	Environmental Assessments
			No. to 69 No. dwellings (in lieu of the 5 No. residential units omitted under Condition No. 2 of the permitted development); 6 No. associated car parking spaces; amendments to private and public open spaces, boundary treatments, hard and soft landscaping and internal roadways; change in house type of Unit No. 20; and all associated site and development works above and below ground.		
F21A/0113	Glenveagh Homes Limited	Semple Woods, Off Hearse Road, Donabate, Co. Dublin	**Semple Woods, Hearse Road Residential Development** The development which will have a total gross floor area of 7,892 sq.m. will consist of an extension to the Semple Woods housing development comprising: the construction of 76 No. residential units including 56 No. two storey houses and a three storey building comprising 20 No. duplex units. The development will also comprise: vehicular access to the subject lands from Semple Woods to the north which includes partial demolition of a wall; pedestrian connections to Semple Woods; 130 No. car parking spaces; bicycle parking; bin storage plant; photovoltaic panels; boundary treatments; lighting; pump station; attenuation basin; hard and soft landscaping (including class 1 and class 2 open space); changes in levels; and all other associated site works above and below ground.	Permission granted by Fingal County Council on 02 February 2022.	NIS, EcIA, SSFRA
F21A/0056	Glenveagh Homes Limited	Semple Woods, Hearse Road, Donabate, Dublin	**Semple Woods, Hearse Road Residential Development** The proposed development consists of amendments to the northern portion (0.9 ha) of the permitted residential development under Fingal County Council Ref. F17A/0113, including the following: Replacement of the permitted Apartment Block 2 and 3 no. three bed houses to the west thereof with a new	Retention permission and planning permission granted by Fingal County Council on 31 August 2021	AA Screening

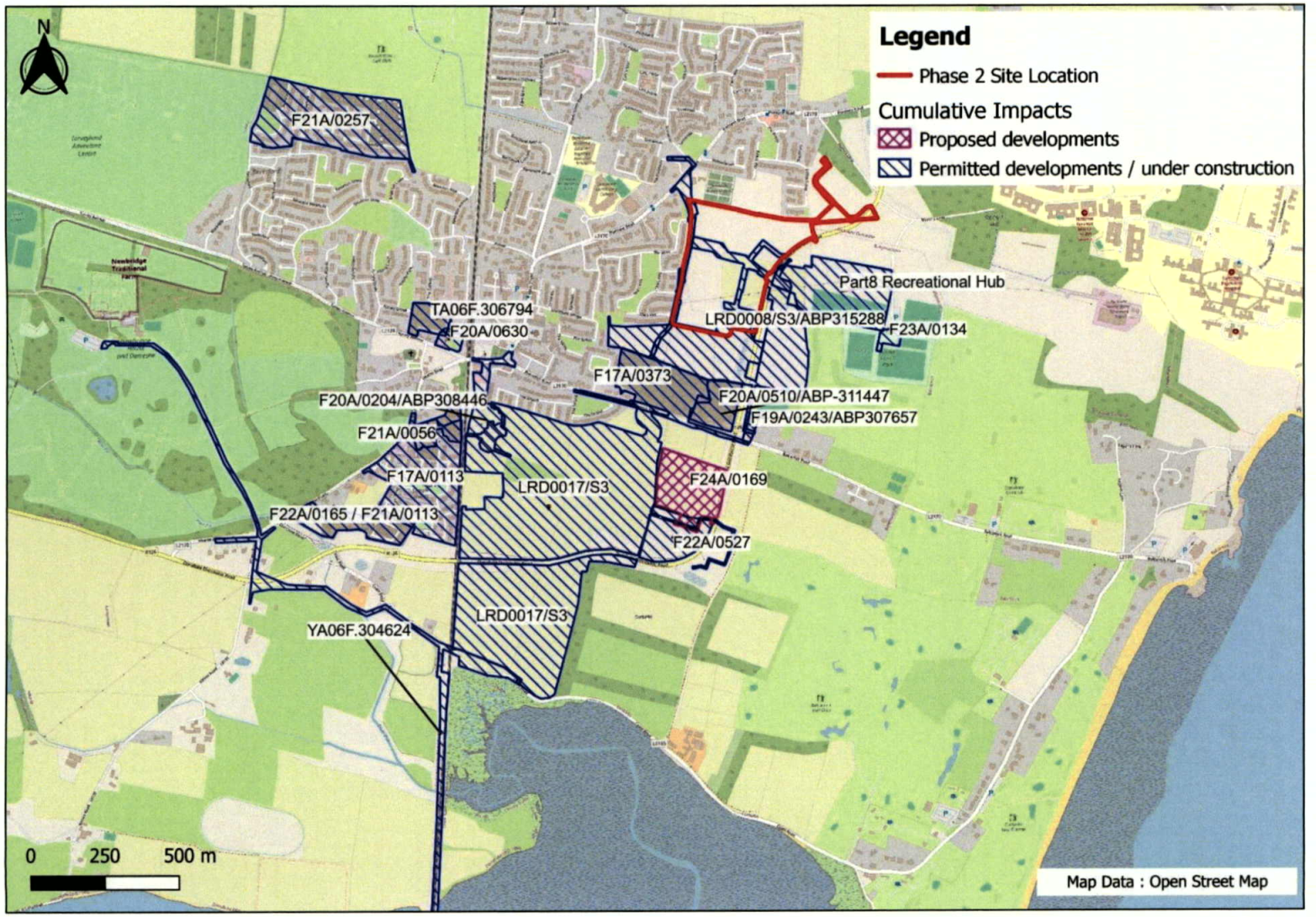
Ref.	Applicant	Location	Description - overview	Status	Environmental Assessments
			part three, part four storey Apartment Block containing 29 units (14 no. 1 bed apartments and 15 no. 2 bed apartments) and a bicycle storage area at ground floor level; Internal and external amendments to the eastern section of the permitted Apartment Block 1, including the replacement of 8 no. 2 bed apartments with 8 no. 1 bed apartments and 4 no. 2 bed apartments from ground to third floor, with associated revisions to building elevations to provide additional balconies and windows, together with a revised roof design. Internal and external amendments to the western section of the permitted Apartment Block 1; Revision of the layout of the vehicular parking areas to the north and south of Apartment Blocks 1 and 2. A total of 90 no. car parking spaces are provided, with 80 no. spaces allocated to serve the future residents of Apartment Blocks 1, 2 and 3, 8 no. spaces serving visitors, and 2 no. spaces serving the permitted childcare facility at the ground floor level of Block 3; Retention and completion of 2 no. ESB substations located along the north-western and eastern boundary; The provision of 4 no. bicycle and bin storage structures, a revised landscaping and public lighting design, and all associated and ancillary site development works. The proposed amendments will provide 12 no. additional apartment units, increasing the number of units on the overall development site from 251 units to 263.		
F17A/0113	McGarrell Reilly Homes	Lands at Hearse Road, Donabate, Co. Dublin	**Semple Woods, Hearse Road Residential Development** The construction of 196 houses, 62 apartments and a crèche, with two vehicular access points from Hearse Road, and access to two houses only from Prospect Hill. The proposal includes a route through the development to the future pedestrian bridge over the	Permission granted by Fingal county Council on 15 January 2018.	AA Screening; EIA Screening (Schedule 7A information) SSFRA

Ref.	Applicant	Location	Description - overview	Status	Environmental Assessments
			railway. Works to Hearse Road include two access points, new footpaths and a new pedestrian and cycle entrance to Newbridge Demesne and also the provision of 1.075 Ha open space in the proposed nature park on the coast road at Corballis, Donabate. The proposed development includes all associated site works and infrastructure which includes landscaped open spaces, internal roads, paths, cycle-paths, public lighting, utilities, pump station, drainage and surface water attenuation and works to Hearse Road and associated entrance to Newbridge Demesne.		
TA06F.306794	Elchoir Construction Limited	Lands adjacent to the existing residential development known as 'The Gallery', Turvey Walk, off Turvey Avenue, To the west of Donabate Train Station, Donabate, Co. Dublin	**Residential Development at Turvey Avenue** Elchoir Construction Limited lodged a SHD planning application to An Bord Pleanàla on 4th March 2020 at lands adjacent to the existing residential development known as 'The Gallery', Turvey Walk, off Turvey Avenue, to the west of Donabate Train Station, Donabate, Co. Dublin. The development consists of 144 no. apartments and 1 no. retail unit in three blocks, all over a single basement. The site has a total area of 1.16ha with a density of 124 units per hectare and is 3-5 storeys in height over basement.	Permission granted by An Bord Pleanàla on 10th August 2020.	EIA Screening; AA Screening
F20A/0630	Drumargh Ltd	Lands at Turvey Walk, fronting Turvey Avenue, adjacent to Donabate Train Station, and the residential development of The	**Mixed-use Development at Turvey Walk** Permission for a mixed use (Retail convenience foodstore, 4 retail units and a café unit) development in 2 Blocks as follows: 1) Block 01: Two storey structure (with plant room at roof level) comprising 4no. retail units at ground floor level, internal ESB substation, car park at ground floor level, providing for car and bicycle parking spaces, and a licensed retail convenience foodstore at first floor level (1,187m²net floor area) including an off licence. 2) Block 02:	Permission granted by Fingal County Council on 09 June 2021.	

Ref.	Applicant	Location	Description - overview	Status	Environmental Assessments
		Gallery, Donabate, Co Dublin	Change of use of existing residential dwelling and provision of an extension to now provide for a single storey café unit. 3) Demolition of shed structure, removal of portacabin and construction of a public plaza development with landscaping, seating and bicycle parking to serve Block 2. 4) Utilisation of existing vehicular and pedestrian access with associated widening and improvements, including provision of a right hand turn on Turvey Avenue. 5) New internal access roundabout with associated landscaping. 6) Loading Bay. 7) Landscaping. 8) Boundary Treatments. 9) And all ancillary site and engineering works necessary to facilitate the development.		
F21A/0257	Loughglynn Developments Limited	Beresford, Donabate, Co. Dublin	**Revisions to Previously Permitted Residential Development at Beresford** Revisions to previously permitted development Reg Ref. F16A/0535. The proposed revisions comprise of the provision of an additional ESB substation and the replacement of the 10 no. House Type D 5 Bed units with a new House Type H 4 bed unit, on a site bounded to the north and east by Beaverstown Golf Club, to the South by Beresford residential development and to the west by Turvey Golf Club lands at Turvey Ave, Donabate, Co. Dublin.	Permission granted by Fingal County Council on 05 August 2021.	
Proposed Developments					
F24A/0169	Marshall Yards Development Company Limited	Corballis East, Donabate, Co Dublin	**Proposed Residential Development at Corballis East** The proposed development, which will have a total Gross Floor Area of 8,028 sq m, will consist of: the construction of a Residential Development comprising 98 No. units including 70 No. two storey houses, 4 No. three storey 4 bed houses, and 6 No. two storey maisonette buildings comprising a total of 24 No. 1 bed units. The	Lodged on 29 February 2024	EIA Screening, NIS

Ref.	Applicant	Location	Description - overview	Status	Environmental Assessments
			development will also comprise of: alterations to the access road associated with the Residential Development permitted under Fingal County Council Reg. Ref. F22A/0527; the provision of internal roads and footpaths; pedestrian connections to the Donabate Distributor Road; pedestrian and vehicular connections to the adjoining site to the west (subject to a Live Planning Application for a Large-Scale Residential Development as per Fingal County Council Reg. Ref. LRD0017/S3); 73 No. car parking spaces; 5 No. car club spaces; bicycle and bin stores; hard and soft landscaping; balconies and terraces; boundary treatments; solar panels; 2 No. ESB substations; public lighting; and all other associated site and development works above and below ground.		

Figure 22.1 Permitted and proposed developments to which regard has been had in the assessment of potential cumulative impacts



23 Mitigation Measures & Monitoring

This Chapter of the Environmental Impact Assessment Report lists the mitigation measures prescribed in all of the preceding Chapters of the Environmental Impact Assessment Report – the measures required to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment – as well as all monitoring measures / programmes prescribed, for both the construction and operational phases.

30/04/2024LRD0039/S3
FINGALCOCOPLANN DEPT

Brady Shipman Martin

DUBLIN
Mountpleasant Business Centre
Mountpleasant Avenue Upper
Ranelagh
Dublin 6

CORK
Penrose Wharf Business Centre
Penrose Wharf
Cork

LIMERICK
11 The Crescent
Limerick

+353 1 208 1900
mail@bradyshipmanmartin.com
www.bradyshipmanmartin.com