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# EIAR Volume 1 Non-Technical Summary

PRESENTED TO

**Liscove Limited**

**Large-Scale Residential Development on Lands at Wayside, Enniskerry Road and Glenamuck Road, Kilternan, Dublin 18 (Kilternan Village LRD)**

DATE

July 2024

Environmental Consultancy Services

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# 1 INTRODUCTION AND BACKGROUND

## Introduction

This Environmental Impact Assessment Report has been prepared by Enviroguide on behalf of Liscove Limited (the Applicant), who is seeking planning permission for a mixed-use development of 487 residential units on a 14.2 hectare site in Wayside, Enniskerry Road and Glenamuck Road, Kilternan, Dublin 18.

Environmental impact assessment is a process of identifying and assessing the likely environmental, social and economic effects of a proposed development project, considering both negative and positive effects. Environmental impact assessments also involve finding ways to reduce negative effects and further improve beneficial effects. It ensures that planning decisions are made considering the environmental effects and with engagement from stakeholders.

This Environmental Impact Assessment Report presents the environmental impact assessment process which has been undertaken in line with the Planning and Development Regulations 2001.

The structure of the environmental impact assessment that accompanies the planning application is set out in the following three volumes:

- Volume 1 Non-technical summary;
- Volume 2 Environmental impact assessment report; and
- Volume 3 Supporting technical appendices.

## Purpose of this Non-Technical Summary

This Non-Technical Summary is a requirement under the European Union Directive 2014/52/EU for all projects that have been subject to an Environmental Impact Assessment.

The report describes the proposed development, the environmental impact assessment process and summarises the likely significant environmental effects that would be caused by the development.

## The Environmental Impact Assessment Process

The environmental impact assessment has been carried out based on desktop studies, site visits, surveys and site-specific investigations.

The Environmental Impact Assessment Report outlines any necessary mitigation and monitoring measures required to avoid, reduce or offset any potentially significant effects.

Following the application of mitigation measures, the environmental impact assessment report will describe any remaining effects that may occur from the proposed development.

The environmental impact assessment report and accompanying planning application are being submitted for consideration to Dún Laoghaire-Rathdown County Council, which is the competent authority for the proposed development.

Figure 2-1 below shows the location of the Proposed Development.

# 2 DESCRIPTION OF PROPOSED DEVELOPMENT

## Site Location

The site of the Proposed Development is located 1.9 kilometres to the south-west of the M50 and Carrickmines Retail Park. The site is currently mostly greenfield with hedgerows and treelines, with hardstanding, derelict dwelling and associated outbuildings and a former football pitch. The former ‘County Market’, a wooden structure, is in the northwest corner of the site.

The site is bordered in the north by Glenamuck Road South, to the west by Enniskerry Road, to the south by Ballycorus Road and to the east by agricultural land.

Part of the site’s frontage lies directly opposite Our Lady of the Wayside Church on Enniskerry Road.

The Proposed Development will be built across two sites measuring approximately 14.2 hectares in total. The two sites will be separated by the future Glenamuck Distributer Link Road.

The western site includes a derelict house known as “Rockville” and associated derelict outbuildings, and the former Kilternan Country Market. The western site is bound by the Glenamuck Road to the north; the Sancta Maria property to the north, west and south; a recently constructed residential development named "Rockville" to the north-east; the Enniskerry Road to the south-west; dwellings to the south; and the future Glenamuck Link Distributor Road to the east. The eastern site is generally bound by dwellings to the south; the future Glenamuck Link Distributor Road to the west; and greenfield land to the north and east. The wider surrounding area is predominantly residential and agricultural.

Phase 2 of the residential development Rockville has been granted permission (under two separate Planning References, D18A/0566 (Phase 2A) and D20A/0015 (Phase 2B) as amended by D23A/0580), and it is planned to link the Proposed Development into Rockville.

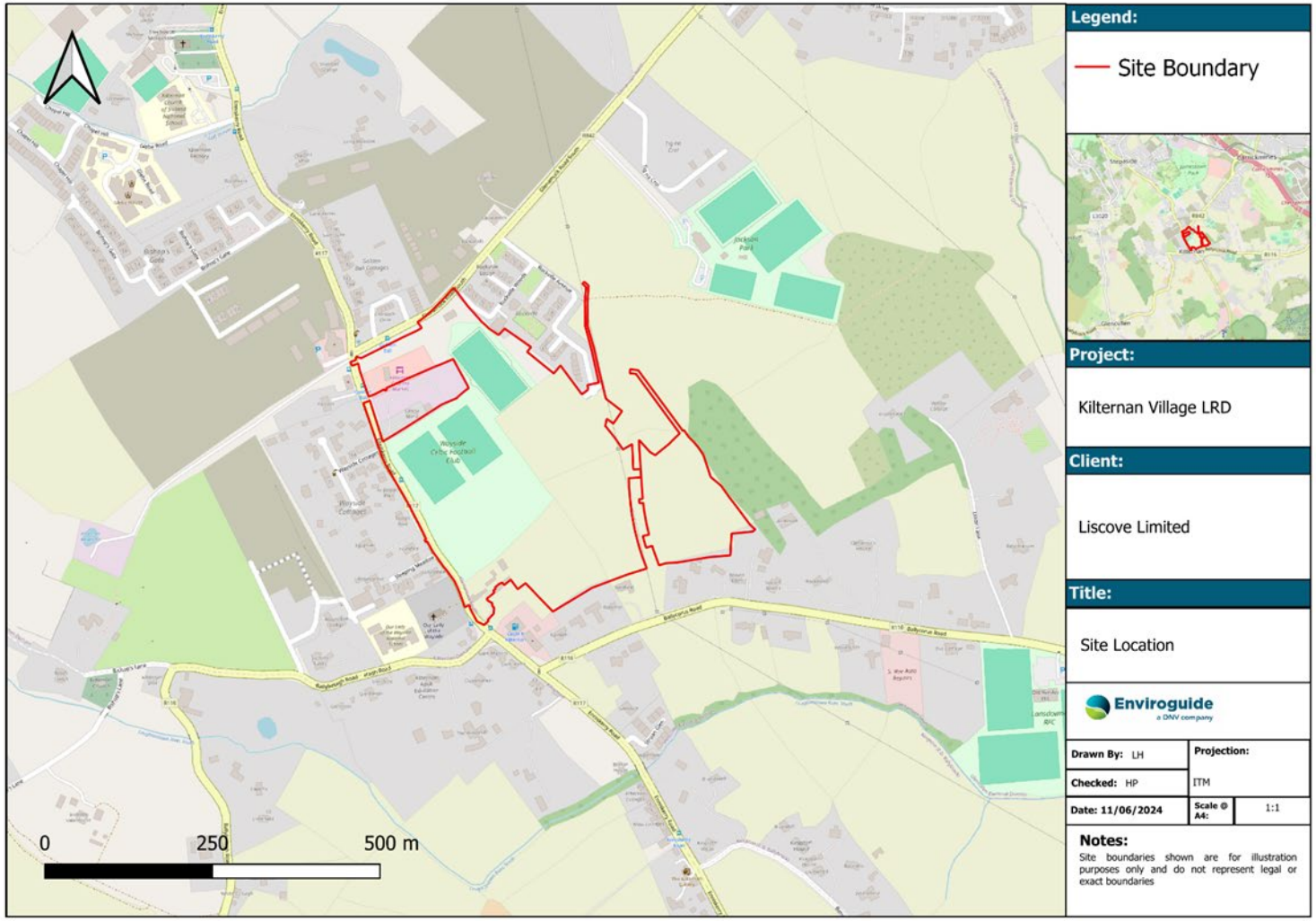


*Figure 2-1 Site Location*

## Project Description

The Proposed Development will consist of the demolition of an existing derelict house known as Rockville along with associated derelict outbuildings and the former Kilternan Country Market (wooden structure).

The Proposed Development will include a total of 487 residential units which will include:

- 196 houses;
- 201 duplex units; and
- 90 apartments.

The western site will include for 362 residential units and a neighbourhood centre, which will provide an anchor retail store, retail/commercial space, a creche, café, restaurant and a community facility, and the eastern site will include for 125 residential units.

The 487 residential units will be made up of:

- 53 1-bedroom units (35 apartments and 18 duplexes);
- 150 2-bedroom units (38 houses, 16 apartments and 96 duplexes);
- 236 3-bedroom units (110 houses, 39 apartments and 87 duplexes); and
- 48 4-bedroom units (48 houses).

The Proposed Development will range in height from two to four storeys (partially over podium/undercroft in the eastern site).

The Proposed Development also provides a pedestrian and cycle route through the Dingle Way from Enniskerry Road to the future Glenamuck Link Distributor Road; 854 car parking spaces (125 spaces in the undercroft of Apartment Blocks 1, 2 and 3 and Duplex Blocks T and U and 729 spaces at surface level) including 28 mobility impaired spaces, 100 electric vehicle spaces, two car share spaces, and four drop-off spaces/loading bays; motorcycle parking; bicycle parking; bin storage; provision of new telecommunications infrastructure at roof level of the Neighbourhood Centre including shrouds, antennas and microwave link dishes (18 antennas, all enclosed in 9 shrouds and 6 transmission dishes, together with all associated equipment); private balconies, terraces and gardens; hard and soft landscaping; sedum roofs; solar panels; boundary treatments; lighting; substations; plant; and all other associated site works above and below ground.

The Proposed Development has a gross floor area of approximately 60,504 square meters above ground, in addition to an undercroft /basement (approximately 4,485 square meters) containing car parking, bike storage, bin storage and plant under Apartment Blocks 1, 2 and 3 and Duplex Blocks T and U on the eastern site.

Surface water and foul drainage infrastructure is proposed to connect into and through the existing and permitted Rockville developments.

## Construction Phase

The construction of this development is intended to take place in the following phases (Phase 1, 2, 3, 4 and 5) which can be viewed in Figure 4. The proposed sequence of the construction phase outlined below is subject to confirmation once a main contractor has been appointed and a detailed Construction Management Plan is prepared for agreement with the relevant Local Authority. The construction period is expected to last for 5 years, from 2025 up to 2030.

Each of the construction phases can be summarised as follows:

- Phase 1 – The demolition of approximately 573.2 square metres of existing structures on site comprising a derelict dwelling known as 'Rockville' and associated derelict outbuildings. The central western portion of the site consists of 83 residential units (made up of houses, duplexes), and all associated landscaping works and drainage for Phase 1. Construction of 2,225 square metres of commercial space. Main public open space, central green way link, dingle way and off-site drainage through southern lands. Three access points to the Enniskerry road are to be included as well as access to Glenamuck Link Distributor Road (GLDR) (if the GLDR has been completed by then) and a link to Rockville. Phase 1 is estimated to take place from February 2025 up to July 2026.
- Phase 2 – Central eastern portion of the site consisting of 121 residential units made up of houses, duplexes, and apartments and a neighbourhood centre along with 3,900 square metres of commercial space. All associated landscaping works and drainage for Phase 2 and the neighbourhood centre. Access to GLDR will be constructed if not completed in Phase 1. Phase 2 is expected to last from March 2026 to January 2028.
- Phase 3 – Central southern portion of the site consisting of 104 residential units, with all associated landscaping works and drainage for Phase 3. Phase 3 is expected to take place between June 2027 to December 2028.
- Phase 4 – Northwestern portion of the site consisting of 54 residential units (made up of houses and duplexes) and the demolition of the former country market along with all associated landscaping works and drainage for Phase 4 and the creation of a new access to Glenamuck Road. This phase is expected to begin in April 2028 and end in February 2029.
- Phase 5 – Eastern portion of the Site on the opposite side of the GDLR consisting of 125 residential units with all associated landscaping works, and drainage for Phase 5 and the creation of a new access onto the GLDR. This phase is expected to last from June 2028 to January 2030.

| LRD Construction | Units | Commercial | Months | Years | Start | End |
|---|---|---|---|---|---|---|
| Phase1 | 83 | 2,225 | 18 | 1.5 | Feb -25 | Jul -26 |
| Phase 2 | 121 | 3,900 | 23 | 1.92 | Mar-26 | Jan -28 |
| Phase3 | 104 | | 19 | 1.58 | Jun -27 | Dec -28 |
| Phase4 | 54 | | 11 | 0.92 | Apr -28 | Feb -29 |
| Phase5 | 125 | | 20 | 1.67 | Jun -28 | Jan -30 |
| Total Quantum & Project Time | 487 | 6,125 | 60 | 5 | | |

*Figure 2-2 Outline Construction Programme (Atkins Réalis,2024)*


*Figure 2-3 Site Layout*


*Figure 2-4 Phasing Plan and Compound Location (Atkins Réalis,2024)*

## Alternatives Considered

Consideration of reasonable alternatives is an important part of the environmental impact assessment process and is necessary to consider the likely environmental effects as a result of a range of development plans for the site within the restrictions in place by environmental and planning conditions.

*Alternative Locations*

Two possible scenarios have been considered in terms of alternative locations for the proposed development.

1. Develop another greenfield site.
2. Purchase another existing site with current planning permission for a similar development.

Having regard to the above alternatives, the selected location is considered the most suitable for the Proposed Development.

*Alternative Uses*

As the Proposed Development consists of residential units and a neighbourhood centre providing a creche, café, restaurant, community facility and retail units, the Proposed Development type is listed as Permissible in Principle and/or Open for Consideration related to the associated zoning objectives.

As such, it was not considered necessary to consider alternative uses for the Proposed Development.

*Alternative Designs and Layouts*

A high-quality final layout and design has been achieved, considering the position of the proposed blocks and units. It is considered that the layout of the Proposed Development is the optimal solution for the lands. It is further considered that the scheme design strikes a balance between respecting the parameters of the Kilternan Local Area Plan (LAP) (albeit this LAP is expired) and ensuring the development potential of a strategically positioned and underutilised plot is maximised, in the heart of Kilternan Village.

*Alternative Processes*

Due to the nature of the Proposed Development (i.e. mixed use / primarily residential) and size of the development (Large-scale Residential Development) where the planning application will be submitted to Dun Laoghaire-Rathdown County Council it was not considered necessary to consider alternative processes for the Proposed Development.

# 3 PLANNING CONTEXT

Chapter 3 of the Environmental Impact Assessment Report provides an overview of the relevant legislation with reference to the Proposed Development at a local, regional and national level, and sets out the strategic and statutory context governing the planning and development of the Proposed Development.

The Dún Laoghaire Rathdown (DLR) County Development Plan 2022-2028 is the current statutory plan for the region, against which planning applications will be considered. Section 10(1) of the Planning and Development Act 2000, as amended, states that the purpose of a development plan is to set out "an overall strategy for the proper planning and sustainable development" in a particular functional area.

The vision for Dún Laoghaire-Rathdown County Development Plan 2022-2028 is to "*embrace inclusiveness, champion quality of life through healthy placemaking, grow and attract a diverse innovative economy and deliver this in a manner that enhances our environment for future generations.*"

The Dún Laoghaire Rathdown County Development Plan 2022-2028 sets the land use zoning objectives and uses that would be permissible in principle and/or open for consideration within each land use. The entirety of the Proposed Development site is located on land zoned 'Objective A' and 'Objective NC':

- The zoning for Objective 'A' includes "*To provide residential development and improve residential amenity while protecting the existing residential amenities*."
- The zoning for Objective 'NC' is as follows: "*To protect, provide for and/or improve mixed-use neighbourhood centre facilities*."

Residential use is classed as permitted in principle for these zones as per the Dún Laoghaire Rathdown County Development Plan 2022-2028.

# 4 POPULATION AND HUMAN HEALTH

This assessment considers the effect of the Proposed Development on population and human health. To assess the baseline environment, the study area chosen was the Glencullen Electoral Division (ED) which contains the village of Kilternan and the Proposed Development site. An assessment of the existing population of the study area was carried out in June 2024 using data from the Central Statistics Office 2022 Census.

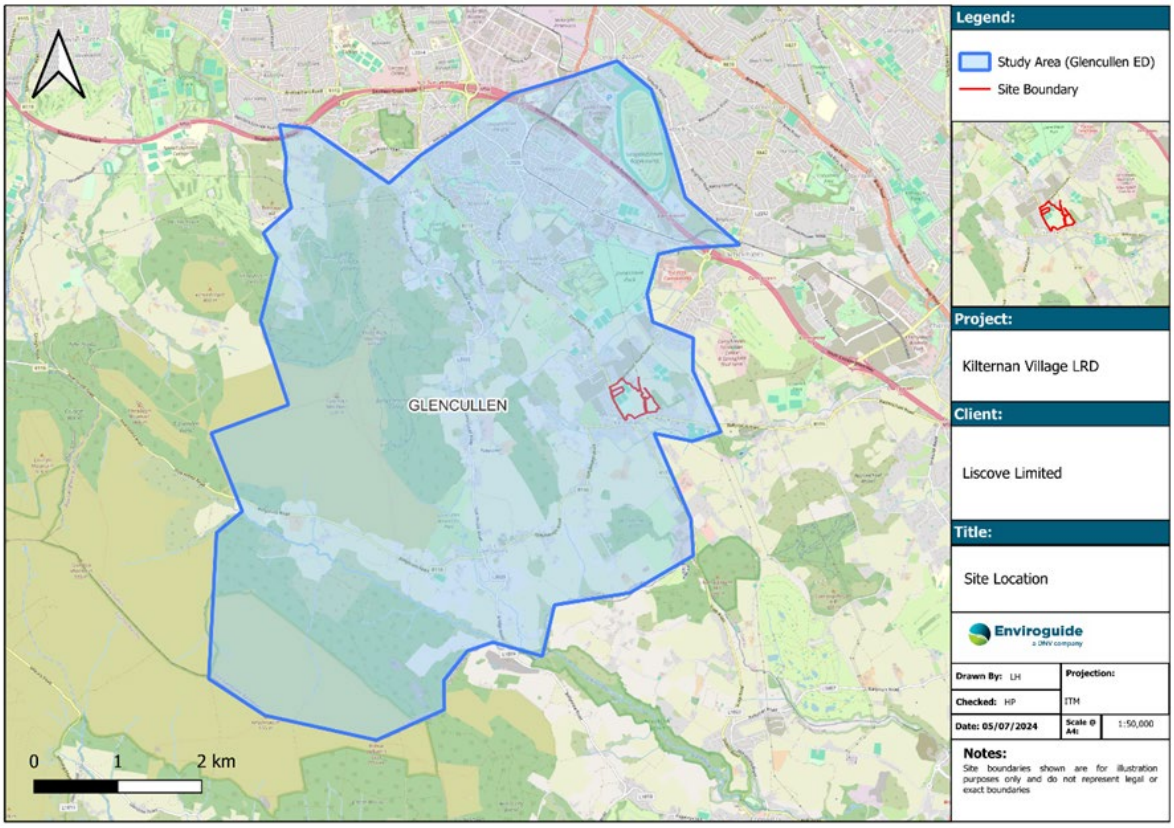


*Figure 4-1 Study Area*

Overall, the baseline assessment found that the study area broadly reflects population trends in Dún Laoghaire Rathdown County and the state. The baseline population analysis can be summarised in the points below.

- There are a high number of young people and people of a working profile in Glencullen when compared to the averages for Dún Laoghaire Rathdown and the State. This is also compounded by the lower-than-average number of people aged 65 years and over.
- The number of people at work in Glencullen is higher than the average for Dún Laoghaire Rathdown and the State. This corresponds to the lower-than-average number of people who are retired in Glencullen when compared with Dún Laoghaire Rathdown and the State.
- Bus, minibus, or coach usage is lower, and train, DART or LUAS services are higher in Glencullen when compared to values for the State. These trends in public transport usage are reflective of the availability of frequent rail services in the area.

- Most people travel 45 minutes or less to work, school or college (74.45%) indicating that most people live and go to work, school, or college within 45-minute time radius.

**Construction Phase**

Through construction activities approximately 100 construction jobs will be created. This will increase the number of people working in the study area and some employees may move to the study area to be closer to their place of work. This will have a neutral and imperceptible effect on the population statistics. The job creation will also have a positive imperceptible effect on the socio-economic status of the study area as it will support employment levels and employee spending in the surrounding business. The construction phase could also have likely negative effects in the form of air quality, dust, noise production, risk of contamination of water sources and increased number of construction-related vehicles utilising the road network. Through standard good practice, control measures and mitigation measures identified in the relevant technical chapters, the effects of these disturbances will be imperceptible. All construction phase effects will be short term in duration as the phase is predicted to last 5 years.

**Operational Phase**

During the operational phase approximately 148 jobs will be created having a positive impact, both directly and indirectly to the local economy and employment. The Proposed Development will provide 487 residential units and will cater for a wide range of people including families, older persons and young couples. This will have a long-term positive impact on population due to the provision of a wide range of dwelling unit types and will cater for a wide cohort of persons.

The most utilised method of transport in the study area when travelling to work is by car, either as a driver or a passenger. Employees and future residents travelling to and from work will increase the number of vehicle trips on the local road network. This has potential to negatively affect air quality, increase traffic related noise levels and cause congestion. These effects will be neutral, long term but imperceptible on population and human health. Noise associated with traffic movements and operational phase activities can also negatively impact the population and human health of the surrounding residents. The likely effect of the Proposed Development on noise and vibration and subsequently human health will be direct, long term, negative and imperceptible.

**Mitigation and Monitoring Measures**

Although there are no specific mitigation or monitoring measures relating to population and human health, measures detailed in other technical chapters relating to air quality, noise, water quality and traffic will also work towards ensuring the effects on human health are minimised as far as possible.

**Residual Effects**

Based on the fact there are no specific mitigation measures proposed for population and human health, the residual impacts will be the same as those detailed in the chapter.

Overall, there will be no significant adverse impacts on, or associated with population and human health attributed to the Proposed Development.

# 5 BIODIVERSITY

The biodiversity chapter assesses the potential impacts upon key ecological receptors within its zone of influence.

A range of ecological surveys have been completed at the site to inform the baseline conditions, including habitat surveys, building inspections, breeding and wintering bird surveys, and bat surveys. All surveys were carried out in the appropriate season by a suitably qualified ecologist and followed best practice guidance. A desk study was also carried out in conjunction with the field surveys in order to collate and review all relevant ecological information and datasets.

The following habitats and species were identified onsite during the site surveys:

- Improved agricultural grassland;
- Amenity grassland;
- Dry meadows and grassy verges;
- Scrub;
- Immature woodland;
- Ornamental / non-native shrub;
- Treelines;
- Mixed broadleaf woodland;
- Spoil and bare ground;
- Recolonising bare ground; and
- Buildings and artificial surfaces.

**Mitigation and Monitoring Measures**

Construction Phase

*Protection of Vegetation*

Any vegetation (including trees, hedgerows or scrub adjacent to, or within, the Proposed Development boundary) which are to be kept will be protected during the construction phase in accordance with the Guidelines for the Protection and Preservation of Trees, Hedgerows and Scrub Prior to, During and Post Construction of National Road Schemes (TII, 2006b), as follows:

- All trees along the Proposed Development boundary that are to be kept, both within and adjacent to the Proposed Development boundary (where the root protection area of the tree extends into the Proposed Development boundary), will be fenced off at the start of works and for the duration of construction to avoid structural damage to the trunk, branches or root systems of the trees. Temporary fencing will be put up at a sufficient distance from the tree so as to enclose the Root Protection Area (RPA) of the tree. The RPA will be defined based upon the recommendation of a qualified arborist.
- Where fencing is not feasible due to insufficient space, protection for the tree/hedgerow will be completed by wrapping hessian sacking (or suitable equivalent) around the trunk of the tree and strapping stout buffer timbers around it.
- The area within the root protection area will not be used for vehicle parking or the storage of materials (including soils, oils and chemicals). The storage of hazardous

materials or concrete washout areas will not be undertaken within 10m of any protected trees, hedgerows and treelines.

- A qualified arborist will assess the condition of, and advise on any repair works necessary to, any trees which are to be retained or that lie outside of the Proposed Development boundary but whose root protection area is impacted by the works. Any remedial works required will be carried out by a qualified arborist.
- A buffer zone of at least 5m will be maintained between construction works and retained hedgerows to ensure that the root protection areas are not damaged.

*Preventing Spread of Non-Native Invasive Plant Species*

A confirmatory pre-construction invasive species survey will be undertaken by a suitably qualified specialist to confirm the absence, presence and/or extent of any listed non-native invasive species within the Proposed Development site. If the presence of any of these species is confirmed within the Proposed Development site, the implementation of an Invasive Species Management Plan prepared by a suitably qualified professional in line with transport infrastructure Ireland guidelines (2020b) will be required.

*Badger and Other Protected Mammals*

A confirmatory pre-construction check of the Proposed Development site for new burrow entrances, resting places and signs will be carried out before commencement of construction immediately prior to construction works commencing to confirm their usage by badger or other potential protected mammals. Any new badger setts (or resting places) identified will require protection in line with the requirements set out in the National Roads Authority (2005) guidance document as follows:

- Badger setts if encountered will be clearly marked and the extent of bounds prohibited for vehicles clearly marked by fencing and signage.
- In the season June to November, no heavy machinery will be used within 30m of badger setts; lighter machinery (generally wheeled vehicles) will not be used within 20m of a sett entrance; light work, such as digging by hand or scrub clearance will not take place within 10m of sett entrances.
- During the breeding season (December to June inclusive), none of the above works will be undertaken within 50m of active setts, nor blasting or pile driving within 150m of active setts.
- Where works need to be undertaken within these zones, or where works directly affect newly identified badger setts, consultation with an ecologist with relevant badger management experience is required, and could include advanced badger mitigation measures such as camera trapping to confirm sett status and sett closure / destruction, which must be undertaken outside the breeding season as per specialist advice, and will all be conducted under the supervision of an ecologist with experience in badger mitigation.
- Any potential new constraints (other protected mammals) identified will also be afforded protection in line with the requirements set out in the transport infrastructure Ireland guidance documents and mitigated in line with the advice and supervision of an experienced ecologist as needed.

*Bats*

Mitigation measures have been proposed in the Bat Mitigation Strategy with reference to practices outlined in Bat Mitigation Guidelines for Ireland V2 (Marnell et al. 2022), Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023) and in Bats & Bat Boxes: Guidance Notes for Agri-environment Schemes (Bat Conservation Ireland, 2015). The aims of the mitigation strategy are to avoid disturbance of roosting bats or mortality of bats during the proposed works, and to provide alternative roost sites to offset the loss of known and potential roost sites.

*Supervision of Proposed Works*

A suitably qualified / licenced bat specialist will be engaged by the appointed contractor who will advise the appointed contractor on ecological matters during construction, communicate all findings in a timely manner to the Applicant and statutory authorities, and supervise and direct the ecological measures associated with the proposed development.

The proposed demolition works are due to commence one month after final grant of planning and to be completed within one month (subject to planning consent). The demolition of the building confirmed as a bat roost will occur during the spring or autumn periods (i.e. April or October), as the risk of accidental death or injury is lower at this time, as it is outside the main maternity season and hibernation season. Bats may use roosts in smaller numbers in winter for hibernation but may nevertheless be present.

The following measures are proposed for demolition of one building with roost potential:

- Presence/absence of bats in the building will be determined by suitably qualified, experienced, and licensed ecologist(s) in advance of building demolition. Presence/absence will be determined by roost inspection checks (e.g. using an endoscope device) and a combination of dusk emergence and/or dawn re-entry surveys (if weather conditions are suitable).
- Immediately following completion of the above (the next day after dawn/dusk emergence surveys), the roofing will be removed under the supervision of the licenced bat ecologist during daylight hours. The bat worker will inspect the roof materials in advance of removal with a suitable device such as an endoscope.
- The contractor undertaking demolition works will facilitate safe access for the bat worker to the roof area of the building to allow inspection for roosting bats. Safe access may be facilitated via a scaffold, or via a Mobile Elevated Working Platform or similar.
- The demolition works will be conducted under the supervision of the licenced bat ecologist. In the event that bats are encountered during the works, they will be removed by hand, and transferred to a bat box which will be installed on site in advance of works.

Regarding the retention and protection of vegetation, in the event where any of the trees showcasing potential roost factors require removal, pruning, or cutting, these will need to be checked in advance of pruning to confirm absence of roosting bats.

Lighting proposals for the construction phase will adhere to the advice provided in Bats and Lighting – Guidance for Planners, Engineers, Architects and Developers (Bat Conservation Ireland 2010), Guidance Note GN08/23 Bats and Artificial Lighting at Night (Institution of Lighting Professionals & Bat Conservation Trust, 2023) and Guidance Note GN01/21 The Reduction of Obtrusive Light (Institute of Lighting Professionals, 2021). Construction stage

lighting details will be reviewed by a qualified bat ecologist. If necessary, the bat ecologist will recommend adjustments to directional lighting (e.g. through cowls, shields or louvres) to restrict light spill in sensitive areas.

*Provision of Alternative Roost Facilities On-site During and Post Development Works*

As part of the mitigation measures, alternative roosts appropriate to the bat species recorded will be provided nearby within the proposed development site. The tree-mounted bat boxes will be installed either by the ecologist or by the contractor under the supervision of the ecologist. All bat boxes will be installed at least 3m above ground level to minimise the risk of interference by humans. The bat boxes will be located away from areas that are subject to artificial light spill. All boxes will be installed prior to the commencement of demolition and construction works.

*Measures for the Unforeseen Discovery of Roosts during Works*

In the event of the unforeseen discovery of roosts during the construction of the proposed development all construction activities will cease in proximity to the discovered roost, and the bat specialist/ecologist contacted for advice. The local National Parks and Wildlife Services (NPWS) ranger will be contacted by the bat specialist/ecologist for an agreed approach.

*Reporting to the National Parks and Wildlife Services*

A report documenting adherence to outlined measures will be produced by the licensed ecologist and forwarded to the NPWS within three months of completion of demolition works. The success of the proposed strategy will be measured by the mortality of any bats during construction, and the provision of alternative roosting sites in the lands during and after construction.

*Breeding Birds*

Where feasible, vegetation (e.g. hedgerows, trees, scrub and grassland) will not be removed, between the 1st of March and the 31st of August, to avoid direct impacts on nesting birds. Where the construction programme does not allow this seasonal restriction to be observed, then these areas will be inspected by a suitably qualified ecologist for the presence of breeding birds prior to clearance. Areas found not to contain nests will be cleared within three days of the nest survey, otherwise repeat surveys will be required. Should nesting birds be encountered during surveys, the removal of vegetation will be required to be delayed until after the nesting has finished.

**Mitigation Measures and Monitoring**

A suitably experienced and qualified Ecological Clerk of Works (ECoW) will be retained by the appointed contractor. The ECoW will advise the appointed contractor on ecological matters during construction, undertake pre-construction surveys as necessary, communicate all findings in a timely manner to the appointed contractor and statutory authorities, acquire any licenses or consents required to conduct the work, and supervise and direct the ecological measures associated with the Proposed Development.

Operational Phase

*Habitats*

Planting of native tree and shrub species will be implemented within the site during construction. The implementation of the landscape plan will extend into the operational phase, as planting becomes established and continues to mature.

*Bats*

Alternative roosts appropriate to the bat species recorded will be provided within the proposed development site. These will be installed at a suitable location determined by the bat worker/ecologist prior to the construction phase and will be maintained and monitored throughout the operation phase.

*Breeding Birds*

As an enhancement measure for the loss of nesting habitat and in order to provide additional nesting opportunities for breeding birds, six nest boxes will be installed within the Proposed Development site. The nest boxes will be installed at a minimum of 3 metres above ground level to ensure against disturbance from humans and domestic animals such as cats. The boxes will be deployed across the site in appropriate locations, as advised by a suitably qualified ecologist.

A landscape monitoring plan will be undertaken for a number of years post implementation to ensure establishment of planting and success of habitat management.

While the success of the proposed Bat Mitigation Strategy will not be measured by occupancy of roosts by bats, it is considered to be best practice and appropriate to implement a monitoring plan to gather information and assess whether the bat population has responded favourably to mitigation measures.

A three-year post-installation monitoring programme will be undertaken. The bat boxes will be checked for presence of bats or signs of bats on a biennial basis between August and September in years 1 and 3 post-installation by an appropriately licensed and qualified ecologist.

The results of the monitoring surveys will be recorded and shared with the local authority and the National Parks and Wildlife Services (NPWS).

**Residual Effects**

The Proposed Development is not likely to have significant residual effects on any nationally designated sites, European sites, badgers and other small mammals, and bats assuming the full and successful implementation of the mitigation measures outlined.

Although there will be a temporary impact during the construction phase until the proposed landscape planting becomes established, the Proposed Development is not likely to result in long-term effects on habitats and will not result in a likely significant negative residual effect, at any geographic scale.

Additionally, assuming the full and successful implementation of the mitigation measures, no long-term significant impacts are predicted on breeding birds at any geographical scale.

# 6 LAND AND SOIL

An assessment of the potential impact on the existing land, soil and geological environment was carried out by Enviroguide Consulting.

The assessment was carried out taking cognisance of the appropriate national guidelines and standards for Environmental Impact Assessment using data collected from a detailed desk study, the results of the ground investigation undertaken by Site Investigations Ltd., a site walkover survey and review of all relevant drawings and documents pertaining to the site and the Proposed Development. A detailed assessment of the potential impacts was undertaken, and appropriate avoidance and mitigation measures were identified to reduce any identified potential impact associated with the Proposed Development.

**Construction Phase**

The construction phase of the Proposed Development will include the demolition of approximately 740m$^2$ of existing structures onsite and the excavation of 95,250m$^3$ of soil and subsoil to depths of between 0.6 metres below ground level and 3.0 metres below ground level for the construction of building foundations, drainage and other infrastructure. Where possible, it is intended to reuse suitable excavated soil and subsoil for landscaping and engineering use. However, it is anticipated that up to 66,400m$^3$ of surplus materials will require removal offsite in accordance with all statutory legislation.

The construction phase of the Proposed Development will also include the importation of 77,750m$^3$ of aggregate fill materials will be required for the construction of the proposed development (e.g., granular material beneath road pavement, under floor slabs and for drainage and utility bedding / surrounds).

During the construction phase, all works will be undertaken in accordance with the Outline Construction Management Plan (CMP) (Atkins Ireland Limited, 2024), the Construction Environmental Management Plan (CEMP) (EGC, 2024) and the Resource and Waste Management Plan (RWMP) (EGC, 2024). Following appointment, the contractor will be required to further develop the CMP, CEMP and RWMP to provide detailed construction phasing and methods to manage and prevent any potential emissions to ground with regard to the relevant industry standards (e.g., Guidance for Consultants and Contractors, CIRIA-C532', CIRIA, 2001).

The CMP, CEMP and RWMP will be implemented for the duration of the construction phase, covering construction and waste management activities that will take place during the construction phase of the Proposed Development.

**Operational Phase**

The operational phase of the Proposed Development consists of the typical activities in a residential area and with the exception localised gardening works by residents, there will be no bulk excavation of soils or bedrock or infilling of waste.

**Mitigation and Monitoring**

Mitigation measures will be adopted as part of the construction works for the Proposed Development. The measures will address the main activities of potential impact which include:

- Control and management of earthworks.

- Control and management of soils and stockpiles.
- Management and control procedures for the exportation of surplus soils and bedrock.
- Management and control procedures for the importation of fill materials.
- Control and handling of cementitious materials.
- Control and handling of fuel and hazardous materials.
- Accidental release of contaminants.

The Proposed Development will require land take of approximately 14.2 hectares and will change from principally undeveloped grasslands to mixed use residential and retail/commercial land use. The lands across the site are zoned as:

- Objective 'A': "*To provide residential development and improve residential amenity while protecting the existing residential amenities*."
- Objective 'NC': *To protect, provide for and/or improve mixed-use neighbourhood centre facilities*."

Therefore, the change in land use is in accordance with the zoning objectives as set out in the Dún Laoghaire-Rathdown County Development Plan 2022-2028.

**Residual effects**

Overall, there will be no significant adverse impacts on, or associated with the land, soils and geology attributed to the Proposed Development.

# 7 HYDROLOGY

An assessment of the potential impacts on the existing hydrological and hydrological environmental was carried out by Enviroguide Consulting.

The assessment was carried out taking consideration of appropriate national guidelines and standard for the Environmental Impact Assessment using data collected from detailed desk study, the results of the ground investigation undertaken by Site Investigations Ltd., a site walkover survey and review of all relevant drawings and documents pertaining to the Proposed Development and site. The results of the assessment provided information on the baseline conditions at the site. A detailed assessment of the potential impacts was undertaken, and appropriate avoidance and mitigation measures were identified to reduce any identified potential impact associated with the Proposed Development.

The site has been mapped by the Environmental Protection Agency (EPA, 2024) to be within the Ovoca-Vartry Water Framework Directive (WFD) Catchment (ID: 10), the Ovoca-Vartry Hydrometric Area (HA10) and the Dargle_SC_010 Sub-Catchment, (Sub-Catchment ID: 10_5). The majority of the site has been mapped by the EPA (EPA, 2024) to be within the Carrickmines Stream_010 WFD River Sub Basin (IE_EA_10C040350), while the southern portion of the site is mapped within the Shanganagh_010 WFD River Sub Basin (IE_EA_10S010600).

The closest surface water feature is recorded on the EPA database (EPA, 2024) as the Shanganagh River (IE_EA_10S010600), named locally as the Loughlinstown River, which is located approximately 0.3km south / southeast of the site. The Glenamuck North Stream (IE_EA_10C040350) is located approximately 0.4km north of the site and flows eastwards before converging with the Carrickmines Stream (IE_EA_10C040350) approximately 2.0km northeast of the site. The Carrickmines Stream flows approximately 3.2km downstream in a south-easterly direction before converging with the Shanganagh River approximately 3.9km east of the site (EPA, 2024).

The bedrock aquifer beneath the site is within the Wicklow Groundwater Body. Locally, groundwater flow within the vicinity of the site is likely to be towards the Carrickmines Stream and the Shanganagh River although baseflow contributions are noted to be low within the Wicklow Groundwater Body.

As documented in the Engineering Infrastructure Report & Stormwater Impact Assessment (Roger Mullarkey and Associates, 2024 submitted with the planning application), the surface water drainage for 12.6 hectares of the 14.2 hectare site (i.e., the drained site area) has been divided into four catchment areas. Surface water runoff from the Proposed Development will be managed in accordance with the principles and objectives of sustainable drainage systems and the Greater Dublin Sustainable Drainage System (GDSDS) to treat and attenuated water prior to the outfall point from the site and ultimately discharging to the watercourses within the catchments of the Carrickmines Stream (River Waterbody Code: IE_EA_10C040350) and the Shanganagh River (River Waterbody Code: IE_EA_10S010600).

As documented in the Engineering Infrastructure Report (Roger Mullarkey & Associates, 2024), the foul drainage from the Proposed Development has been divided into four catchment areas. Foul water from the Proposed Development will be treated in the Shanganagh Wastewater Treatment Plant (WWTP) (Discharge Licence No. D0039-02) before ultimately

discharging to the Southwestern Irish Sea - Killiney Bay coastal waterbody. The Uisce Eireann Confirmation of Feasibility (CoF) letter dated the 14th of June 2024 (UE Reference: CDS24004528) states that the proposed foul water connection is feasible without infrastructure upgrade by UE. A Statement of Design Acceptance (SODA) was subsequently received from Uisce Eireann on the 17th of June 2024 (Uisce Eireann Reference: CDS24004528) confirming that UE has no objections to the foul water design proposals.

Water supply to the western portion of the Proposed Development (i.e., to the west of the Glenamuck Link Distributor Road) will be from the existing 300mm Uisce Eireann mains water supply located on Enniskerry Road. While water supply to the eastern portion of the Proposed Development (i.e., to the east of the Glenamuck Link Distributor Road) will be via the 280mm watermain currently under construction as part of the Glenamuck Link Distributor Road roads project. The Uisce Eireann Certificate of Feasibility letter dated the 14th June 2024 (UE Reference: CDS24004528) states that the proposed water supply connection is feasible without infrastructure upgrade by Uisce Eireann. A statement of design acceptance was received from Uisce Eireann on the 17th of June 2024 (Uisce Eireann Reference: CDS24004528) confirming that Uisce Eireann has no objections to the water supply design proposals.

**Construction Phase**

During the construction phase, all works will be undertaken in accordance with the Outline Construction Management Plan (Atkins Ireland Limited, 2024), the Construction Environmental Management Plan (CEMP) (EGC, 2024) and the Resource and Waste Management Plan (RWMP) (EGC, 2024). Following appointment, the contractor will be required to further develop the Construction Management Plan, Construction Environmental Management Plan and Resource and Waste Management Plan to provide detailed construction phasing and methods to manage and prevent any potential emissions to ground with regard to the relevant industry standards (e.g., Guidance for Consultants and Contractors, CIRIA-C532', CIRIA, 2001).

**Operational Phase**

During the operational phase ongoing regular maintenance of the proposed drainage including the sustainable drainage systems measures in accordance with CIRIA SuDS Manual C753 will be incorporated into the overall management strategy for the Proposed Development.

**Mitigation Measures and Monitoring**

The Construction Management Plan, Construction Environment Management Plan and the Resource Waste Management Plan will be implemented for the duration of the construction phase, covering construction and waste management activities that will take place during the construction phase of the Proposed Development.

Mitigation measures will be adopted as part of the construction works for the Proposed Development. The measures will address the main activities of potential impact which include:

- Control and management of earthworks.
- Control and management of soils and stockpiles.
- Management and control procedures for the exportation of surplus soils and bedrock.
- Management and control procedures for the importation of fill materials.

- Control and handling of cementitious materials.
- Control and handling of fuel and hazardous materials.
- Accidental release of contaminants.

**Residual Effect**

Overall, there will be no impact to the existing Water Framework Directive Status of water bodies associated with the Proposed Development including the Glenamuck North Stream, the Carrickmines Stream, the Shanganagh River, Southwestern Irish Sea – Killiney Bay and the Wicklow groundwater body as a result of the Proposed Development taking account of design avoidance and mitigation measures where required.

# 8 AIR QUALITY AND CLIMATE

The Air Quality and Climate chapter examines the potential for the Proposed Development to impact upon air quality and climate within the vicinity of the site. This chapter also describes and assesses the impacts on local climate and on global climate in a wider context.

**Construction Phase**

A construction phase dust assessment has been carried out in accordance with the Institute of Air Quality Management (IAQM) *Guidance on the assessment of dust from demolition and construction* (2024). The risk of dust impacts has been assessed separately for demolition, earthworks, construction and trackout and the dust emission magnitude has been classified for each of the four activities (this is known as 'Step 2A' of the dust assessment), using the definitions outlined for each activity within the Institute of Air Quality Management (IAQM) guidance. The dust emission magnitude is based on the scale of the anticipated works and is classified as small, medium and large. The sensitivity of the area was determined for dust soiling and human health impacts, respectively, as per the guidance (this is known as 'Step 2B' of the dust assessment). In accordance with the Institute of Air Quality Management (IAQM) guidance, the dust emission magnitude (Step 2A) and sensitivity of the area (Step 2B) have been combined and the risk of impacts from demolition, construction, earthworks and trackout have determined (before mitigation is applied) (this is known as 'Step 2C' of the dust assessment). This risk has then been used to inform the selection of appropriate mitigation measures.

Table 8-1 details the risk of dust impacts for demolition, earthworks, construction and trackout activities.

*Table 8-1 Summary of Unmitigated Risks*

| Potential Impact | Sensitivity | Magnitude | | | |
|---|---|---|---|---|---|
| | | Demolition | Earthworks | Construction | Trackout |
| | | Small | Large | Medium | Large |
| **Dust Soiling Impacts** | High | Medium Risk | High Risk | Medium Risk | High Risk |
| **Human Health Impacts** | Low | Negligible | Low Risk | Low Risk | Low Risk |
| **Ecological Impacts** | Not applicable – no ecological receptors within the study area | | | | |

The Institute of Air Quality Management (IAQM) recommends that significance is only assigned to effect after considering the construction activity mitigation. The risk of dust impacts has been determined in Step 2C and the appropriate dust mitigation measures identified, and the final step is to determine whether there are significant effects arising from the construction phase of the Proposed Development. The proposed mitigation measures will reduce the effects to be not significant.

It is predicted that fossil fuel combustion gas emissions including carbon dioxide, sulphur dioxide, nitrogen oxides, carbon monoxide and hydrocarbon particulate emissions will be minor and ongoing for the construction phase of the development and will not have a significant adverse impact on the existing ambient air quality in the vicinity of the site. The air

dispersion modelling concluded that the construction phase is likely to result in a short-term increase in Nitrogen Dioxide ($NO_2$) concentrations in the locality. The results determine that there may be an 'imperceptible' increase in concentrations of Nitrogen Dioxide ($NO_2$) at the one identified receptor (R1) out of two receptors which have been assessed, when compared with 'Do Nothing' levels; with the highest predicted increase of 0.04 µg/$m^3$ measured at receptor R1 in the phase 2/phase 3 (2028) 'Do Something' scenario; however, this increase in traffic has been determined to have an overall insignificant impact in terms of local air quality. Furthermore, the increase in traffic has been determined as marginal with regard to climatic impacts. Therefore, no residual significant impacts are anticipated from the proposed development in the context of air quality and climate.

Increased light good vehicles and heavy goods vehicles traffic flow as a result of the proposed development is likely to contribute to increases in greenhouse emissions such as carbon dioxide and nitrous oxide ($N_2O$). However, these contributions are likely to be marginal in terms of overall national greenhouse gas emission estimates and Ireland's obligations under the Paris Agreement, and therefore unlikely to have an adverse effect on climate. Furthermore, it is widely anticipated that carbon dioxide emissions for the passenger car fleet will reduce in future years due to the increasing prevalence of electric or hybrid vehicle use.

**Operational Phase**

Waterman Moylan Consulting Engineers Limited have prepared an Energy Statement for the Proposed Development (2024) and has been included in this Environmental Impact Assessment Report (EIAR) in Volume 3 - Appendices. This report identifies the energy standards with which the Proposed Development will have to comply and also sets out the overall strategy that will be adopted to achieve these energy efficiency targets.

The Proposed Development will be required to minimise overall energy use and to incorporate an adequate proportion of renewable energy in accordance with Building Regulations Part L 2022, Conservation of Energy and Fuel.

The design and construction of all buildings in accordance with Building Regulations Technical Guidance Document Part L 2022 will ensure that modern building materials are used and that they are designed to be thermally efficient resulting in a reduction in the volume of fossil fuels required to heat the buildings.

A Site-Specific Flood Risk Assessment (SSFRA) has been prepared for the Proposed Development by Roger Mullarkey and Associates Consulting Structural and Civil Engineers (2024). This assessment identifies the risk of flooding at the site from various sources and sets out possible mitigation measures against the potential risks of flooding. The report concluded that the site is suitable for development and has an overall low risk of being affected by flooding.

**Residual Effects**

No negative residual impacts in the context of air quality and climate are anticipated regarding the proposed development.

# 9 NOISE AND VIBRATION

The noise and vibration chapter provides a description of the likely noise impacts associated with the Proposed Development.

A noise assessment was carried out by RSK Ireland Limited (2024) and is detailed in this chapter of the EIAR. A baseline noise survey was completed to establish the receiving environment and to determine the impact from the noise generating activities associated with the Proposed Development.

Based on a review of the guidance documents and the baseline noise environment, the following daytime noise criteria are recommended for the construction phase at the site:

- For residential properties it is considered appropriate to adopt a 70dB(A) criterion; and
- For non-residential locations it is considered appropriate to adopt the higher category values of 75dB(A) during the day. These will only be considered as noise sensitive during office hours.

**Construction Phase**

Vibration criteria for the Proposed Development has been developed based on the guidance on construction vibration prediction, assessment and control contained within British Standard Code of Practice for Noise and Vibration Control on Construction and Open Sites Part 2: Vibration.

The Proposed Development will comply with BS 5228 “Noise Control on Construction and open sites Part 1: Code of Practice for basic information and procedures for noise control” and all works will be limited to normal daytime working hours:

- 7am – 7pm Monday to Friday
- 7am – 2pm Saturdays
- No works Sundays or on Public Holidays

The nearest noise sensitive locations are residential properties which are located approximately 30m – 40m from the site boundary. Noise prediction calculations have been completed for noise from the use of onsite plant up to 250m from the source using the inverse square law. It is not anticipated that the adopted criteria will be exceeded during the construction phase at the closest noise sensitive locations (30m and 40m from the site boundary). It is concluded that the likely noise impact of the development in the construction phase is therefore insignificant.

**Operational Phase**

In the operational phase, criteria have been set for new building services plant items in accordance with the methodologies outlined in BS 4142:2014+A1:2019. It has been concluded that the likely noise impact of the development in its operational phase is not significant.

The cumulative effects have been assessed taking other planned, existing, and permitted developments in the surrounding area into account. The assessment concluded that the likely cumulative impact of the Proposed Development with other developments in the area during both the construction and operational phases will not be significant in terms of noise and vibration.

### Residual Effects

No negative residual effects in the context of noise and vibration are anticipated regarding the Proposed Development.

# 10 LANDSCAPE AND VISUAL ASSESSMENT

This chapter assesses the landscape and visual effects of the Proposed Development on the surrounding environment.

The aim of a landscape and visual assessment is to identify the elements of the landscape which make it unique and the extent to which it is possible to alter these landscapes before unacceptable consequences arise. Landscape character represents the individuality of an area based on its combination of features and elements. The purpose of this assessment is to evaluate the existing landscape character of the site and surroundings, to assess the visual impact of the Proposed Development and to identify landscape designations and planning policies that may concern the site and its environs.

A desktop study was carried out which included for:

- Establishing an appropriate study area for the assessments;
- Review the zone of theoretical zone of visibility (ZTV) (using Viewsheds software);
- Review of the Dun Laoghaire Rathdown County Council Development Plan to review sensitive landscape and scenic view/route designations;
- Selection of potential viewpoints from key visual receptors to be assessed during fieldwork for actual visibility and sensitivity.

A site visits was undertaken to carried out to:

- Record a description of the landscape elements and characteristics within the study area;
- Capture high quality base photography from which to prepare photomontages of the proposal (Appendix 10-1 of the EIAR).

Construction Phase

During the construction phase, the site landscape will undergo a change. Expected landscape effects include:

- Numerous large, brightly coloured earth moving equipment, construction machinery, cranes operating on the site and construction site offices/facilities, security lighting and fencing;
- Change in colour and form of topography due to the excavation, removal and storage of soils;
- Removal of hedgerows (trees and shrubs), mainly in the south limit of the Proposed Development;
- Creation of areas of hard surfaces (car parks, paths, roads);
- Construction of proposed new buildings; and,
- Planting of proposed green structure (trees, shrubs, herbaceous, lawns).

These landscape impacts will reduce rapidly with distance from the site boundaries, and intervening hedgerows, open park spaces, and existing buildings will further reduce the impacts to minor to negligible, negative and short term for the construction phase.

The lands at present are mostly in use for agriculture (grazing) with their previous use being as football pitches. These lands are broken into a number of fields and these are separated from one another by hedgerows and tree lines. The lands have been derelict for some time

and the hedgerows had become overgrown with scrub hedge vegetation such as Bramble being allowed to grow out on either side to create broader hedges and the hedge plants were also allowed to grow up tall losing their lower vegetation and their effective stock proof quality. In recent times, works have been carried out to clear encroaching scrub species such as Bramble and coarse vegetation to allow for the erection of stock proof fencing.

It is concluded that the Proposed Development will, therefore, have a minor, negative and short to medium-term impact on the landscape character of the site during the construction phase. However, this is considered typical for construction sites of large residential developments.

Operational Phase

As the effects of the presence of the Proposed Development is considered as part of the construction phase, it is not expected that there will be any additional likely significant landscape and visual effects during the operational phase.

**Mitigation Measures and Monitoring**

Construction Phase

Landscape tender drawings and specifications will be produced to ensure that the landscape work is implemented in accordance with best practice. This document will include tree work procedures, soil handling, planting and maintenance. The contract works will be supervised by a suitably qualified landscape architect. The planting works will be undertaken in the planting season after completion of the main civil engineering and building work.

Any construction works within close proximity to retained trees are advised to be undertaken in accordance with approved method statements prepared by the construction contractor under the direct supervision of a qualified consultant Arboriculturist. Therefore, during the construction works, a professionally qualified Arboriculturist is recommended to be employed by the principal contractor or site manager to monitor and advice on any works within the root protection area of retained trees to ensure successful tree retention and planning compliance. The Arboriculturist is to make regular site visits to ensure that the tree protection measures are in place and adhered to.

Operational Phase

Monitoring of the mitigation measures will form part of the landscape management plan. Replacement trees, replacement planting and pruning measures will be captured in landscape maintenance plans and are intrinsically linked to the proposed mitigation measures. All landscape works will be in an establishment phase for the initial three years from planting. A landscape maintenance plan accompanies the planning application. Prior to completion of the landscape works, a competent landscape contractor will be engaged and a detailed maintenance plan, scope of operation and methodology will be put in place.

**Residual Effects**

No negative residual impacts in the context of landscape and visual impact are anticipated regarding this Proposed Development.

Construction Phase

Notwithstanding the proposed improvements and mitigation measures proposed during the construction phase, it is considered that the initial development of the site, including removal of trees and hedgerows and general construction activity will result in overall residual effects that are moderate, negative temporary impacts and ongoing residual effects that will be moderate, neutral short-term impacts by the closest receptors and reduce rapidly with distance to impacts which are minor/negligible, neutral short term effects.

Operational Phase

On completion, the disturbance and change associated with the construction stage will be gradually altered by the influence that the new development establishes on the character and visual context of its environs. In this regard it is considered that the Proposed Development of the site will have a residual minor local impact on the landscape character of its environs and reduce rapidly with distance to impacts which are negligible, neutral long-term impacts.

# 11 ARCHAEOLOGY AND CULTURAL HERITAGE

This study determines, as far as reasonably possible from existing records, the nature of the cultural heritage resource in and within the vicinity of the development area using appropriate methods of study. The study area is defined as an area measuring 250m from the proposed development.

Desk-based assessment is a programme of study of the historic environment within a specified area or site on land, in the inter-tidal zone or underwater that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information to identify the likely heritage assets, their interests and significance; the character of the study area, including appropriate consideration of the settings of heritage assets (CIfA 2020a,4). To compile a complete baseline, a site inspection is carried out to complement the results of the desk-based assessment. This leads to the following:

- Determining the presence of known archaeological heritage sites that may be affected by the proposed development;
- Assessment of the likelihood of finding previously unrecorded archaeological remains during the construction programme;
- Suggested mitigation measures based upon the results of the above research.

There are five protected structures included on the Recorded Protected Structure (RPS) within 250m of the Proposed Development. Four of the five protected structures are also included in the National Inventory of Architectural Heritage (NIAH) Building Survey. The closest structure: entrance gates to the former Kiltiernan Abbey (RPS 1793) is a protected structure located approximately 9m west of the proposed development area. The closest structure listed on the NIAH: a post box (NIAH 60260018) is located adjacent to the boundary wall defining the western extent of the development area along Enniskerry Road. No trace of the post box was noted during the field inspection and the section of wall where its location is recorded is noted has be replaced. The post box appears to have been removed prior to 2019 according to Google Streetview which is prior to when the Applicant purchased the subject lands..

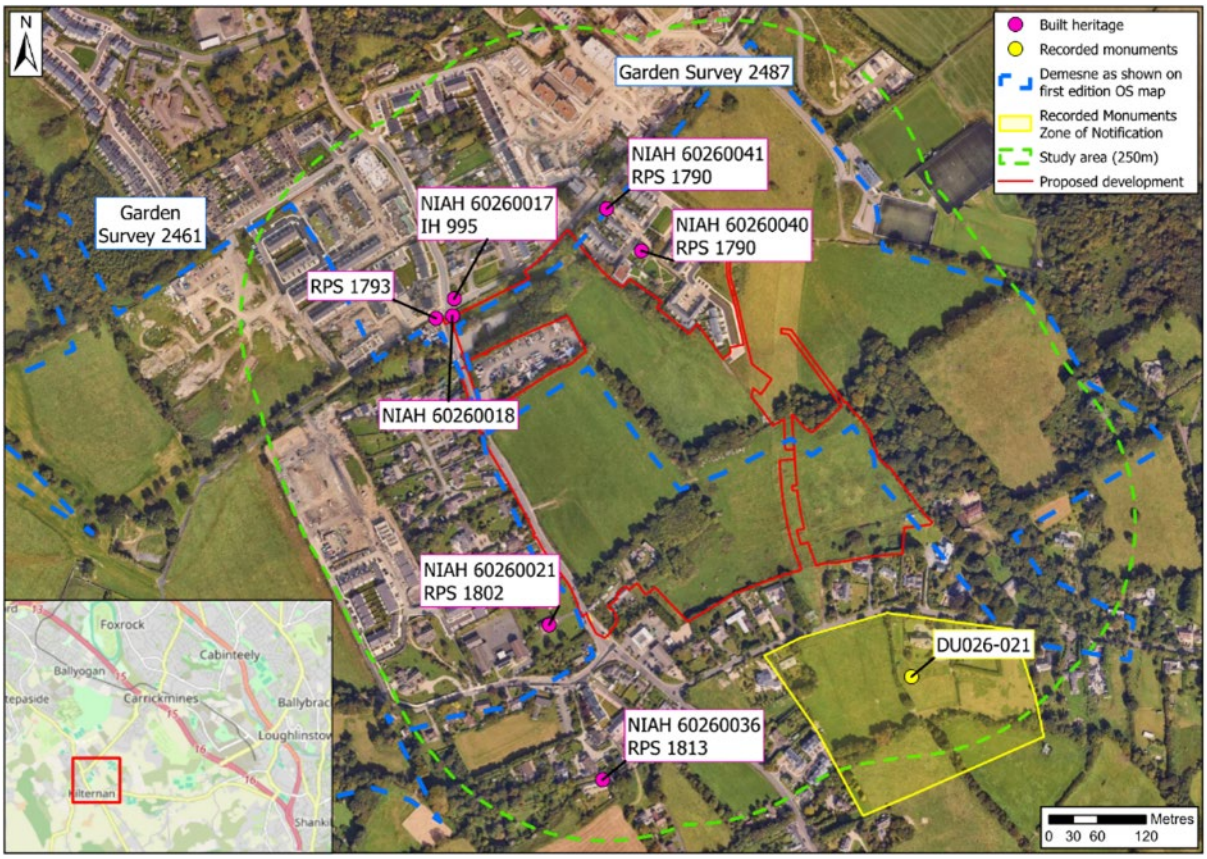


*Figure 11-1 Site location showing recorded monuments and cultural heritage sites within the study area*

A field inspection of the proposed development area was carried out on the 22nd July 2024. This was undertaken to identify the nature and extent of any recorded sites and structures along with an assessment for previously unrecorded sites or structures of archaeological, architectural or cultural heritage significance.

Construction Phase

*Archaeology*

No recorded archaeological sites will be impacted by construction activities associated with the Proposed Development.

Possible archaeological remains were identified by geophysical survey within a small portion of the Proposed Development area (Harrison 2006, Licence No. 06R0064). Additionally, as the site has remained largely undisturbed (with the exception of portions of Field 3) there is the potential for previously unrecorded archaeological remains to exist beneath the ground level. Any such remains may be directly, negatively and permanently impacted upon by ground disturbances associated with the Proposed Development. Prior to the application of mitigation the significance of effect may range from moderate to very significant.

*Architecture*

The Proposed Development includes the demolition of the dwelling known as ‘Rock Villa’, and its associated stone outbuildings, which are now derelict and date to the second part of the 19th century. The structures, albeit modified and derelict, represent local heritage assets.

Impacts will be direct, negative and permanent. Prior to the application of mitigation, the significance of effect will be significant.

A cast-iron post box (NIAH 60260018) is recorded adjacent to the extant boundary wall surrounding the Proposed Development. The post box has been removed as part of the replacement of the wall and as such, no impacts are predicted by construction activities as the feature is no longer present (removed prior to the Applicant purchasing the site).

The construction of the Proposed Development will have a direct, negative and permanent impact on the western extent of the demesne lands (Garden Survey 2487) associated with Rockville House (RPS 1790; NIAH 60260040). The existing belt of mature trees separating Fields 1, 2 and 3 will be retained. Prior to the application of mitigation, the significance of effect will be moderate.

The poorly preserved elements of granite stone walling that borders the Proposed Development area to the west and northwest will be removed by the Proposed Development. This is a direct, negative and permanent impact and prior to the application of mitigation is represents a moderate significance of effect.

*Cultural Heritage*

No additional construction impacts are predicted upon specific cultural heritage sites, other than those detailed above.

Operational Phase

*Archaeology*

No impacts are predicted upon the archaeological resource because of the operation of the Proposed Development.

*Architecture*

The operation of the Proposed Development has the potential to result in an indirect, negative and permanent impact on the Catholic Church of Our Lady of the Wayside (RPS 1802; NIAH 60260021), which is located approximately 40m southwest of the development area. The church is located within a large landscape garden, which represents the curtilage of the structure. The immediate setting of the building will remain intact, as will the view of the principal northeast facing elevation (containing the entrance). The construction of new buildings and a plaza opposite to the garden entrance to the church will have a minor impact on the setting of the church when viewed from the northwest, but the significance of effect is assessed as being not significant.

The operation of the Proposed Development has the potential to result in an indirect, negative and permanent impact on the gated entrance to Kiltiernan Abbey (RPS 1793), which is located approximately 9m southwest of the development area. The gates occupy a roadside setting opposite the Proposed Development area. The immediate setting of the gates will remain intact, as will the view of the principal northeast facing elevation, but new structures will be visible within the surrounding when viewed from the north, which will have a minor impact on the setting of the gates, but significance of effect is assessed as being not significant.

The operation of the Proposed Development has the potential to result in an indirect, negative and permanent impact on Rockville House (RPS 1790; NIAH 60260040), which is located c.

25m northeast of the development area. The setting of the structure has been affected by the construction of modern residences to the west and south, but the Proposed Development will be visible to the rear of the building when viewing the main north facing elevation from the northeast. The significance of effect is assessed as being slight negative.

The operation of the Proposed Development has the potential to result in an indirect, negative and permanent impact on the modified late 19th century house that is located to the immediate southeast of the Proposed Development area and the property plot containing 'Rock Villa'. The development will be set back from the house to the south, west and north with the provisions of footpaths. The significance of effect is assessed as being not significant.

No impacts are predicted on the remaining architectural heritage sites located within the study area.

**Mitigation Measures and Monitoring**

Construction Phase

*Archaeology*

A programme of geophysical survey be carried out within the previously undisturbed greenfield portions of the Proposed Development area, in advance of construction to investigate the archaeological potential of these lands (excluding the portion of Field 2 that has already been assessed). The work will be carried out under licence, as issued by the National Monuments Service of the Department of Housing, Local Government and Heritage (DoHLGH).

Geophysical survey will be followed by a programme of archaeological test trenching. This work will be undertaken by a licence eligible archaeologist in consultation with the National Monuments Service of the DoHLGH. Subject to the results of the programme of archaeological testing further mitigation may be required, such as preservation by record (excavation)/in-situ and/or monitoring of groundworks.

*Architecture*

Prior to the commencement of construction, a full written and photographic record will be made of 'Rock Villa' and its stone outbuildings. Overgrowth will be removed to facilitate the survey and internal access provided (if Health and Safety considerations allow). The record will be created by a suitably qualified heritage contractor and accompanied by documentary research. Furthermore, all ground works within this area will be subject to archaeological monitoring, by a suitably qualified archaeologist.

A full written and photograph record will be made of the demesne landscape associated with Rockville House, which will be directly impacted upon by the Proposed Development. The record will be created by a suitably qualified heritage contractor and accompanied by documentary research, where relevant.

A full written and photograph record will be made of the sections of stone walling to be removed as part of the construction of the development, which currently bound part of the site. The record will be created by a suitably qualified heritage contractor and accompanied by documentary research, where relevant. The masonry should be re-used within the development where appropriate.

Operational Phase

The predicted indirect impacts at operation stage on the Catholic Church of Our Lady of the Wayside (RPS 1802; NIAH 60260021); the gates to Kiltiernan Abbey (RPS 1793) and Rockville House (RPS 1790; NIAH 60260040) are not deemed to be significant. Due to the visual nature of the predicted impacts, it is not possible to mitigate the minor effects predicted.

There is no recommendation for a monitoring system at operational phase.

**Residual Effects**

Following the completion of all mitigation measures, there will be no significant residual impacts upon the archaeological, architectural or cultural heritage resource.

# 12 MATERIAL ASSETS

This chapter provides an assessment of the potential impacts of the Proposed Development on man-made physical resources in the environment, including built services and infrastructure comprising electricity supply, gas supply, information and communications technology, surface water drainage, water supply and demand, wastewater management and waste management infrastructure.

**Electricity Supply**

Construction Phase

Construction related activities will require temporary connection to the local electrical supply network for lighting and construction actives. The power demand during the construction phase may also be supplemented with on-site diesel generators. Connecting a new multi-unit housing development to the electricity distribution system must be carried out in accordance with Electricity Supply Board (ESB) Networks' specifications. A temporary suspension of the network locally to facilitate the connection works may be required during the construction phase, and an additional temporary suspension will also occur when power is provided to the site of the Proposed Development.

Operational Phase

The impact of the operational phase of the Proposed Development on the electricity supply network is likely to be to increase demand to the existing supply.

Mitigation Measures and Monitoring

The temporary suspensions during the construction phase will be controlled by ESB Networks as the statutory undertaker and in accordance with standard protocols.

Residual Impact

The potential impact from the construction phase of the Proposed Development on the local electrical supply network is likely to be negative, slight, and short-term.

The impact from the operational Phase on the electricity supply network is likely to be neutral, not significant in the long term.

**Gas Supply**

Construction Phase

Connecting a new multi-unit housing development to the gas network system must be carried out in accordance with Gas Networks Ireland's specifications. The developer must employ the services of a registered mechanical installer or plumber and select and register with a natural gas supplier. A temporary suspension of the network locally to facilitate the connection works may be required during the construction phase. These temporary suspensions will be controlled by Gas Networks Ireland as the statutory undertaker and in accordance with standard protocols.

The potential impact from the construction phase of the Proposed Development on the local gas supply network is likely to be negative, slight, and short-term. The potential impact from

the operational phase on the gas supply network is likely to be neutral and not significant in the long term.

**Information and Communications Technology**

A specific Telecommunications Assessment has been conducted for the Proposed Development and has identified microwave links and radio frequency links which will be impacted by the height of the Proposed Development. It is proposed in the Telecommunications Report to provide new telecommunications infrastructure at roof level of the Neighbourhood Centre. The assessment concluded the infrastructure will provide an adequate solution to mitigate the impact the Proposed Development will have on the existing poor mobile phone signal in the site and area. It will provide both the occupants of the Proposed Development and the local area with adequate voice and data services to meet modern demands.

The Department of the Environment, Climate and Communications have developed an interactive map which details the progress of the rollout of the National Broadband Plan. The High-Speed Broadband map identifies locations and premises as amber or blue and the map is updated on a quarterly basis. Amber areas depict target areas for the State intervention of the National Broadband Plan. Blue areas indicated that commercial operators have instated or are in the process of delivering high speed broadband services. The Enniskerry Road, Glenamuck Road and the site of the Proposed Development are located within a blue area and high-speed broadband is available

Due to the temporary and phased nature of the construction phase the potential impact of the construction phase on the local telecoms network is considered negative and not-significant, while the impact from the operational phase on the local telecoms network is likely to be positive and not-significant in the long term.

**Surface Water Drainage**

It is noted that specific issues relating to Hydrology associated with the Proposed Development are set out in Chapter 7 of the Environmental Impact Assessment Report.

Construction Phase

A full Stormwater Impact Assessment and a Site-Specific Flood Risk Assessment have been completed for the Proposed Development. Construction phase activities at the Proposed Development site that could potentially impact on water quality are detailed in the Hydrology Chapter of the Environmental Impact Assessment Report.

Operational Phase

Once operational, the surface water drainage infrastructure for the Proposed Development will replicate natural characteristics.

Mitigation measures and monitoring

Control measures for potential emissions to surface water, groundwater and soil are detailed in the Construction Environmental Management Plan.

Residual Effects

Given the design of the surface water management strategy for the Proposed Development and the implementation of sustainable drainage systems features, it is considered that there be an overall neutral, imperceptible, long-term impact on the receiving surface water quality of the Shanganagh River.

**Water Supply and Demand**

Construction Phase

Commencement of construction activities will create a demand for water supply to the site. A temporary connection is required to facilitate on-site works for all housing developments. The Proposed Development will be connected to the existing mains water supply adjacent to the site. Uisce Eireann have confirmed that connection to the existing mains water supply network is feasible. Some local diversions may be required to water supplies to accommodate the construction works which may require temporary outages. Additionally, new connection works may cause water supply disruptions during the construction phase. These disruptions will be controlled by Uisce Eireann and Dun Laoghaire Rathdown County Council in accordance with standard protocols. Due to the nature of the works during the construction phase, the likely impacts on the local mains water supply will be negative, slight, short term and temporary (not significant).

Operational Phase

During the operational phase of the Proposed Development there will be a demand for water from the public water supply, however, in accordance with best practice, water conservation appliances are to be incorporated as part of the Proposed Development to reduce the overall water demand. The mains water supply is operated in accordance with relevant existing statutory consents and Uisce Eireann have confirmed that, based on a desk top analysis of the capacity currently available in the Uisce Eireann networks as assessed by, Uisce Eireann the proposed demand can be facilitated.

Mitigation Measures and Monitoring

No mitigation measures or monitoring is required.

Residual Effect

The likely impact of the increase in mains water demand will be neutral and not significant on mains water supply in the long-term.

**Wastewater Management**

Construction Phase

A temporary connection is required to facilitate on-site works for all housing developments. It will be the Main Contractor's responsibility to apply to Uisce Eireann for connections to the existing foul water network, and all connections to the foul water network will be constructed strictly in accordance with Uisce Eireann 's requirements. Foul water sewer connections will be constructed strictly in accordance with Uisce Eireann requirements and drains will be laid to comply with the requirements of the latest Building Regulations, and in accordance with the recommendations contained in the Technical Guidance Document H. The new connection works may cause disruptions to the foul water network during the construction phase. These

disruptions will be controlled by Uisce Eireann and Dun Laoghaire-Rathdown County Council in accordance with standard protocols.

Operational Phase

The foul water from the Proposed Development will ultimately be treated at Shanganagh Wastewater Treatment Works.

Mitigation Measures and Monitoring

No mitigation measures or monitoring is required

Residual Effects

Due to the nature of the works during the construction phase, the likely effect will be negative, non-significant and temporary.

The increase in wastewater being discharged to the public sewer will have a neutral, non-significant, and long-term impact on the capacity of the sewer.

**Waste Management**

Construction Phase

A Resource and Waste Management Plan has been prepared for the construction phase of the Proposed Development (Enviroguide Consulting, 2024). All waste generated during construction and demolition activities will be segregated onsite to enable ease in re-use and recycling, wherever appropriate. In general, the priority of the Resource and Waste Management Plan shall be to promote recycling, reuse and recovery of waste and diversion from landfill wherever possible. After in-situ reuse and recycling options have been fully considered, all residual waste streams will be collected by appropriately authorised waste collection contractors and will be managed using suitably permitted/licensed waste disposal or materials recovery facilities. Due to the use of permitted/licensed waste collection/waste management facilities, it is not predicted that the production of waste will cause any likely significant effects on the environment. It is the responsibility of the Main Contractor to ensure that waste collection contractors are legally permitted to carry the waste, and that the facility they bring the waste to is licensed to handle that type of waste as outlined in the Waste Management Acts 1996-2005.

Operational Phase

An Operational Waste Management Plan has been prepared for the Proposed Development by Enviroguide Consulting (2024). The Operational Waste Management Plan contains full details of the types and quantities of waste that may arise at the Proposed Development. The typical wastes that will be generated during the operational phase of the Proposed Development will include the following:

- Dry mixed recyclables;
- Organic waste;
- Glass; and
- Mixed non-recyclable / general waste.

In addition to the typical waste materials that will be generated on a daily basis, there will be some additional waste types generated in small quantities that will need to be managed separately including:

- Bulky wastes – including furniture, carpets, mattresses;
- Waste electrical and electronic equipment;
- Batteries;
- Textiles – clothes or soft furnishings;
- Light bulbs or fluorescent tubes;
- Chemicals – old medicines, paints, detergents; and
- Waste oil.

The commercial units (creche, office, medical, retail) and the community area will generate similar waste types to domestic waste types with some additional commercial “office” type wastes such as paper and printer ink, batteries, and waste electrical and electronic equipment. An additional lockable, colour coded, hazardous waste storage area will be provided for medical waste from the medical unit which will be managed and accessed by medical personnel only. By implementing the actions outlined in the Operational Waste Management Plan, a high level of recycling, reuse and recovery will be achieved at the development in line with national and European targets.

Mitigation Measures and Monitoring

In the absence of mitigation, the potential impact from the Construction and Operational Phases on waste disposal has the potential to be negative and moderate in the long term. Mitigation measures are detailed in the Construction Environmental Management Plan (Enviroguide Consulting, 2024), the Resource Waste Management Plan (Enviroguide Consulting, 2024) and the Operational Waste Management Plan (Enviroguide Consulting, 2024)

Residual Effects

Provided the mitigation measures are implemented, and a high rate of reuse, recycling and recovery is achieved, the likely overall effect of the construction and operational phases on material assets will be neutral and imperceptible in the long term.

# 13 TRAFFIC

The traffic and transport chapter assess the potential traffic and transport effects from the proposed development on to the local road network.

The study area for the traffic and transportation assessment has been established based on the likely areas of influences of the Propped Development on various modes of travel such as walking, cycling, public transport and vehicular traffic and on key travel destinations.

The baseline environment was detailed in relation to walking and cycling infrastructure, public transport, local road network, local road junctions and future transport proposals.

Construction Phase

The predicted traffic generated because of the Proposed Development was determined based on an outline construction programme and activity schedule. A total of 67,729 cubic metres of material will be required to exported off site and 77,720 cubic metres required to construct building up to finished floor level (grey slab). Anticipated heavy goods vehicle (HGV) movements associated with this volume have been estimated in Table 13-1.

*Table 13-1 HGV Daily Two-Way Movements Associated with Export and Import of Material.*

| Phase | IN | Out | Total |
|---|---|---|---|
| 1 | 12 | 12 | 24 |
| 2 and 2a | 5 | 5 | 10 |
| 3 | 5 | 5 | 10 |
| 4 | 6 | 6 | 12 |
| 5 | 8 | 8 | 16 |
| **Total** | **36** | **36** | **72** |

In terms of construction personnel, it is anticipated that approximately 100 people will be employed on site during peak periods. Based on an average of 3 people occupying each car and approximately 10% of construction personnel arriving via public transport, this will result in an average of 30 daily car trips.

Construction traffic impacts have been assessed for each phase of construction. For Phase 1, the Glenamuck Road (east) and Enniskerry Road (south) will be utilised for construction traffic. The effects will be junction is negligible with a maximum increase of 5% of Annual Average Daily Traffic (AADT) experienced on Enniskerry Road.

For Phases 2 to 5, the (GDRS) is expected to be available and as such construction traffic will utilise the Glenamuck Link Distributor Road (GLDR) to access the site. For each phase, the potential traffic effects are below the relevant thresholds from Transport Infrastructure Ireland.

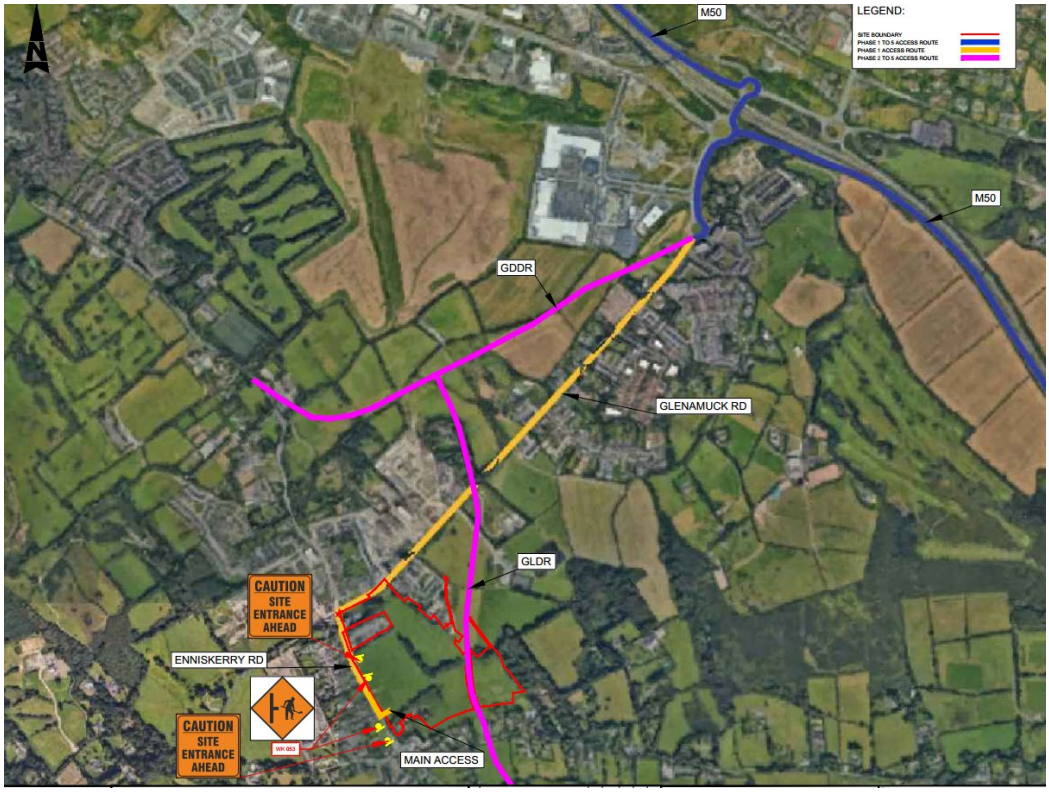


*Figure 13-1 Outline Construction Traffic Routing Plan*

Operational Phase

The predicted trip generation for the Proposed Development was estimated for the future residential and non-residential uses. Detailed traffic analysis was carried out to determine how the additional traffic from the Proposed Development will be distributed onto the local road network. A number of access junctions surrounding the site were assessed under a several future scenarios which included all phases of the Proposed Development and other committed developments in the surrounding area up to the opening year plus 15 (i.e., 2041).

Mitigation and Monitoring Measures

Mitigation measures to minimise the potential effects of construction traffic have been detailed in the outline Construction Management Plan. There are no mitigation measures required for the operational phase.

Residual Effects

Based on the above construction threshold the construction impacts on the local road network are considered to be negligible during the construction phase.

All the access junctions assessed during the operational phase were found to be operating within capacity with minimal impact on the Enniskerry Road, Glenamuck Road and GLDR links.

# 14 RISK MANAGEMENT

It is critical that any project is screened against potential risks which it might encounter and/or impose on the nearby environment during its construction and operational phase. This chapter sets out the assessment of the vulnerability of the Proposed Development.

To understand the potential consequences and predicted impacts of any major accident or disaster due to the Proposed Development and the vulnerability of the project, a desk study was undertaken. The assessment reviewed:

- The vulnerability of the project to major accidents or disasters.
- The potential for the project to cause risks to human health, cultural heritage and the environment, because of that identified vulnerability.

A methodology has been used including the following assessment:

- Identifying and screening the hazards;
- Screening the hazards;
- Identifying the impact;
- Assessing the likelihood of the major accident or disaster occurring, and
- Assessing any risks that remain.

The design has considered the potential for flooding, road accidents, invasive species or fire within the design methodology. From this, it is considered that the vulnerability of the Proposed Development to major accidents and/or disasters is not significant.

# 15 INTERACTIONS

Interrelationships between various environmental aspects must be considered when assessing the impact of the proposed development, as well as individual significant impacts. The significant impacts of the proposed development and the proposed mitigation measures have been detailed in the relevant chapters of this report. However, as with all developments that poses potential environmental impacts, there also exists potential for interactions/interrelationships between the impacts of different environmental aspects. The results may exacerbate or ameliorate the magnitude of impacts.

When considering interactions, the assessor has been vigilant in assessing pathways – direct and indirect – that can magnify effects through the interaction. In practice many impacts have slight or subtle interactions with other disciplines.

The environmental impact assessment report concludes that inter-relationships are negligible, and no additional significant effects are identified through effect interactions.

# 16 MITIGATION AND MONITORING

The Proposed Development will be operated in a manner that will ensure that the potential impacts on the receiving environment are avoided where possible. In cases where impacts or potential impacts have been identified, mitigation measures have been proposed to reduce the significance of particular impacts. These mitigation recommendations are contained within each topic chapter exploring specific environmental aspects.

The mitigation and monitoring chapter of the environmental impact assessment collates and summarises the mitigation commitments made in Chapter 4 to Chapter 13.

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