MWP

Environmental Report

Proposed Large-scale Residential Development (LRD) at Ardshanavooly, Killarney, Co. Kerry

Ross-Park Residential HS Limited

September 2026

Contents

1. Introduction 1
2. Site Location and Context 1
3. Characteristics and Scale of the Proposed Development 3
3.1 Characteristics and Scale of the Proposed Development 3
3.1.1 Site Access 5
3.1.2 Services 5
3.1.3 Water Supply 5
3.1.4 Foul Water 5
3.1.5 Storm Water 6
3.2 Construction Overview 6
3.3 Use of Natural Resources 7
3.4 Production of Wastes 7
3.5 Emissions 7
4. Environmental Impact Assessment (EIA) Screening 8
5. Natura Impact Statement (NIS) 9
6. Environmental Appraisal 9
6.1 Population, Human Health and Material Assets 9
6.1.1 Receiving Environment 9
6.1.2 Potential Effects 9
6.1.2.1 Construction Phase 10
6.1.2.2 Operational Phase 10
6.1.3 Mitigations 11
6.1.4 Conclusion 11
6.2 Biodiversity 11
6.3 Land and soils 11
6.3.1 Receiving Environment 11
6.3.2 Potential Effects 12
6.3.2.1 Construction Phase 12
6.3.2.2 Operational Phase 13
6.3.3 Mitigations 13
6.3.3.1 Construction Environmental Management Plan 13
6.3.3.2 Storage and Stockpiles of Excavated Materials 13

6.3.4 Conclusion 13
6.4 Water 13
6.4.1 Receiving Environment 13
6.4.1.1 Hydrology 14
6.4.1.2 Hydrogeology 16
6.4.1.3 Drinking Water 18
6.4.1.4 Flood Risk 18
6.4.2 Potential Effects 18
6.4.2.1 Construction Phase 18
6.4.2.2 Operational Phase 19
6.4.3 Mitigations 19
6.4.3.1 Construction stage 19
6.4.3.2 Operational phase 22
6.4.4 Conclusion 22
6.5 Climate and Air Quality 22
6.5.1 Receiving Environment 22
6.5.2 Potential Effects 23
6.5.2.1 Construction Phase 23
6.5.2.2 Operational Phase 31
6.5.3 Mitigations 31
6.5.3.1 Construction Phase 31
6.5.3.2 Operational mitigations 34
6.5.4 Conclusion 34
6.6 Noise and Vibration 34
6.6.1 Study Area 34
6.6.2 Noise Sensitive Receptors 35
6.6.3 Scope of Assessment 35
6.6.4 Assessment Criteria 36
6.6.4.1 Construction Phase – Noise Impacts 36
6.6.4.2 Construction Phase – Vibration Impacts 37
6.6.5 Potential Effects 37
6.6.5.1 Construction Phase – Noise 37
6.6.5.2 Operational and cumulative noise 39

6.6.6 Mitigation Measures 40
6.6.6.1 Construction Phase 40
6.6.6.2 Operational Phase 40
6.6.7 Conclusion 40
6.7 Traffic 40
6.8 Archaeology and Cultural Heritage 41
6.9 Landscape and Visual Impact 42
6.10 Cumulative Impact 43
6.10.1 Mitigations 48
6.10.2 Conclusion 48
7. References 48

Tables

Table 3-1: Anticipated Emissions for the Proposed Development 7
Table 6-1: Relevant Surface Water Bodies 16
Table 6-2: Groundwater Status 17
Table 6-3: PM_{10} emissions Zone D 2024 (Source: EPA Ambient Monitoring Network) 23
Table 6-4: $PM_{2.5}$ emissions Zone D 2024 (Source: EPA Ambient Monitoring Network) 23
Table 6-5 Receptors sensitive to dust 24
Table 6-6: Classification of Scale of Activities during construction phase 26
Table 6-7: Dust magnitude for site construction phase 26
Table 6-8: Sensitivity to construction activities 27
Table 6-9: Sensitivity of the Area to Dust Soiling effects on People and Property 27
Table 6-10: Sensitivity of the Area to Human Health Impacts 28
Table 6-11: Sensitivity of the Area to Ecological Impacts 29
Table 6-12: Sensitivity of the Area - Outcome 29
Table 6-13: Risk of Dust Impacts - Earthworks 30
Table 6-14 Risk of Dust Impacts - Construction 30
Table 6-15 Risk of Dust Impacts - Trackout 30
Table 6-16 Issues relevant to Noise and Vibration 35
Table 6-17 Construction Stage Noise Level Thresholds 36
Table 6-18 Typical Plant and Machinery and associated noise levels to be used during construction 38
Table 6-19: Relevant Planning Applications in the Area for Cumulative Impact 43

Figures

Figure 2-1: Proposed Development Site in Relation to the Wider Tralee Area 2
Figure 2-2: Aerial Photograph of the Proposed Development Site 2
Figure 3-1: Proposed Site Layout 4
Figure 6-1: Corine Land Cover Type 12
Figure 6-2: Overview of Sub-Catchments within the Proposed Development Site 15
Figure 6-3 : Watercourses EPA Name 16
Figure 6-4: Groundwater Aquifer Map 17
Figure 6-5: Human receptor proximity to proposed development site and location of dust monitoring. 25
Figure 6-6: NIAH registered houses. 42

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1. Introduction

Malachy Walsh and Partners (MWP) Engineering and Environmental Consultants, have been commissioned by Ross-Park Residential HS Limited ("the Applicant") to prepare an Environmental Report to accompany a planning application in respect of a Proposed Large Residential Development (LRD) at Ardshanavooly, Killarney, Co. Kerry.

MWP prepared this Environmental Report, on behalf of the applicant, to accompany the planning application for the proposed development to Kerry County Council. The report provides an appraisal of the environmental effects of the proposed development.

2. Site Location and Context

The Proposed Development site is located within the townland of Ardshanavooly, Killarney, Co. Kerry approximately 550m from Killarney town centre and approximately 740m northeast of Killarney National Park, Co. Kerry. The proposed development site is immediately west of the Deerpark Retail Park. Access to the current green field is from the Deerpark Retail Park, off Arbtus Drive.

The site comprises a managed agricultural field enclosed by stone walls, block walls and hedge lines. Adjoining the northern boundary of the site is the Killarney Pitch and Putt. Adjacent to the southeastern area of the site is residential housing. Three large agricultural fields enclose the site to the northeast and northwest. Extending northwards away from the site is residential housing and the Killarney bypass (N22) c. 366m north of the site.

Figure 2-1 shows the Proposed Development site in the context of the wider Killarney area. Figure 2-2 shows the Proposed Development site on an aerial photograph. The Proposed Development has been zoned new/proposed residential (R1) in the Kerry County Development Plan (CDP) 2022-2028.

Friary Downs road is approximately 120m south from the Proposed Development. There is an agricultural field and granted development between the Proposed Development and the Friary Downs road.

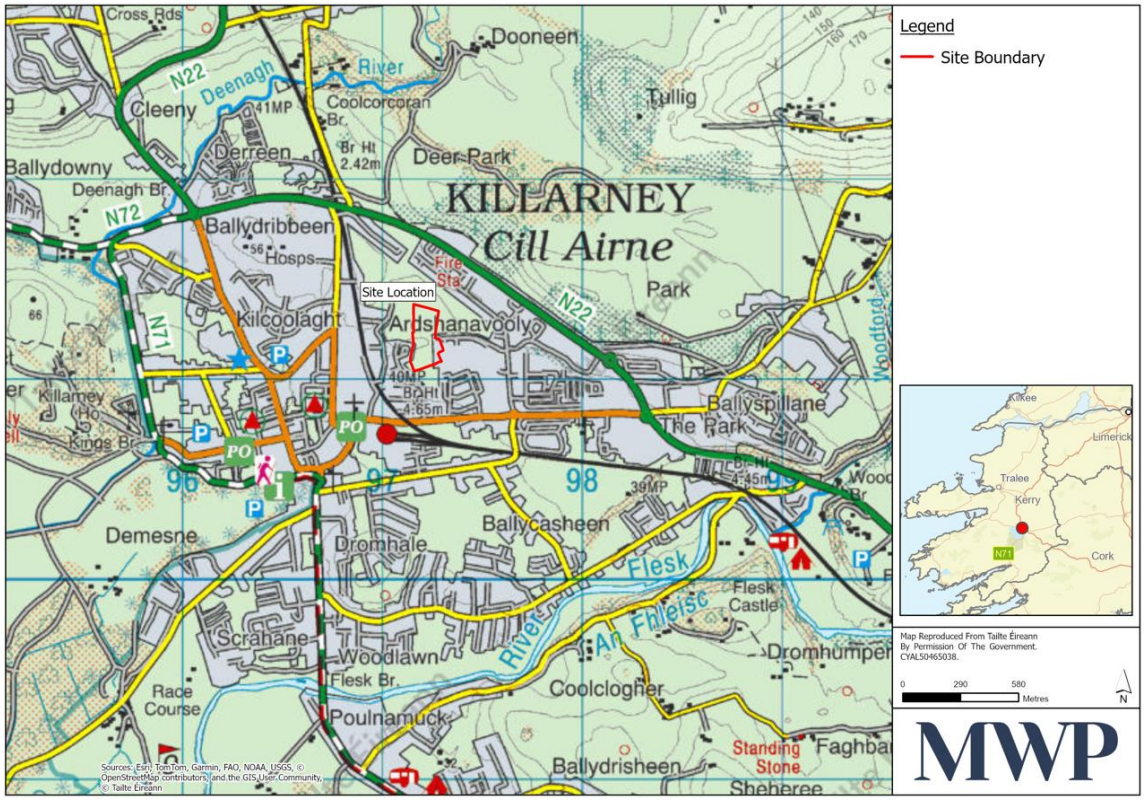


Figure 2-1: Proposed Development Site in Relation to the Wider Tralee Area



Figure 2-2: Aerial Photograph of the Proposed Development Site

3. Characteristics and Scale of the Proposed Development

3.1 Characteristics and Scale of the Proposed Development

The Proposed Development will be on an area of approximately 3.8ha and consists of a LRD comprising 188 No. residential units, a creche, car parking, shared open spaces, landscaping, and all associated and ancillary site works to facilitate the Proposed Development.

The Proposed Development includes the following:

- Clearing of the site to allow for the construction of the proposed LRD.
- The construction of 188 No. residential houses comprising of:
    - 19 No. 2 Bed units
    - 67 No. 3 Bed Units
    - 34 No. 4 Bed Units
    - 68 No. apartments (36 No. 1-Bed Apartments and 32 No. 2-Bed Apartments)
- Construction of ancillary creche, landscaping and associated site development works.
- The construction of approximately 220 No. car parking spaces proposed throughout the site.
- Ancillary infrastructure development works will include wastewater infrastructure, surface water attenuation, water utility services, public lighting, bin stores, bicycle stores, ESB substations, and all associated site development works.
- Vehicular access to the Proposed Development will be from the extended road network from the south.



Figure 3-1: Proposed Site Layout

3.1.1 Site Access

Vehicular access to the proposed development will initially be provided via the existing road network to the south, with access taken from Friary Downs at its junction with Park Road (R876), Killarney. This priority junction will facilitate access to the site during the initial phases of development.

An east-west spine road will be delivered through the development, providing internal circulation and establishing connectivity with adjoining lands to the east, including the Ardshanavooly LRD development. A temporary access arrangement is proposed on the western side of the site pending the construction of the planned signalised junction associated with the future road network.

In the longer term, access to the development will be provided via the proposed Killarney Strategic Links Project (Links Road A-C), which will form part of the wider relief road network linking the N22 with Park Road. Elements of this strategic route will be delivered as part of the proposed development. The access strategy has been designed to accommodate the phased implementation of Links Road A-C, incorporating both interim and permanent access arrangements.

The development also includes pedestrian and cyclist infrastructure connecting to Friary Downs and the R876 to the south, together with internal pedestrian and cycle networks that will provide links throughout the site and to adjoining developments.

3.1.2 Services

MWP have prepared a Civil Utilities Planning Report to accompany the planning application (Doc No. 25123-ZZ-ZZZ-RP-MWP-6006 Civil Utilities Report). This report details water supply, foul water, storm water including SuDS measures, public lighting, telecommunications and other electrical services proposals for the Proposed Development. Refer to this report for further details on the civil utilities proposals.

3.1.3 Water Supply

There is an existing 200mm asbestos main, to the east of the site. A Pre-connection enquiry was submitted to Uisce Éireann (UÉ). UÉ have advised that the connection is feasible with infrastructure upgrades outlined in their Confirmation of Feasibility (COF) letter, referred to in the Civil Utilities Report (Doc No. 25123-ZZ-ZZZ-RP-MWP-6006 Civil Utilities Report).

It is proposed to connect the Proposed Development to the existing watermains in the public road via a 150mm diameter connection. The spine within the estate has been designed as 150mm diameter and on a route so to minimize upgrade works required within the site when the future phases are constructed. Branches of 150mm diameter will serve routes with fewer than 100 residential units.

3.1.4 Foul Water

A plan of the existing Uisce Éireann services in the area is provided in the COF attached in the Civil Utilities Report. The COF has advised the development is feasible subject to upgrades.

The development is being served by a foul gravity sewer. The sewer will discharge to an existing UE 225mm foul sewer located to the south of the site along Friary Downs Road.

3.1.5 Storm Water

Site investigations indicate the subsoil's consist of sandy gravels to depth. These sandy gravels have been tested in accordance with BRE365, these tests indicate a high permeability K value up to $1.6x10^{-5}$ m/s. The results show good infiltration media, indicating that infiltration on-site is a viable method of removing surface water from the development.

A SuDS system with greater at-source water quality characteristics is considered to be a more sustainable method of stormwater control on this site. The permeability of the soil allows full infiltration into the groundwater. It is proposed to install a new stormwater sewer system within the development. The design has been completed taking cognizance of the Greater Dublin Regional Code of Practice for Drainage Woks (GDSDS) and the CIRIA SUDS manual 2015.

The surface water drainage system will incorporate all hardstand areas including rainwater from the roofs of each of the houses which will be discharged into a central carrier pipe located down the central spine corridor. Stormwater runoff along the carriageway will be directed to an attenuation/soakaway area within the green public space. The system is designed to collect the stormwater runoff generated on the site and store it in an underground stormtech attenuation tank. This tank will allow runoff to infiltrate naturally through the soil beneath and into the groundwater.

The storm sewer system was designed using an iterative approach and the use of Infodrainage software to obtain a design that incorporates these parameters and inputs. Several configurations were developed and the proposed storm sewer system is the option most suited to the site taking cognizance of the constraints including area and site gradients. The attenuation system has been designed based on infiltration testing carried out on the 12th of February 2026.

3.2 Construction Overview

The key construction elements of the Proposed Development include:

- Site preparation and pre-construction activities.
- A temporary construction compound will be established within the site boundary. This will be situated a minimum of 25m from any river or surface drain.
- Implementation of temporary site construction drainage system.
- Required vegetation to be cleared, will be felled/removed and cleared. This will include the removal of small areas of scrub and the felling of a limited number of trees along sections of the site boundary. Existing hedgerows and treelines will be retained where practicable and incorporated into the final layout.
- Roads, car parking area, public open spaces and footpaths will be constructed.
- 188 No. residential units will be constructed.
- Creche with outdoor play area will be constructed.
- New planting to comprise native trees; shrubs; native hedgerow; hedgerow in front gardens. Refer to the Landscape Plan and Drawings accompanying the planning application for details and locations.

A 5 year planning permission is being sought, and it is proposed to build the development in one phase.

It is expected that the Proposed Development will commence upon receipt of development consent. It is estimated that the duration of the build will be a total of approximately 24 months.

3.3 Use of Natural Resources

The Proposed Development will require land take of 3.8ha. Construction will require excavation and removal of topsoil and subsoils within the site across the extent of the development footprint. It is proposed that excavated topsoils and subsoils will be reused within the site. Any excavated subsoils not suitable for reuse within the Proposed Development will be brought to a suitable licenced waste facility.

Materials to be delivered to site will mainly consist of higher grade materials, e.g. stone material for roads and foundation, and concrete for the construction of that hardstanding areas. Concrete and additional aggregate material required from construction will be sourced from authorised facilities.

Operational daily water requirement is calculated in the Civil Utilities Report and Uisce Eireann has advised it is feasible in the COF. The final calculated operational water volume requirement is approximately 83,000 litres per day.

3.4 Production of Wastes

During construction, it is estimated that excavated materials will be suitable for reuse within the site. Any excavated materials not suitable for reuse within the proposed development will be brought to a suitable licenced waste facility. A detailed breakdown on resources and wastes is contained in the Resource and Waste Management Plan included with this planning application (Document no. 25123-ZZ-ZZZ-RP-MWP-EN-6002).

Other construction phase waste may consist of surplus hardcore, stone, concrete, ducting, electrical wiring, metal offcuts, timber, plastic waste and packaging, and unused oil and diesel. These wastes will be stored in the construction compound and collected at intervals and taken off site to be reused, recycled and disposed of in accordance with best practice procedures at an approved facility. All waste to be taken off site will be collected, approved by the contractor and recycled or disposed at an approved facility. Domestic type waste generated by contractors will be collected on site, stored in an enclosed skip at the construction compounds and disposed of at a licensed waste facility.

Operational waste for the residential development will be controlled by each household and dealt will be municipal services. Operational daily foul water flow rate is calculated in the Civil Utilities Report and Uisce Éireann has advised it is feasible in the COF. This wastewater will be managed by a connection to the public sewer system. The final calculated operational foul water volume requirement is approximately 83,000 litres per day.

3.5 Emissions

The anticipated emissions likely to be generated by the Proposed Development are summarised in Table 3-1 below.

Table 3-1: Anticipated Emissions for the Proposed Development

Project Phase	Aspect	Potential Emission/Nuisance
Construction Phase	Air	The main emissions to atmosphere during the construction stage of the Proposed Development is from fugitive dust associated with the following activities: • Groundworks associated with excavation and construction of the Proposed Development infrastructure

Project Phase	Aspect	Potential Emission/Nuisance
		• Transportation and unloading around the site; • Vehicular movement over potentially hard dusty surfaces such as freshly excavated lands The movement of machinery, construction vehicles and the use of generators during the construction phase will also generate exhaust fumes containing predominantly carbon dioxide (CO_2), sulphur dioxide (SO_2), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM_{10})
	Noise	Traffic flows, excavation works, mechanical machinery and electrical equipment typically used for construction projects will generate noise emissions.
	Water	Surface water runoff and discharges from construction working areas are likely during construction. Potential pollution sources could arise as a result of soil erosion or from oil/ fuel or chemical storage and use. During construction a temporary site drainage system will be installed to manage stormwater run-off
	Traffic	The additional traffic, especially heavy goods vehicles associated with the construction phase, has the potential to cause nuisance to those using the local road networks
Operational Phase	Air	No significant air emissions will be produced by the proposed development during operation
	Noise	There will be no significant point source noise emissions associated with the proposed facilities
	Water	Wastewater emissions generated during the operational phase will be managed by a connection to the public sewer. Surface water run-off will be captured and managed by the proposed stormwater drainage systems
	Traffic	Traffic disruption is expected to be comparable to the current situation

4. Environmental Impact Assessment (EIA) Screening

An EIA screening report (MWP document number **25123-ZZ-ZZZ-RP-MWP-EN-6004**) has been completed. EIA has been screened out.

5. Natura Impact Statement (NIS)

A Natura Impact Statement was carried out as part of the planning application. The NIS concluded, following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the proposed LRD and with the implementation of the mitigation measures proposed, that the proposed LRD will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects, and there is no reasonable scientific doubt in relation to this conclusion.

6. Environmental Appraisal

The following subsections provide an environmental appraisal of the Proposed Development.

6.1 Population, Human Health and Material Assets

This section contains an appraisal of the potential effects on population, human health and material assets relevant to the Proposed Development.

6.1.1 Receiving Environment

The Proposed Development site is located approximately 550m northeast of Killarney town centre. The site comprises a managed agricultural field enclosed by wall structures. Adjoining the eastern boundary of the site is Deerpark Retail Park and Killarney Pitch and Putt to the north. Adjacent to the southeastern area of the site is residential housing. Three large agricultural fields enclose the site to the northeast and northwest. Extending northwards away from the site is residential housing and the Killarney bypass (N22) c. 366m north of the site.

The site is located within the Electoral Division (ED) of 'Killarney Urban'. CSO data indicates that in 2022, this ED had a total population of 10,487 residents and a population density of 1,404 persons per km² according to the Census 2022 data. Within the ED 'Killarney Rural' CSO data indicates a population of 7,735 residents and a population density of 123 persons per km² in 2022. Killarney town population had a slight decrease in population from 14,504 in 2016 to 14,412 in 2022.

The nearest high sensitivity receptors are the residential houses to the south west adjacent to the Proposed Development site. Medium sensitivity receptors adjacent to the Proposed Development are the pitch and putt course immediately to the north and the Deerpark Retail Park to the east of the Proposed Development. There are further residential houses on all sides of the Proposed Development that are not immediately adjacent to the Proposed Development but range from approximately 100m – 200m in distance from the site. There is a play ground and school approximately 500m east of the Proposed Development.

6.1.2 Potential Effects

Potential environmental impacts, including noise, dust emissions, traffic, health and safety risk, population and visual change, may affect nearby sensitive residential receptors.

6.1.2.1 Construction Phase

Dust and noise effects are detailed later in their specific sections within this report (Sections 6.5 and 6.6), Cumulative in Section 6.10 and Visual change in Section 6.9.

The Proposed Development will comply with the Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005) as amended and the Safety, Health and Welfare at Work (General Application) Regulations 2007 (S.I. 299 of 2007) as amended and associated regulations. While construction activities may pose risks to worker health and safety, all works will be undertaken in line with the Safety, Health and Welfare at Work (Construction) Regulations 2013 (S.I. No. 291 of 2013) to minimise the likelihood of any impacts on workers' health and safety.

In relation to population and economic activity, the Proposed Development will generate employment opportunities during the construction phase. The temporary increase in jobs within this area will provide short-term support for local population stability.

During the construction phase, material assets such as utilities may be temporarily affected. Utility services, including electricity, water supply, and sewer connections, may experience minor disruption during installation and tie-in works, though these will be managed in coordination with service providers to avoid significant interruption. Overall, impacts on material assets are expected to be temporary and localised.

6.1.2.2 Operational Phase

Once constructed, there will be no adverse significant noise impact from the Proposed Development. Any ancillary noise (residents and residential services) will be typical of any housing development and will form part of the natural urban soundscape.

It is expected that the impact of additional car engine exhaust emissions will have a negligible change on local ambient air quality. No significant increases to greenhouse gas emissions are expected to occur and there will be no significant impact to Ireland's contributions to global emissions.

A Transport and Traffic Assessment (TTA) (Doc No. MHL_26010TT-Deerpark LRD Killarney-TTA-Doc02) was carried out by MHL & Associates Ltd. The TTA is summarised in Section 6.7. The TTA concludes that this development will have a negligible impact on Junctions 2 and 3, but it will add localised capacity pressure to Junction 1, which already operating above its design capacity.

A Landscape Report (Doc No. 24535-1-DO2_Landscape Design Rationale Report) was completed. The LVIA is summarised in Section 6.9 of this report. Visual effects associated with the development are anticipated to be low or moderate and neutral or beneficial in quality. The design qualities of the development will be represented in the scale, form, and materiality of the housing proposed units as well as the hard and soft landscape detailing associated with open spaces and streets.

In relation to population and economic activity, employment opportunities during the operational phase will be minimal.

The Proposed Development will integrate with existing material assets including electricity, water supply, and sewer infrastructure. The additional demand generated by 188 new homes will increase usage of public utilities and services; however, these are designed to accommodate growth in designated residential areas. No significant adverse impacts on material assets are anticipated, as the development aligns with planned infrastructure provision and will contribute positively to the efficient use of existing services.

6.1.3 Mitigations

Specific mitigations are outlined within the following sections for identified impacts such as dust Section 6.5.3, and noise in Section 6.6.6 and traffic in Section 6.7. No additional mitigations are required in order to minimise the effects of the Proposed Development on population and human health.

No effects on population and human health from the Proposed Development are anticipated during the operational phase.

6.1.4 Conclusion

Considering the potential effects and the mitigations within the specific sections, such as water and air and climate, no significant impacts are expected due to the Proposed Development.

6.2 Biodiversity

Potential impacts on biodiversity from the Proposed Development has been assessed by an ecological impact assessment (EcIA Doc No. 25123-ZZ-ZZZ-RP-MWP-EN-6009)

The EcIA states that the implementation of standard good practice measures, including ecological supervision, pre-construction checks, pollution prevention measures, protection of retained habitats, and biosecurity protocols, will minimise risks to ecological receptors.

The EcIA concludes that overall, taking account of:

- The local ecological context
- The limited ecological value of the majority of on-site habitats
- The absence of designated sites within the footprint
- The standard mitigation measures proposed

The Proposed Development is not predicted to result in significant adverse effects on ecological receptors at local, county, national or European level.

6.3 Land and soils

This section addresses the Proposed Developments impact on land and soils.

6.3.1 Receiving Environment

The site is a green field site with a gentle 4m undulation from the north to the south. The two high points in the undulation are in the north east corner and the southern third of the Proposed Development site.

The CORINE (2018) landcover data series (available on EPA's Map Viewer) indicates that landcover at the Proposed Development site is classified as 'Pastures' (Code: 231) with areas around the site classified as 'Discontinuous urban fabric' (Code: 112). See Figure 6-1 for the CORINE landcover for the Proposed Development site.

According to the Geological Survey Ireland (GSI) online map viewer, the Proposed Development site is mainly underlain by 'Cloonagh Limestone Formation' with a description of 'Bedded bioclastic limestone'.

Soils in the majority of the Proposed Development site are identified as 'Brown Earth: Well drained mineral soils, on the GSI website. Subsoils at the Proposed Development are classed as 'Glaciofluvial sands and gravels' on the EPA mapping.

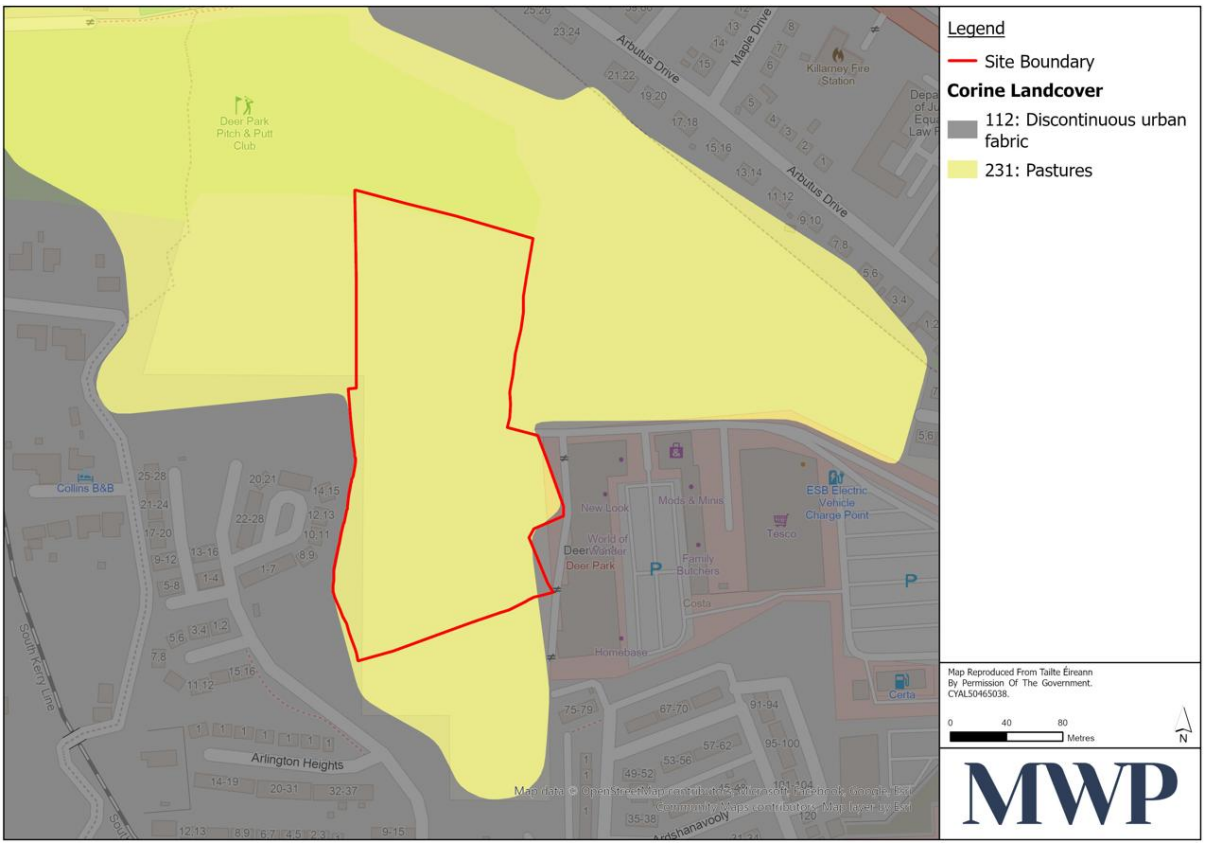


Figure 6-1: Corine Land Cover Type

Review of the GSI Geological Heritage Database available on the GSI online mapping system indicates that there are no Geological Heritage Sites within the site.

6.3.2 Potential Effects

6.3.2.1 Construction Phase

Due to existing site slopes, cut and fill earthworks will be required at the Proposed Development site. All excavated material will be reused on site where possible. The main potential effects of the Proposed Development revolve around the excavation and stockpiling / infilling of the excavated material and the management of this material.

There is potential for impacts on water quality as a result of the erosion of soil and the storage of excavated materials. These include runoff, dust creation and soil compaction. However, any risk from the stockpiling of excavated materials can be managed through good site practice and following the requirements set out in the CEMP. Furthermore, mitigation measures as outlined in Section 6.4 will reduce any effect on water quality.

6.3.2.2 Operational Phase

During the operational phase, the Proposed Development will result in the permanent alteration of land use from agricultural/open ground to residential. Soil resources will be sealed beneath buildings, roads, and hard surfaces, reducing permeability. There will be some landscaped areas and gardens which will provide some reinstatement of soil cover, though these will be managed rather than natural systems. Potential impacts include changes to drainage patterns, reduced infiltration, and minor compaction from ongoing residential activity.

Overall, impacts on land and soil are considered permanent but not significant.

6.3.3 Mitigations

6.3.3.1 Construction Environmental Management Plan

The mitigations regarding potential impacts to Land and soils from the Proposed Development have been outlined in this environmental report and will be incorporated into the CEMP, see Doc No. 25123-ZZ-ZZZ-RP-MWP-EN-6002. This CEMP will be implemented for the full duration of the construction of the Proposed Development.

6.3.3.2 Storage and Stockpiles of Excavated Materials

The handling, storage and re-use of excavated materials are of importance during the construction phase of the Proposed Development.

Excavated materials will be re-used on the site and can be used to backfill excavations as appropriate. Additional materials will be imported and this includes crushed stone and hardcore, quarry run, ready-mix concrete, tarmac material for the roads, services ducts, pipe work and steel. The handling, storage and management of excavated spoil will be carried out in line with the approved CEMP.

Site management should include the checking of equipment, materials storage and transfer areas, drainage structures and their attenuation ability on a regular basis during the construction phase of the Proposed Development. The purpose of this management control is to ensure that the measures in place are operating effectively, prevent accidental leakages, and identify potential breaches in the protective retention and attenuation network during earthworks operations.

6.3.4 Conclusion

Once all of the above mitigations have been implemented it is considered that the potential effects identified will not have a significant impact on the land and soils of the surrounding area.

6.4 Water

This section describes the existing hydrological and hydrogeological environment at the site and the surrounding area and assesses the likely impact of the Proposed Development. Mitigation measures are proposed or cross-referenced, as required.

6.4.1 Receiving Environment

The Proposed Development is located within agricultural farmland. There are no drains exiting the Proposed Development site. Currently all stormwater at the Proposed Development site infiltrates to the ground.

The nearest natural stream is approximately 1.5km down gradient of the site; EPA_Name, Folies stream (EPA code 22F10) and a second stream is approximately 2.3km downgradient EPA_Name ROSS_ISLAND (EPA code 22R33). A number of other streams are in the vicinity and are shown in Figure 6-3. All of the rivers in the vicinity flow into Lough Leane at Ross Bay Approximately 2.8km southwest of the Proposed Development. Due to the infiltration at the Proposed Development site there is no direct link to these streams.

6.4.1.1 Hydrology

6.4.1.1.1 Catchment Description

The Proposed Development site is located within the Water Framework Directive Catchment22, also known as Laune-Mane-Dingle Bay catchment. This Catchment is a large area of Kerry made up of smaller surface water sub catchments. They are delineated catchment areas for river monitoring and water quality management for the EU Water Framework Directive.

This catchment covers the area drained by the Rivers Laune and Maine, along with all streams flowing into tidal waters between Glanearagh Head and Clogher Head, County Kerry. It has a total drainage area of approximately 2,036 km². The largest urban centre within the catchment is Killarney, followed by Cahersiveen, Killorglin, Castleisland, and Dingle. The total population of the catchment is about 62,006, giving a population density of roughly 30 people per km². This catchment is dominated by the east-west trending series of sandstone ridges and limestone valleys that dominate the landscape of south and west Munster. In this catchment, the limestone valley is nearly completely submerged by the sea- having been preferentially eroded compared to the sandstone ridges lying either side of it and the valley is now filled by Dingle Bay while the sandstone ridges on either side form the Iveragh and Dingle Peninsulas.

The Laune Maine Dingle Bay Catchment is divided into 19 subcatchments and has 145 surface water bodies and 16 groundwater bodies.

The Proposed Development site lies within the Laune_SC_010 Water Framework Directive (WFD) Sub-Catchment (ID: 22_14) which is within the Laune-Maine-Dingle Bay WFD Catchment (ID: 22) shown in Figure 6-2.

6.4.1.1.2 Surface water body and status

The nearest surface water features within the sub-basin in the vicinity of the Proposed Development are:

- Deenagh River (IE_SW_22D010500) (EPA code 22D01). This waterbody is located approximately 1.4km to the west of the development site. This waterbody flows in a south westly direction and discharges into Lough Leane (IE_SW_22_210).
- Folies stream (IE_SW_22L010100) (EPA code 22F10). This waterbody is located approximately 1.7km to the southwest of the development site. This waterbody flows in a south westly direction and discharges into Ross Bay (IE_SW_22_209) which ultimately converges with Lough Leane (IE_SW_22_210).
- Ross Island stream/ Scrahane (IE_SW_22L010100) (EPA code 22R33). This waterbody is located approximately 2.4km to the southwest of the development site. This waterbody flows in a south westly direction and discharges into Ross Bay (IE_SW_22_209) which ultimately converges with Lough Leane (IE_SW_22_210).
- Flesk River (IE_SW_22L010100) (EPA code 22F02). This waterbody is located approximately 1.6km to the southwest of the development site. This waterbody flows in a south westly direction and discharges into Lough Leane (IE_SW_22_210).

- Ross Bay (IE_SW_22_209). This waterbody is located approximately 2.8km to the southwest of the development site.
- Lough Leane (IE_SW_22_210). This waterbody is located approximately 2.9km to the southwest of the development site.

All of the above rivers are in the WFD river waterbody named LAUNE_010. The River Waterbody Water Framework Directive (WFD) status for the 2019-2024 period for the WFD river waterbody LAUNE_010 was classified as 'Bad' and its WFD Risk status categorised as "At risk". The WFD River Waterbodies Risk Status represents the risk for each waterbody of failing to meet their WFD objectives by 2027. Waterbodies are categorised as "At risk" because they are failing to meet their WFD objectives. These areas require targeted, evidence-based measures to mitigate significant pressures.

The Folies stream and Ross Castle stream flow into Lough Leane. They flow into the WFD lake waterbody named Ross Bay (EPA code IE_SW_22_209), the WFD Lake Waterbody Risk Status for Ross Bay is "At risk". Ross Bay is a part of Lough Leane (EPA code IE_SW22_210) the WFD Lake Waterbody Risk Status for Lough Leane is "Not at risk".

All data relating to water features was obtained from Environmental Protection Agency (EPA) interactive map viewer. See **Figure 6-3** for the location of the waterbodies in the vicinity of the proposed development site and **Table 6-1** for details of these waterbodies.

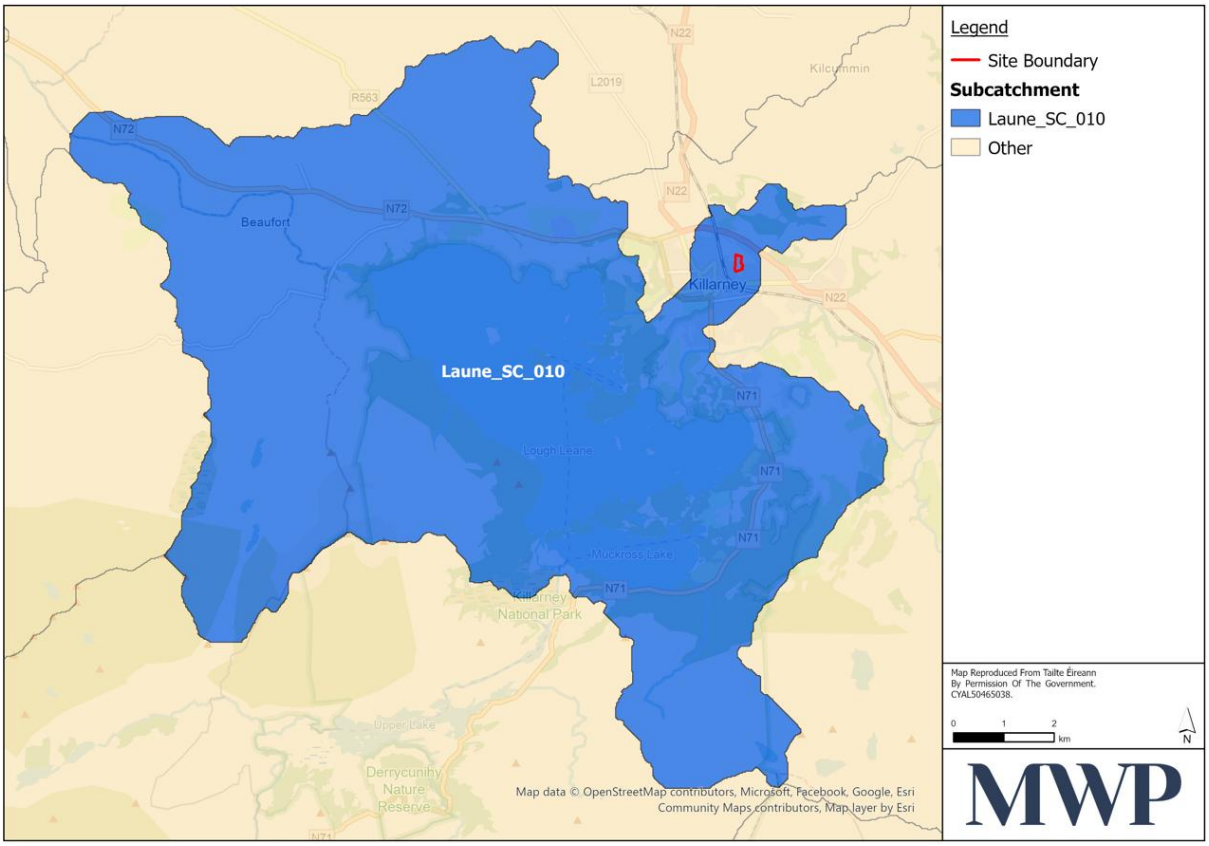


Figure 6-2: Overview of Sub-Catchments within the Proposed Development Site

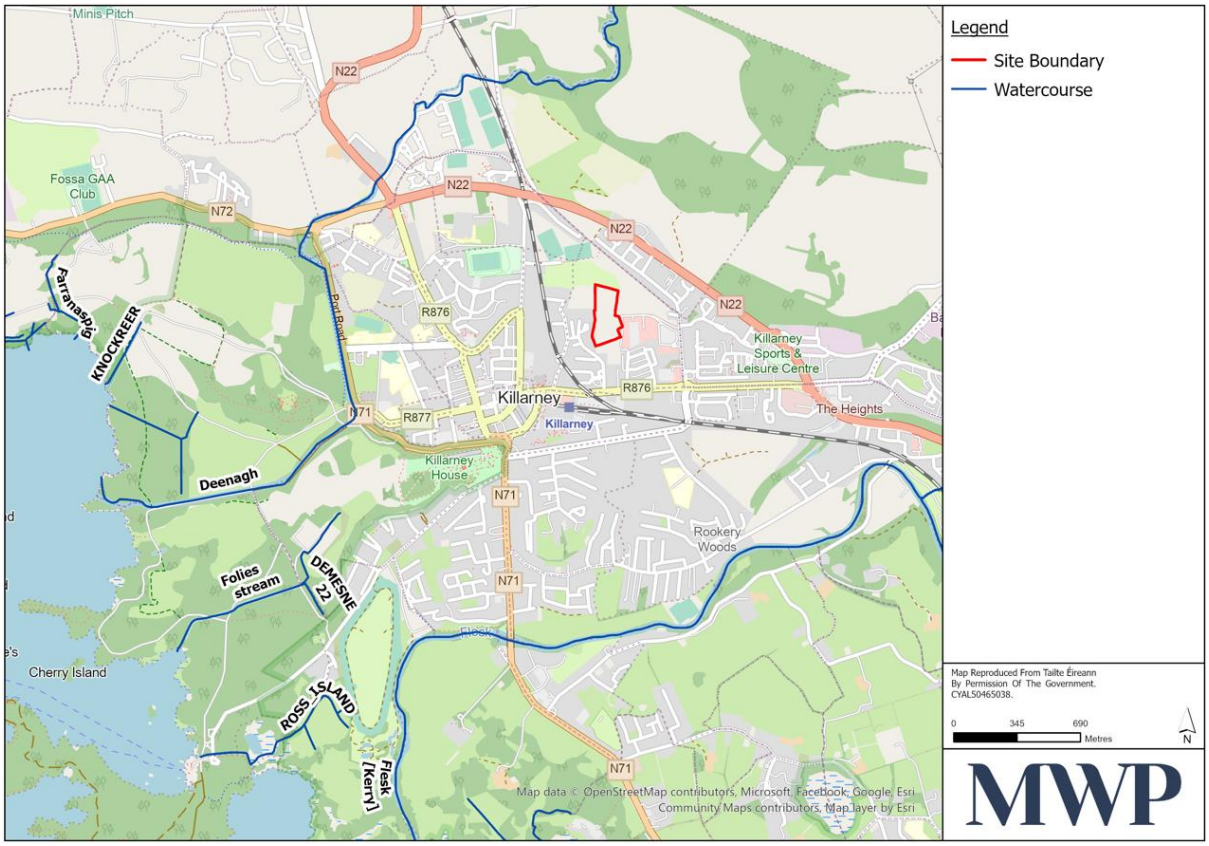


Figure 6-3 : Watercourses EPA Name

Table 6-1: Relevant Surface Water Bodies

WFD Waterbody Name	Type	Status 2019-2024	At Risk of Not Achieving Good Status	Pressures
Laune_010	River	Bad	At Risk	None indicated
Ross Bay	Lake	Bad	At Risk	None indicated
Leane	Lake	Good	Not at Risk	None indicated

6.4.1.2 Hydrogeology

The Groundwater Body (GWB) underlying the site is the Laune Muckross (GWB) (EU Code: IE_SW_G_048) as shown in **Figure 6-4.** The current round of monitoring 2019-2024 has the GWB receive a 'Good' overall groundwater Status, but the GWB status is deemed 'At Risk' by the WFD Risk Assessment.

The aquifer underling the site, according to GSI (www.gsi.ie/mapping), is a Rkd-Regionally Important Gravel Aquifer-Karstified (diffuse). This is an aquifer that holds groundwater and is capable of supplying regionally important public water supplies.

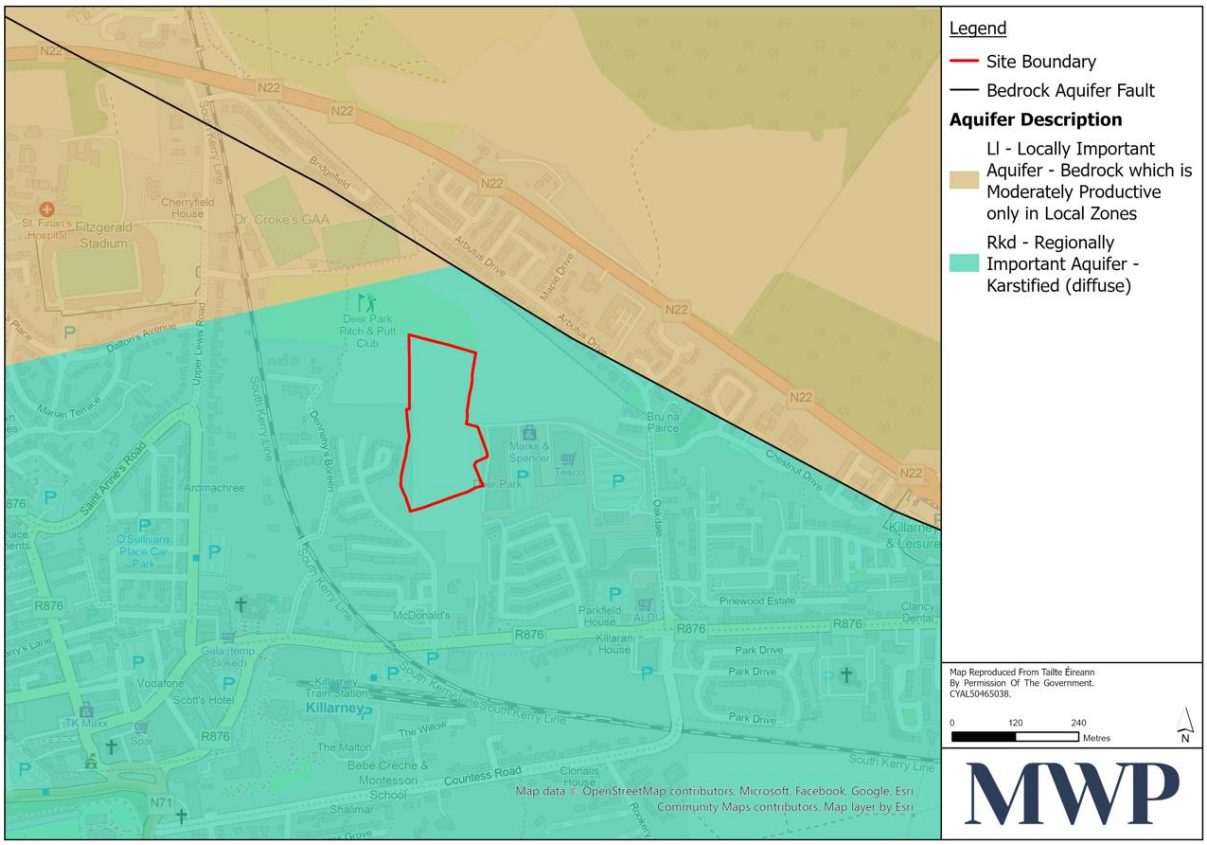


Figure 6-4: Groundwater Aquifer Map

Groundwater vulnerability is a term used to represent the intrinsic geological and hydrogeological characteristics that determine the ease with which groundwater may be contaminated generally by human activities. The GSI have mapped vulnerability as high at the proposed development location. Groundwater vulnerability maps are based on the types and thickness of subsoils (sands, gravels, glacial tills (or boulder clays), peat, lake and alluvial silts and clays), and the presence of karst features. The predominant quaternary sediment type underlying the proposed development site is 'GDSs – Gravels derived from Devonian sandstones', indicating there is a lot of glacial material at the site.

Table 6-2 provides a summary of the WFD status for the groundwater aquifer under the proposed development site. The water quality has remained good from 2007 to the latest results in 2024 and the aquifer was at risk in terms of WFD status. Agriculture is the top significant pressure impacting the groundwater body. This means that the water quality standards are at risk of not meeting their environmental objective.

Table 6-2: Groundwater Status

Waterbody Name (Code)	Type	Status 2013-2018	Status 2016-2021	Status 2019-2024	At Risk of Not Achieving Good Status	Pressures
Laune Muckross (IE_SW_G_048)	Groundwater	Good	Good	Good	At risk	Agriculture

6.4.1.3 Drinking Water

According to the EPA maps (Article 7 Abstraction for Drinking Water), there are no surface water drinking water sources at the Proposed Development or within 2km of the Proposed Development.

6.4.1.4 Flood Risk

A Flood Risk Assessment (FRA) for the Proposed Development was undertaken by MWP and is included with the planning application documentation (Document no. 25123-ZZ-ZZZ-RP-MWP-CE-6007). The proposed development will be classified as a Highly Vulnerable Development in the context of the Planning System and Flood Risk Management (PSFRM) Guidelines. The flood maps indicate that the site is in Flood Zone C and therefore has a low probability of flooding.

The proposed uses are justified based on existing zoning and the Strategic Flood Risk Assessment (SFRA) conducted for the Kerry County Development Plan.

6.4.2 Potential Effects

6.4.2.1 Construction Phase

During the construction period, the proposed development has the potential to lead to temporary impacts on hydrology and water quality unless appropriate mitigation is applied. The site naturally undulates and therefore recontouring will be part of the proposed development. The construction of the proposed development will require control of surface water during the construction works. There is potential for suspended solids and other contaminants from the construction entering the ground and the surrounding field drainage system.

The depth of groundwater table drawdown will generally be no deeper than the internal road drainage level. As the depth of excavation for drains is generally less than 1.0 metres, there will be a negligible impact from drawdown (reduction in level of the water table) on the water table.

The following are additional potential impacts on hydrology and hydrogeology due to the construction of the proposed development;

- Excavation of soils could lead to an increase in suspended solids in the surface water run-off and from minor quantities of exposed mineral soils. The removal of the vegetated material will also lead to an increase in the rate of run-off along the route of the site internal access roads and hard-standing areas. This increase in the rate of run-off could lead to a very minor increase in flooding downstream.
- Inappropriate site management of excavations could lead to the discharge of suspended solids to surface waters.
- Inappropriate management of the drainage of soil storage areas could lead to the discharge of suspended solids to surface waters.
- The construction of new infrastructure has the potential to obstruct existing overland flow.
- Use of machinery during construction could result in spillages of fuel, oils, lubricants and other hydrocarbons to surface waters, with potentially adverse impacts on local groundwater quality and surface water quality in downstream areas. A film of oil on a waterbody can prevent gaseous exchange and prevent re-oxygenation, with deleterious effects on aquatic ecology.

6.4.2.2 Operational Phase

The increase in hard surface areas from the development may slightly raise surface water run-off rates, creating a minor risk of downstream flooding.

6.4.3 Mitigations

6.4.3.1 Construction stage

The construction phase will include a system of drainage and sediment catching consisting of settlement ponds and silt traps in order to prevent suspended solids from being discharged from the site during the construction phase.

The main design mitigations built into the drainage layout are;

- Silt traps within the drains every 50m.
- Settlement ponds built into the drainage system.
- Attenuation system for the storm water runoff at the proposed development
- Overland discharge of stormwater from the settlement ponds into the attenuation system/soakaway.
- Electrical oil containing equipment on site during the operational phase will be in bunded areas.

An Environmental Manager will have responsibility for the implementation of water quality protection measures as outlined in the CEMP (Doc No. 25123-ZZ-ZZZ-RP-MWP-EN-6002).

The CEMP will be used to manage protections and mitigate potential impact to water quality during the construction of the proposed development. The CEMP includes environmental protection and mitigation measures for:

- Waste Management;
- Excavated Materials;
- Pollution Prevention and Mitigation;
- Drainage Design Specification;
- Monitoring; and
- Environmental Incident and Emergency Response.

The CEMP outlines the details required during the construction stage for the protection of water quality (EMP 2: Surface Water Runoff Control). These controls include but are not limited to;

- Use of silt traps and settlement ponds during construction phase.
- Details of sediment control and drainage system to be constructed during the construction phase.

Emergency procedures will be developed by the main contractor in advance of works commencing and spillage kits will be available onsite including in vehicles operating onsite. Construction staff will be familiar with emergency procedures in the event of accidental fuel spillages. Remedial action will be immediately implemented to address any potential impacts in accordance with best practice standards and legislative requirements including but not limited to the Environmental Protection Agency Act, 1992 (as amended), Waste Management Act, 1996 (as amended) and the Safety, Health and Welfare at Work Act, 2005 (as amended).

- Any required emergency vehicle or equipment maintenance work will take place in a designated impermeable area within the site.
- Emergency response procedures will be put in place, in the unlikely event of spillages of fuels or lubricants.

- Spill kits including oil absorbent material will be provided so that any spillage of fuels, lubricants or hydraulic oils will be immediately contained.
- In the event of a leak or spill from equipment in the instance of a mechanical breakdown during operation, any contaminated soil will be removed from the Proposed Development site and compliantly disposed of offsite. Residual soil will be tested to validate that all potentially contaminated material has been removed. This procedure will be undertaken in accordance with industry best practice procedures and standards.
- All construction works staff will be familiar with emergency procedures in the event of accidental fuel spillages.
- All construction works staff onsite will be fully trained on the use of equipment.

Sedimentation

The following mitigation measures will be implemented to reduce the potential for sedimentation during the construction phase:

- Any storm water runoff containing sediments will be prevented from leaving the site by either a settlement pond to allow percolation or an infiltration pit.
- There will be no storage of material/equipment or overnight parking of machinery within 10m of the field drainage ditch.
- Visual inspections of roads at site entry/exit points will be undertaken to prevent the accumulation of dirt.
- Excavations will only remain open for limited time periods to reduce groundwater and surface water ingress and water containing silt will be passed through a settlement pond prior to discharge.
- Dewatering, where required, will incorporate the use of filter media. There will be no direct discharges into the existing field.
- Spoil and temporary stockpiles including stone stockpile areas will be positioned in locations which are distant from drainage systems and retained drainage channels, away from areas subject to flooding.
- To help shed rainwater and prevent ponding and infiltration, the sides and top of the stockpiles will be regraded to form a smooth gradient with compacted sides reducing infiltration and silt runoff.
- Where required, silt fences will be erected at the toe of stockpiles to prevent runoff. The silt fences will be monitored daily by the appointed contractor and silt will be removed as required.
- Runoff from spoil heaps will be prevented from entering watercourses by diverting it through onsite settlement ponds and removing material as soon as possible to designated storage areas.
- Use biodegradable erosion control matting on exposed slopes.
- Phase vegetation clearance and re-seed disturbed areas promptly.
- Monitor and maintain sediment control measures daily, especially after rainfall events.

Accidental Spills and Leaks

The following mitigation measures will be implemented to reduce the potential for accidental spills and leaks during the construction phase:

- The main contractor will maintain an emergency response action plan and emergency procedures will be developed by the main contractor in advance of any works commencing.
- Wastewater from the construction welfare facilities will be managed by means of a sealed storage tank. All wastewaters will be removed from site by permitted waste collector to wastewater treatment plants.

- Designate a bunded storage area at the contractor's compound(s) and away from surface water gullies or drains for oils, solvents and paints used during construction. The fuel storage tanks shall be bunded to a volume of 110% of the capacity of the largest tank/container within the bunded area or 25% of the total capacity of all the tanks within the bund, whichever is the greater.
- Chemicals will be stored within a storage container with an accompanying Control of Substances Hazardous to Health ("COSHH") Datasheet in accordance with health and safety regulations. All chemicals will be stored in designated bunded areas at least 10m away from the field drainage system.
- Drainage from the bunded area shall be diverted for collection and safe disposal. All containers within the storage area will be clearly labelled, so that appropriate remedial action can be taken in the event of a spillage. When moving drums from the bunded storage area to locations within the site plot, a suitably sized spill pallet will be used for containing any spillages during transit.
- All plant and equipment utilised onsite will be maintained is in good working condition. Any equipment not meeting the required standard will not be permitted for use within the Proposed Development. Only emergency breakdown maintenance will be carried out onsite.
- Drip trays and spill kits will be available onsite to ensure that any spills from vehicles are contained and removed offsite.
- Drip trays will be located under all static plant.
- Hoses and valves will be checked regularly for signs of wear and will be turned off and securely locked when not in use.
- Diesel pumps and similar equipment will be checked regularly, and any accumulated oil removed for appropriate disposal.
- Refuelling of construction vehicles and the addition of hydraulic oils or lubricants to vehicles, will take place in designated impermeable refuelling areas isolated from surface water drains.
- There will be no refuelling allowed within 10m of the field drainage system.
- Where mobile fuel bowsers are used on the site, in the event of a machine requiring refuelling outside of the designated impermeable area, fuel will be transported in a mobile double skinned tank.
- Adequate stocks of hydrocarbon absorbent materials (e.g., spill-kits and/or booms) shall be held onsite to facilitate response to accidental spills. Spill response materials shall also be stored on all construction vehicles.
- In the event of an accidental spillage, or water pollution incident, the site manager or designate shall notify the Local Authority as soon as possible.

Use of Cementitious Materials

Mitigation and monitoring measures to limit potential impacts associated with the use of natural resources throughout the course of the Proposed Development are as follows:

- Ready-mixed concrete will be brought to the site by truck. A suitable risk assessment for wet concreting will be completed prior to works being carried out which will include measures to prevent discharge of alkaline wastewaters or contaminated water (for example storm water) to the underlying subsoil and groundwater.
- The pouring of concrete will take place within a designated area protected (for example by a geosynthetic material) to prevent concrete runoff into the soil/groundwater media.

- No onsite batching should occur. Washout from mixing will be carried out only in a designated contained impermeable area.
- Wash down and washout of concrete transporting vehicles will take place at an appropriate designated area and direct discharge of wash water to ground or surface waters will be strictly prohibited. Alternatively, where washout takes place onsite, it will be carried out in a designated, carefully managed onsite washout area.
- Wastewater from washing of concrete lorry chutes will be directed into a concrete washout container, lined with an impermeable membrane. The container should be of good condition, should not overflow or leak and should be easily accessible to vehicles. The containers must be checked and emptied at a frequency equivalent to the volume of concrete being used and no runoff should leave the washout location. The area much be clearly marked and must be located away from storm drain inlets, open drainage facilities, water courses and ditches.

6.4.3.2 Operational phase

The increase in hard surface areas from the development may slightly raise surface water run-off rates, creating a minor risk of flooding at the proposed development site. Attenuation and infiltration has been designed into the system to remove this risk. During operation, stormwater will be redirected into the proposed drainage system. This will replicate the existing infiltration of stormwater at the proposed development site.

6.4.4 Conclusion

Once all of the above mitigations have been implemented it is considered that the potential effects identified will not have a significant impact on the hydrology or hydrogeology of the surrounding area.

6.5 Climate and Air Quality

6.5.1 Receiving Environment

The potential human receptors within the environs of the proposed development include the residential houses and the Deerpark Retail Park adjacent to the proposed development (see Figure 5-6). The nearest Natura 2000 sites are Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC (000365) which at its nearest point is approximately 720m southeast and Killarney National Park SPA (004038) which is approximately 720m southeast of the Proposed Development.

Under the Clean Air for Europe (CAFÉ) Directive, EU member states designated zones for managing air quality. Killarney was designated Zone D. The AQIH index is a measurement of air quality as it pertains to health. The AIQH index for Killarney is currently (02/12/2025) classed as ‘Good Index 1’. (Monitoring Location Killarney Anam Arts and Cultural Centre). Tables 6-3 and 6-4 present the current annual and hourly max results for PM10 and PM2.5 at Killarney Anam Arts and Cultural Centre which is the nearest monitoring location to the proposed development at approximately 500m away. They show levels are under the annual mean and no hourly exceedances have occurred.

Table 6-3: PM_{10} emissions Zone D 2024 (Source: EPA Ambient Monitoring Network)

PM_{10}	AQS Café Directive Limits	Killarney Anam Arts and Cultural Centre
Annual mean (µg/m^3)*	40	11.3
Hourly max (µg/m^3)**	50	No Exceedances

*PM_{10} annual mean limit value for the protection of human health: applicable from 2005

**Hourly max: No more than 35 days >50µg/m^3 applicable from 2005

***Partial year data available

Table 6-4: $PM_{2.5}$ emissions Zone D 2024 (Source: EPA Ambient Monitoring Network)

$PM_{2.5}$	AQS Café Directive Limits*	Killarney Anam Arts and Cultural Centre
Annual mean (µg/m^3)	25	7

*$PM_{2.5}$ annual mean limit value for the protection of human health: 25 µg/m^3 applicable from 2010.

6.5.2 Potential Effects

6.5.2.1 Construction Phase

The main potential impact of the proposed development on air quality in the receiving environment will be temporary in nature during the construction stage of the proposed development from fugitive dust and vehicle emissions.

Fugitive dust and vehicle emissions are associated with the following activities:

- Groundworks associated with the construction proposed development;
- Transportation and unloading of crushed stone around the site;
- Vehicular movement over potentially hard dusty surfaces such as freshly excavated and constructed access tracks and crane hardstanding areas;
- Vehicular movement over material potentially carried off site and deposited on public roads.

The movement of machinery, construction vehicles and the use of generators during the construction phase will generate exhaust fumes containing predominantly sulphur dioxide (SO_2), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM_{10}).

Construction Phase Air Quality Assessment (AQA)

The Institute of Air Quality Management (IAQM) have recently (2024) updated guidance for the assessment of dust from demolition and construction. Transport Infrastructure Ireland (TII) has published guidance for 'Air

Quality Assessment (AQA) of Proposed National Roads' (PE-ENV-01107). This standard refers to the IAQM procedures.

The objectives of the AQA process are to:

- Determine baseline air quality within the study area.
- Identify human receptors where a potential significant change in NO2, PM10 or PM2.5 concentrations, due to the proposed national road scheme, may occur.
- Identify sensitive designated habitats where a potential significant change in NOx or ammonia concentrations, due to the proposed national road scheme, may occur.
- Identify human and sensitive designated habitats where there is risk of dust and traffic movement effects occurring during the construction phase.
- Determine suitable mitigation measures to reduce significant air quality effects to an acceptable level.

A key principle of the air quality assessment process is to be proportional to the nature and scale of the Proposed Development as it relates to the potential for significant air quality effects.

Step 1: Screen the need for a detailed assessment: An assessment will be required where there are sensitive receptors located within 200m of the boundary of the development site. Sensitive receptors can be classed as human and ecological (see Table 6-5)

Table 6-5 Receptors sensitive to dust

Receptor	Receptor Type (Generic)
Human	Residential, Hospital, Schools, Care Homes, Playing Fields, Parks, Footpaths, Places of Work, Food Manufacturers, Hi tech manufacturing, Car parks, Vehicle Showrooms and Farmland
Ecological	Ramsar, SPA's, SAC's, NHA's and pNHA's and Nature Reserves.

There are residential properties and a retail park adjacent to the proposed development. Therefore, the need for a more detailed assessment is screened in (See Figure 6-5).



Figure 6-5: Human receptor proximity to proposed development site and location of dust monitoring.

Step 2: Assess the Risk of Dust Impacts

The risk of dust arising in sufficient quantities to cause annoyance and/or health and/or ecological impacts should be determined using four risk categories: negligible, low, medium and high risk. A site is allocated to a risk category based on two factors:

- The scale and nature of the works (Step 2A), which determines the potential dust emission magnitude as small, medium or large, and;
- The sensitivity of the area to dust impacts (Step 2B) which is defined as low, medium or high sensitivity.

These two factors are combined to determine the risk of dust impacts with no mitigation applied.

Step 2A: The scheme being assessed is the construction of a large residential development. The proposed site is currently farmland. The risk of potential dust impacts occurring has been determined separately for earthworks, construction and trackout as presented in following sections. Table 6-6 gives the scale of the activity of the proposed development as part of step 2A. Table 6-7 gives the magnitude of the activity of the proposed development as part of step 2A.

Table 6-6: Classification of Scale of Activities during construction phase

Activity/Scale	Large	Medium	Small
Earthworks	Total site area >110,000m^2. Dusty soil type. >10 HDV. >6m bunds	Total site area 18,000m^2 – 110,000m^2. Moderately dusty soil type. 5 – 10 HDV. 3 – 6m bunds	Total site area <18,000m^2. Soil type with large grain size. <5 HDV. Bunds <3m
Construction	Total building volume >75,000m^3. On site concrete batching, sandblasting	Total building volume 12,000m^3 – 75,000m^3, potentially dusty construction materials, on site batching	Total building volume <12,000m^3 construction material with low potential for dust release (eg metal cladding or timber)
Trackout	>50 HDV (.3.5t) outward movements in one day. Potentially dusty surface material, unpaved road length >100m.	20 – 50HDV (>3.5t) outward movements in one day. Moderately dusty surface material (e.g. high clay content), unpaved road length 50-100m.	<20 HDV (>3.5t) outward movements in any one day. Surface material with low potential for dust release, unpaved road length <50m.

Table 6-7: Dust magnitude for site construction phase

Activity	Potential Dust Effect Magnitude	Justification
Earthworks	Medium	Total site area 85,000^2. Moderately dusty soil type.
Construction	Medium	Total building volume 12,000m3 - 75,000m3
Trackout	Medium	Approximately 32 HDV movements a day.

Step 2B: Define the Sensitivity of the Area

The sensitivity of the area takes account of a number of factors:

- The specific sensitivities of receptors in the area;
- The proximity and number of those receptors;
- In the case of PM10, the local background concentration and;
- Site specific factors, such as whether there are natural shelters, such as trees, to reduce the risk of wind-blown dust.

Table 6-8 outlines the sensitivity of the receptors around the proposed development to dust soiling, health effects and ecological effects.

Table 6-8: Sensitivity to construction activities

Activity	Sensitivity	Justification
Sensitivities of People to Dust Soiling Effects	High	The people or property would reasonably be expected to be present continuously, or at least regularly for extended periods, as part of the normal pattern of land use (residential)
Sensitivities of People to the Health Effects of PM_{10}	High	Locations where members of the public are exposed over a time period relevant to the air quality objective for PM_{10} (residential)
Sensitivities of Receptors to Ecological Effects	Low	There are no protective designations within or in close proximity to the development site

Table 6-9 shows how the sensitivity of the area is determined for dust soiling, the receptor sensitivity is determined in Table 6-8, the distance to the receptors determines the sensitivity.

Table 6-9: Sensitivity of the Area to Dust Soiling effects on People and Property

Receptor Sensitivity	Number of Receptors	Distance from Source (m)			
		<20	<50	<100	<250
High	>100	High	High	Medium	Low
	10 - 100	High	Medium	Low	Low
	1 - 10	Medium	Low	Low	Low
Medium	>1	Medium	Low	Low	Low
Low	>1	Low	Low	Low	Low

* The sensitivity of the area should be derived for each of the relevant activities: demolition, construction, earthworks and trackout.

**Estimate the total number of receptors within the stated distance. Only the highest level of area sensitivity from the table needs to be considered. For example, if there are 7 high sensitivity receptors <20 m of the source and 95 high sensitivity receptors between 20 and 50 m, then the total of number of receptors <50 m is 102. The sensitivity of the area in this case would be high.

***For trackout, the distances should be measured from the side of the roads used by construction traffic. The impact declines with distance from the site, and it is only necessary to consider trackout impacts up to 50 m from the edge of the road.

Table 6-10 shows how the sensitivity of the area is determined for Human Health impacts, the receptor sensitivity is determined in Table 6-8, the distance to the receptors determines the sensitivity.

Table 6-10: Sensitivity of the Area to Human Health Impacts

Receptor Sensitivity	Annual Mean PM_{10} concentration	Number of Receptors	Distance from Source (m)[c]			
			<20	<50	<100	<250
High	>32µg/m³	>100	High	High	High	Medium
		10 - 100	High	High	Medium	Low
		1 - 10	High	Medium	Low	Low
	28 - 32µg/m³	>100	High	High	Medium	Low
		10 - 100	High	Medium	Low	Low
		1 - 10	High	Medium	Low	Low
	24 - 28µg/m³	>100	High	Medium	Low	Low
		10 - 100	High	Medium	Low	Low
		1 - 10	Medium	Low	Low	Low
	<24µg/m³	>100	Medium	Low	Low	Low
		10 - 100	Low	Low	Low	Low
		1 - 10	Low	Low	Low	Low
Medium	>32µg/m³	>10	High	Medium	Low	Low
		1 - 10	Medium	Low	Low	Low
	28 - 32µg/m³	>10	Medium	Low	Low	Low
		1 - 10	Low	Low	Low	Low
	24 - 28µg/m³	>10	Low	Low	Low	Low
		1 - 10	Low	Low	Low	Low
	<24µg/m³	>10	Low	Low	Low	Low
		1 - 10	Low	Low	Low	Low
Low	-	≥1	Low	Low	Low	Low

* The sensitivity of the area should be derived for each of the four relevant activities: demolition, construction, earthworks and trackout.

**Estimate the total within the stated distance (e.g. the total within 250 m and not the number between 100 and 250 m), noting that only the highest level of area sensitivity from the table needs to be considered. For example, if there are 7 high sensitivity receptors <20 m of the source and 95 high sensitivity receptors between 20 and 50 m, then the total of number of receptors <50 m is 102. If the annual mean PM_{10} concentration is 29 $\mu g/m^3$, the sensitivity of the area would be high.

***Most straightforwardly taken from the national background maps, but should also take account of local sources. The values are based on 32 $\mu g/m^3$ being the annual mean concentration at which an exceedance of the 24-hour objective is likely in England, Walesand Northern Ireland. In Scotland there is an annual mean objective of 18 $\mu g/m^3$

**** In the case of high sensitivity receptors with high occupancy (such as schools or hospitals) approximate the number of

Receptor Sensitivity	Annual Mean PM_{10} concentration	Number of Receptors	Distance from Source (m)[C]			
			<20	<50	<100	<250

people likely to be present. In the case of residential dwellings, just include the number of properties.

***** For trackout, the distances should be measured from the side of the roads used by construction traffic. The impact declines with distance from the site, and it is only necessary to consider trackout impacts up to 50 m from the edge of the road.

Table 6-11 shows how the sensitivity of the area is determined for ecological impacts, the receptor sensitivity is determined in Table 6-8, the distance to the receptor determines the sensitivity.

Table 6-11: Sensitivity of the Area to Ecological Impacts

Receptor Sensitivity	Distance from Source (m)[C]	
	<20	<50
High	High	Medium
Medium	Medium	Low
Low	Low	Low

* The sensitivity of the area should be derived for each of the four relevant activities: demolition, construction, earthworks and trackout.

**Only the highest level of area sensitivity from the table needs to be considered

***For trackout, the distances should be measured from the side of the roads used by construction traffic. The impact declines with distance from the site.

Table 6-12 derives the sensitivity of the surrounding area for each of the three relevant activities for the proposed Development. These are earthworks, construction and trackout.

Table 6-12: Sensitivity of the Area - Outcome

Potential Impact	Sensitivity of the Surrounding Area			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	-	High	High	High
Human Health	-	Low	Low	Low
Ecological	-	Low	Low	Low

Step 2C: Define the Risk of Impacts

The dust emission magnitude determined at Step 2A should be combined with the sensitivity of the area determined in Step 2B to determine the risk of impacts with no mitigation applied. For those cases where the risk

category is 'negligible' no mitigation measures beyond those required by legislation will be required. Levels of risk determined should determine the level of mitigation that must be applied. Tables 6-13, 6-14 and 6-15 present the risk of dust impacts from the three relevant activities.

Table 6-13: Risk of Dust Impacts - Earthworks

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Medium Risk	Low Risk
Low	Low Risk	Low Risk	Negligible

Table 6-14 Risk of Dust Impacts - Construction

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Medium Risk	Low Risk
Low	Low Risk	Low Risk	Negligible

Table 6-15 Risk of Dust Impacts - Trackout

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Medium Risk	Low Risk
Low	Low Risk	Low Risk	Negligible

Table 6-16 takes all the preceding tableted information into a summarised table to show the risk od dust impacts for the three relevant activities.

Table 6-16 Summary Dust Risk Table to Define Site -Specific Mitigation

Potential Impact	Risk		
	Earthworks	Construction	Trackout
Dust Soiling	Medium Risk	Medium Risk	Medium Risk

Potential Impact	Risk		
	Earthworks	Construction	Trackout
Human heath	Low Risk	Low Risk	Low Risk
Ecological	Low Risk	Low Risk	Low Risk

Table 6-16 shows the risk of impact from the Proposed Development, overall is medium and short term in duration, due to dust soiling. As such specific mitigations are outlined in Section 6.5.3.

6.5.2.2 Operational Phase

Once operational the air emissions will be limited to traffic at the proposed development and comparable with surrounding residential developments.

6.5.3 Mitigations

6.5.3.1 Construction Phase

The generation of dust during the construction phase cannot be totally eliminated. However good site management will ensure fugitive dust emissions are kept to a minimum. The following mitigation measures are all highly recommended accept for where specifically it is stated that they are only desirable. Mitigation measures outlined here will be incorporated into the Construction Environmental Management Plan (CEMP). Mitigation measures for the control of dust are as follows:

Communications

- Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.
- Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager.
- Display the head or regional office contact information

Dust Management

- Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the Local Authority. The level of detail should include as a minimum the highly recommended measures in this document. The desirable measures should be included as appropriate for the site. The DMP may include visual inspections.

Site Management

- Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken.
- Make the complaints log available to the local authority when asked.
- Record any exceptional incidents that cause dust and/or air emissions, either on- or off- site, and the action taken to resolve the situation in the log book.

Monitoring

- Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the local authority when asked. This should include regular dust soiling checks of surfaces such as cars and window sills within 100m of site boundary, with cleaning to be provided if necessary.
- Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the local authority when asked
- Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.
- It is recommended that Bergerhoff dust deposition monitoring is carried out at this site at two locations. One on the western side near the residential houses and one on the eastern side near the Deerpark Retail Park. The limit should be 350 mg/m2/d.
- This monitoring approach is to be agreed with the local council before construction begins.

Preparing and maintaining the site

- Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.
- Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site.
- Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period.
- Avoid site runoff of water or mud.
- Keep site fencing and barriers clean using wet methods.
- Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below.
- Cover, seed or fence stockpiles to prevent wind whipping.
- Periodic maintenance of the public road surface near the entrance will be undertaken. This will include the prompt removal of any spillage so as to prevent the dispersion of dust along the road, which is likely to be re-suspended by passing vehicles. A mechanical vacuum road sweeper shall be used if necessary.
- Exposed surfaces, unpaved internal haul roads, and entrances to the site should be dampened during dry windy conditions in the interest of controlling fugitive dust.
- It is desirable to re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable.

Operating vehicle/machinery and sustainable travel

- Ensure all vehicles switch off engines when stationary – no idling vehicles.
- Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable.
- It is desirable to impose and signpost a maximum-speed-limit of 15 kph on site roads haul roads and work areas.

- Vehicles and plant machinery operating on-site will be properly maintained to prevent excessive emissions of particulates and other pollutants from the exhaust pipes.

Operations

- A wheel wash will be put in operation at the entrance to the construction site
- A road sweeper is to be utilised as necessary on Friary Downs and Park road based on the daily inspections in order to prevent dust creation from tracking of mud onto the road.
- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.
- Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.
- Use enclosed chutes and conveyors and covered skips.
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
- Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.
- It is desirable to use gravel at the site exit to remove caked on dirt from tyres and tracks.

Waste management

- Avoid bonfires and burning of waste materials.

Measures specific to earthworks.

- It is desirable to re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable.
- It is desirable to use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable
- It is desirable to only remove the cover in small areas during work and not all at once

Measures specific to Construction

- It is desirable to avoid scabbling (roughening of concrete surfaces) if possible.
- Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.
- It is desirable to ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.
- It is desirable for smaller supplies of fine power materials ensure bags are sealed after use and stored appropriately to prevent dust

Measures specific to Trackout

- Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use.

- Avoid dry sweeping of large areas.
- Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport
- Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable.
- Record all inspections of haul routes and any subsequent action in a site log book.
- Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned.
- Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).
- Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits.
- Access gates to be located at least 10 m from receptors where possible.

Construction Traffic Emissions

Construction traffic emissions can be reduced using the following measures:

- Ensure regular maintenance of plant and equipment. Carry out periodic technical inspection of vehicles to ensure they perform most efficiently; and
- All site vehicles and machinery to be switched off when not in use - no idling.

6.5.3.2 Operational mitigations

No operational mitigations are required for the proposed development.

6.5.4 Conclusion

Once the mitigations are implemented for the construction phase of the proposed development there will not be a significant impact on air quality in the surrounding area.

6.6 Noise and Vibration

This section of the report has been prepared to identify and assess the potential noise and vibration impacts associated with the proposed development. The construction and operational phases of the development have been assessed.

6.6.1 Study Area

The proposed development site location current noise levels are influenced by local road traffic, residential activity, and occasional agricultural operations. The study area comprises of the proposed development site and its immediate environs. Noise sensitive receptors that could potentially be impacted by noise and vibrations as a result of the proposed development were identified.

6.6.2 Noise Sensitive Receptors

These were identified primarily as existing housing developments immediately adjacent to the proposed development on the western side and the Deerpark Retail Park immediately adjacent to the eastern side of the proposed development site. Both of these sensitive receptors are shown **Figure 3-1.** The noise sensitive receptors immediately adjacent are also the same as the dust receptors immediately adjacent and are presented in **Figure 6-5.**

6.6.3 Scope of Assessment

The assessment concentrates on characteristics of the proposed development which have the potential for significant adverse impacts.

Table 6-16 Issues relevant to Noise and Vibration

Topic Area	Potential Issues Construction Phase	Potential Issues Operational Phase
Daytime Noise	Construction Machinery	Additional Traffic generated by new development
Sensitive receptors	Existing Residential Developments	Existing and proposed residential developments
Night-time Noise	None	Additional traffic generated by new development
Sensitive receptors	Not Applicable	Existing and proposed residential developments
Daytime Vibration	Construction Machinery	None
Sensitive receptors	Existing Residential Developments	Not Applicable
Night-time Vibration	None	None
Sensitive receptors	Not Applicable	Not Applicable

Table 6-16 outlines the main noise and vibration issues which has been assessed. The assessment concentrates on characteristics of the proposed development which have the potential for significant adverse impacts.

Table 6-16 Issues relevant to Noise and Vibration

Topic Area	Potential Issues Construction Phase	Potential Issues Operational Phase
Daytime Noise	Construction Machinery	Additional Traffic generated by new development
Sensitive receptors	Existing Residential Developments	Existing and proposed residential developments
Night-time Noise	None	Additional traffic generated by new development
Sensitive receptors	Not Applicable	Existing and proposed residential developments

Topic Area	Potential Issues Construction Phase	Potential Issues Operational Phase
Daytime Vibration	Construction Machinery	None
Sensitive receptors	Existing Residential Developments	Not Applicable
Night-time Vibration	None	None
Sensitive receptors	Not Applicable	Not Applicable

6.6.4 Assessment Criteria

6.6.4.1 Construction Phase – Noise Impacts

There is no statutory guidance in Ireland relating to the maximum noise levels permitted during construction works, and in the absence of statutory guidance or other specific limits prescribed by local authorities, the thresholds outlined in the British Standard 5228-12009+A1:2009, Code of Practice for Noise and Vibration Control on Construction and Open Sites - Noise has been adopted in this assessment, as they are recognised by the expert community as the most appropriate in the assessment of construction noise. The noise levels, which are reproduced in Table 6-17, are typically deemed acceptable.

Table 6-17 Construction Stage Noise Level Thresholds

Assessment category and threshold value period (T)	Threshold values, L_{AeqT} dB		
	Category A [Note A]	Category B [Note B]	Category C [Note C]
Night-time (23:00 to 07:00hrs)	45	50	55
Evening and Weekends [Note D]	55	60	65
Daytime (07:00 – 19:00hrs) and Saturdays (07:00 - 13:00hrs)	65	70	75

Note A: Category A: threshold values to use when ambient noise levels (when rounded to the nearest 5dB) are less than these values.

Note B: Category B: threshold values to use when ambient noise levels (when rounded to the nearest 5dB) are the same as category A values.

Note C: Category C: threshold values to use when ambient noise levels (when rounded to the nearest 5dB) are higher than category A values.

Note D: 19:00 – 23:00 weekdays, 13:00 – 23:00 Saturdays and 07:00 – 23:00 Sundays.

The lowest threshold value has been applied to the proposed development so all properties will be afforded a Category A designation. Therefore, if the construction noise exceeds 65dB LAeq(T) then this is assessed as a potentially significant impact.

6.6.4.2 Construction Phase – Vibration Impacts

According to NRA's 2014 Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes, there are two separate considerations for vibration during the construction phase namely 1) that which affects human comfort and 2) that which affects cosmetic or structural damage to buildings.

The guidelines suggest that human tolerance for daytime blasting and piling, two of the primary sources of construction vibration, limits vibration levels to a peak particle velocity (ppv) of 12mm/s and 2.5mm/s respectively. Blasting and piling are not required during this project. As such no impacts are expected.

6.6.5 Potential Effects

6.6.5.1 Construction Phase – Noise

The construction phase entails the building of the development infrastructure including, roads, foundations, and the structures themselves. The main noise sources during the construction works will include heavy machinery and support equipment used to construct the various elements. This typically means heavy earth moving machinery, generators, and material transport trucks.

The noise levels described in the following sections for the various construction phases are indicative only and are based on theoretical worst-case assumptions in order to demonstrate that it will be possible to undertake the works without significant noise impacts. By their nature the works are short term and will only potentially impact on a small number of receptors at any one time. Construction works are intermittent, mobile and vary in intensity from phase to phase and accordingly are difficult to accurately predict for any given time in the future. As the development progresses, structures themselves can act to screen noise levels depending on the receiving receptors. Best practice is to adopt worst case assumptions using typical sources which tends to overestimate the effect.

The exact equipment to be used is not known at this stage, but the plant and machinery outlined in Table 6-18 are typical of plant commonly used and can provide an accurate assessment of construction noise emissions.

The associated noise levels have been sourced from BS 5228 Noise and Vibration from open and construction sites, totalled, and extrapolated to the nearest noise sensitive location. Only attenuation due to distance is accounted for in the prediction of resultant noise levels at different distances. The resultant noise level is then compared against the relevant noise threshold (refer to Table 6-17).

The result is a theoretical worst case, as it assumes all machinery will be operating simultaneously which will not be the case and accounts for attenuation due to distance only. In reality there will be further noise attenuation due to atmospheric absorption, ground absorption, and landform screening. Therefore, the noise levels presented herein are an overestimate.

Using the following equation, noise emissions from the construction site are extrapolated to different distances, in this case 10m, 20m, 40m, 80m and 160m.

$$SPL2 = SPL1 - 20\log(r2/r1)$$

Where:

- Sound Pressure Level 1 (SPL1) = Known noise level at 10m from construction site
- Sound Pressure Level 2 (SPL2) = Unknown noise level at nearest receptor
- r2 = Distance between noise sensitive receptor and construction site
- r1 = 10 m

Table 6-18 Typical Plant and Machinery and associated noise levels to be used during construction

Activity	ITEM BS5228 Ref	Predicted Sound Pressure Level (@10m (r_1) L_{eq} dB(A)	Predicted Sound Pressure Level @ 20 m (r_2), L_{eq} dB(A).	Predicted Sound Pressure Level @ 40 m (r_2), L_{eq} dB(A).	Predicted Sound Pressure Level @ 80 m (r_2), L_{eq} dB(A).	Predicted Sound Pressure Level @ 160 m (r_2), L_{eq} dB(A).
Site Clearance/ Demolition	Tracked Excavator (C2.21)	71	65	59	53	47
	Dump Truck (tipping fill) (C2.30)	79	73	67	61	55
	Diesel Generator (C4.76)	61	55	49	43	37
Total		**80**	**74**	**68**	**62**	**56**
General Construction	Dump Truck (tipping fill) (C2.30)	79	73	67	61	55
	Tracked excavator (C2.21)	71	65	59	53	47
	Compressor (D7.8)	70	64	58	52	46
	Telescopic Handler (C4.54)	79	73	67	61	55
	Hand-held Circular Saw (C4.72)	79	73	67	61	55
	Diesel Generator (C4.76)	61	55	49	43	37
Total		**84**	**78**	**72**	**66**	**60**
Road Works / Landscaping	Asphalt Paver & Tipping Lorry (C5.30)	75	69	63	57	51
	Electric Water Pump (C5.40)	68	62	56	50	44

Activity	ITEM BS5228 Ref	Predicted Sound Pressure Level (@10m (r_1) L_{eq} dB(A)	Predicted Sound Pressure Level @ 20 m (r_2), L_{eq} dB(A).	Predicted Sound Pressure Level @ 40 m (r_2), L_{eq} dB(A).	Predicted Sound Pressure Level @ 80 m (r_2), L_{eq} dB(A).	Predicted Sound Pressure Level @ 160 m (r_2), L_{eq} dB(A).
	Vibratory Roller (C5.20)	75	69	63	57	51
Total		**78**	**72**	**66**	**60**	**54**

The theoretical worst case predicted noise levels show that where works are taking place within 40m of an existing noise sensitive receptor there is the potential for the guideline construction noise thresholds to be exceeded. This would mean all the items of plant identified in Table 6-16 would need to be in operation simultaneously and continuously over the course of an 10-hour day. In this worst case scenario there will be a significant noise impact on receptors within 40m for the duration of the operation of all the plant at the same time. Any such timeframe of operation is expected to be short as most operations on the construction site happen in phases and separate locations.

At distances beyond 40m noise levels are predicted to be within acceptable guideline values and the noise impact is not significant.

These results indicate that noise reduction measures, construction works planning, and community liaison needs to be taken into consideration when heavy construction works are taking place within 40m of sensitive receptors. Such measures are described in more detail in Section 6.6.6.

The associated construction phase noise impact is dependent on a multitude of variables and is predicted to range from a temporary significant adverse impact to not significant. Mitigation measures described in Section 6.6.6 will reduce the potential for significant adverse impact.

6.6.5.2 Operational and cumulative noise

The Friary Downs Road is a Cul de Sac and as such has a low amount of traffic noise. The Traffic and Transport Assessment (TTA) assessed operational traffic and included cumulative traffic increase over the years from future development, within it's model. The TTA shows that there will be an increase in traffic from the proposed development. Considering that in order to increase traffic noise levels by 1 dB, traffic volumes would need to increase by the order of 25%, it is considered that additional traffic introduced onto the local road network due to the proposed development will increase traffic noise by about 1-2dB. Due to the existing traffic noise and the urban area, the increase will not be a significant noise impact.

The future plan of making Friary Downs a through road to the Killarney bypass will be assessed for noise at that time for that future development.

6.6.6 Mitigation Measures

6.6.6.1 Construction Phase

- Best practice mitigation techniques as specified in BS 5228:2009+A1 2014 – Noise and Vibration Control on Construction and Open Sites shall be implemented during the construction phase. Contractors will be familiar with the measures in this document,
- There is the potential for construction noise to exceed guideline construction noise thresholds at receptors close to works areas during periods of intense construction activity.
- Solid 2.4 m high perimeter timber hoarding will be erected on the western boundary of the proposed development at locations where house building will occur within 40m of a residential house and there is no existing block work wall between the residence and the proposed development.
- To prevent construction noise thresholds being exceeded, noise screens shall be utilised around noisy plant and machinery such as generators and cutting stations.
- Noise stationary equipment will be located away from sensitive boundaries as far as practicable.
- The use of inherently quiet plant is required where appropriate – all compressors and generators will be "sound reduced" or "super silent" models fitted with properly lined and sealed acoustic covers, which will be kept closed whenever the machines are in use, and all ancillary pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers.
- Site activities shall be staggered when working in proximity to any receptor, that is concrete cutting and rock breaking should where possible. This proposed method of working will provide effective noise management of site activities to ensure that any receptor is not exposed to unacceptably high levels of noise over extended periods.
- A nominated person from the Project Management team will be appointed to liase with local residents and businesses regarding noise nuisance events.
- In the event of the requirement for out of hours work to occur which will involve the generation of noise levels that are predicted to exceed out of hours noise limit criteria, Kerry County Council shall be immediately notified prior to the works commencing.

6.6.6.2 Operational Phase

No mitigation measures additional to the inherent design as proposed as required.

6.6.7 Conclusion

Once the mitigation measures are implemented the construction noise levels will be within the typical tolerable construction noise thresholds.

6.7 Traffic

A Traffic and Transport Assessment (TTA) was carried out by MHL as part of the Proposed Development and is included with the planning application. Traffic and Transport Assessment, doc no. MHL_26010TT-Deerpark Killarney-TTA DOC 02 (13/03/2026).

In summary, the TTA assessment focused on the 3 no. nearby traffic junction and the proposed development junction for this application.

The traffic modelling analysis carried out for these design year scenarios shows that:

The assessed junctions are operating below capacity for all design years up to 2043 for both morning and evening peaks, except for Junction 1 which is over capacity.

• Junction 1 reaches a maximum RFC of 142% in the 2043 Sunday with development scenario which is an 11% RFC increase compared to RFC of 131% without the development.

• Junction 2 reaches a maximum RFC of 69% in the 2033 weekday AM with development scenario.

• Junction 3 reaches a maximum RFC of 71% in the 2043 Sunday with development scenario.

• The queue length comparison observed the physical surveyed lengths to the model software lengths. For Junction 1, the software produced conservative lengths compared to the physical queues recorded. In contrast, for both junction 2 and junction 3, the modelled software queue results were less than the existing surveyed queues. Both methods have limitations, software modelling doesn't account for changes in traffic from day to day, while physical surveys are compiled from CCTV observations and are therefore subject to the limitations of the camera view. The data provides an idea of what is happening at each junction but does not represent exact everyday conditions.

• This queue length data can be used to identify issue in the traffic signals timings. There may be capacity to modify the traffic signals on the ground to increase the efficient of the signal timings.

• Based on observations of vehicles queueing on site or from one junction to the next, consideration should be given to installing a yellow box junction at Junction 2 to facilitate vehicles entering or exiting from Friary Downs to do so safely, eliminating blockages from queues from Junction 1 and 3.

Comparing the analysis of the traffic models, this development will have a negligible impact on Junctions 2 and 3, but it will add localised capacity pressure to Junction 1, which is already operating above its design capacity.

6.8 Archaeology and Cultural Heritage

An Archaeology Impact Assessment Report (AIA) has been carried out on the proposed development.

Research has shown that there are no recorded archaeological monuments or built heritage features within or in close proximity to the proposed development site at Ardshanavooly. Extensive licensed test excavations across the footprint of the entirety of the proposed development site revealed no subsurface archaeology. There are no archaeological constraints pertaining to the proposed development site.

There are two NIAH houses in the vicinity of the proposed development, Reg Numbers 21400817 and 21400816. Both of these houses are approximately 150m west of the proposed development, see **Figure 6-6**. Due to the distance and existing infrastructure there will not be a significant impact on the houses from a visual or vibration aspect.



Figure 6-6: NIAH registered houses.

6.9 Landscape and Visual Impact

A Landscape Design Rationale Report was completed by Cunnane Stratton Reynolds on the Proposed Development (September 2026), see Doc No. 24535-1-DO2_Landscape Design Rationale Report. In summary the report found the following:

In terms of landscape character and open space provision, the Proposed Developent is considered to have a positive impact. The landscape strategy has been designed to deliver high-quality, functional and biodiverse open spaces that contribute to placemaking, environmental sustainability and community well-being.

The site is located within the established urban area of Killarney, with undeveloped lands to the north, medium density residential neighbourhoods to the south and west, and commercial retail warehousing and associated parking areas to the east.

Residential development is proposed on lands zoned for residential use and located within walking distance of the town centre. Owing to its central urban location, the Deerpark LRD site lies outside designated visually sensitive areas and protected views and prospects identified in the County Development Plan.

In general, the Proposed Development is not anticipated to give rise to significant adverse or visual effects. The retention of existing mature trees, where feasible, together with the introduction of additional native tree and shrub planting, will strengthen the landscape structure of the site, soften the appearance of the development and assist in integretating the scheme into its wider landscape setting.

Mitigation is provided through the retention of established vegetation and the implementation of a comprehensive native planting strategy, which will enhance biodiversity, reinforce landscape character and contribute postively to the long-term visual amenity of the area.

6.10 Cumulative Impact

The existing and permitted developments in the area were looked at in cumulative impact with the Proposed Development.

The existing development in the area includes residential housing estates, retail parks (Deerpark Retail Park) and leisure facilities (Deerpark Pitch and Putt club).

Due to the urban environment, there are many minor planning applications within the broader area such as garden extensions and bay windows, these are not considered relevant as they will have negligible cumulative impact. The current applications that are most relevant to the proposed development in cumulative impact are listed in the Table 6-19.

Table 6-19: Relevant Planning Applications in the Area for Cumulative Impact

Application No.	Applicant	Location	Distance from Proposed Development	Proposed Development	Status
20241	Wrightwood Development Ltd.	Ardshanavooly, Park Road	0.03km	Erect 2 no. semi-detached dwellings and all associated site works.	Permitted: 20/08/20
KCC: 20766 ABP: 309948	Pauline Lyne	Ardshanavooly, Park Road	0.39km	Construct family flat extension onto existing guesthouse; permission to retain two private bedrooms in attic space of guesthouse and all site development works.	KCC Granted: 18/03/21 Appealed: 15/04/21 ABP Granted: 04/08/21
21952	Marie Kissane O'Connor	No. 92 Ardshanavooly, Killarney	0.2km	Retain vehicular entrance and parking area to front of house and retention permission for extension to front and an extension to the rear upper floor.	Granted: 15/11/21
211007	Ciara Fleming	No. 80 Ardshanavooly	0.15km	Construct single storey extension to front of existing	Granted: 30/11/21

Application No.	Applicant	Location	Distance from Proposed Development	Proposed Development	Status
				dwelling and ancillary site works.	
211297	Mary Mangan	Ardshanavooly	0.23km	Construct a single-storey extension to the front and rear of existing dwelling house.	Granted: 21/02/22
211160	Tesco Ireland Ltd.	Ardshanavooly, Deerpark Road	0.24km	Retain click and collect signage in the existing Tesco car park; construction of a sheltered canopy (c. 50sq.m) in existing car park to provide 2 no. dedicated click and collect spaces for the existing Tesco, pedestrian crossing; site development works.	Granted: 04/05/22
22610	Brendan & Martina Kelleher	Fair Hill, Ardshanavooly	0.34km	Construct new single storey dwelling house; planning permission to widen existing entrance for new access to new dwelling house; all site development works.	Granted 13/01/23
22605	Brendan & Martina Kelleher	Fair Hill, Ardshanavooly	0.29km	Retain existing B&B premises within revised site boundaries. Retain permission for changes to existing B&B. Planning to amalgamate guest bedrooms 3 and 4 into one guest bedroom.	Granted 17/01/23

Application No.	Applicant	Location	Distance from Proposed Development	Proposed Development	Status
KCC: 22454 ABP: 314150	Aldi Stores (Ireland) Limited	Ardshanavooly, Killarney	0.36km	Retention of amendment to opening hours to: 0900 to 2200 Monday to Friday and 0900 to 2100 on Saturdays, Sundays and Public Holidays and to no restrictions on delivery hours.	KCC Granted: 27/06/22 Appealed: 25/07/22 ABP Granted: 28/11/23
2360106	Tim Lyne	Site A, Deerpark Road, Killarney	0.4km	Planning permission to construct two-storey building for office use and financial/professional services, and all ancillary site works at Site A at Deerpark Road.	Granted: 27/08/24
2460491	The Platform ICAV	Deerpark Retail Park	0.06km	Change from retail/offices to medical/wellness centre; associated elevational changes.	Granted: 15/10/24
24320	Wrightwood Developments Ltd.	Ardshanavooly, Park Road	0.09km	Change carpark and bin storage to 2 no. one-bedroom apartments and 1 no. one-bedroom accessible apartment; installation of pitched roof between apartments 5 and 6 relocation of window on 1st floor to side elevation of apartment no.11; previously granted under 23/991.	Granted: 30/10/24

Application No.	Applicant	Location	Distance from Proposed Development	Proposed Development	Status
KCC: 2460523 ABP: 321077	Tim Lyne	Park Road, Killarney	0.42km	Demolish existing dwelling house/outbuildings; construct two new detached dwellings, and all associated site works.	KCC Granted: 27/09/24 Appealed: 18/10/24 ACP grant: 02/09/25
23991	Wrightwood Developments Ltd.	Ardshanavooly, Park Road	0.06km	(a) construct childrens creche, (b) planning permission to construct 14 in number 1 bedroom and 2 in number 2 bedroom apartments, (c) new access road, parking and all associated site works within revised site boundaries	Granted: 15/12/23
2560467	Michael Hegarty	Countess Shopping Centre Park Road Killarney V93XK52 Avenue	0.49km	Planning permission for (A) a change of use of existing singular retail unit to 2 no. units. Unit 1 a Café/Restaurant without takeaway facilities and unit 2 a Restaurant with ancillary takeaway facilities and (B) to carry out alterations to existing front façade at Countess Shopping Centre, Park Road, Killarney, Co. Kerry.	Granted 2025-07-28
21332	Octavius Property Company Limited	Ballycasheen Park Road Killarney Co	0.97km	(1) change use of 18 no. apartments in block a from existing use as holiday	granted, conditional 24/05/2021

Application No.	Applicant	Location	Distance from Proposed Development	Proposed Development	Status
		Kerry Ballycasheen		apartments to use as residential apartments. (11)provision of a bin and bicycle storage with ancillary storage area for residents (111)provision of ground level private amenity spaces for ground level apartments with associated hard and soft landscaping works to include for provision of a communal open space area and associated site works	
20706	Octavius Property Company	Blocks A,B And D Hotel Killarney Park Road And Cork Road Killarney, Co Kerry Ballycashen	1.06km	change of use of 18 no. apartments in blocks a, 15no. apartments in block b and 15 no. apartments in block d from existing use as holiday apartments to use as residential apartments	Granted, 2020-09-30
ACP 318509	KPH Construction & Development Ltd.	Upper Park Road, Killarney, Co. Kerry	1.6km	LRD. Construction of 143 houses, 106 apartments, creche and all associated site development works. A Natura Impact Statement (NIS) has been submitted with this application.	Granted: 21/03/24

Application No.	Applicant	Location	Distance from Proposed Development	Proposed Development	Status
2660718	Wrightwood Developments Ltd	Ardshanavooly, Park Road	0.06km	LRD. Construction of 123 no. dwellings, 139 no. surface car parking spaces, 272 no. bicycle parking spaces and all associated site works.	Decision due 24/09/2026

There are potential cumulative effects in the construction phase from the Proposed Development with neighbouring granted planning applications particularly the Ardshanavooly LRD which is located in the adjoining field to the northwest. Potential cumulative effects may arise if construction activities associated with these developments occur concurrently resulting in an increase in construction traffic on the local road network, temporary increases in noise and dust emissions and increased pressure on local services and infrastructure.

6.10.1 Mitigations

However these cumulative effects are expected to be temporary and localised in nature. Implementation of Construction Environmental Management Plan (CEMP) measures, including traffic management, dust management, noise management would minimise the potential for cumulative impacts. Communication and coordination with neighbouring construction sites, including the Ardshanavooly LRD and any developments under construction along Friary Dows Road, will be undertaken where construction activities overlap. Where required, a coordinated construction traffic management plan will be implemented to reduce any potential impacts on traffic on Friary Downs Road. Subject to these measures, any cumulative construction phase effects are considered likely to be short-term and not significant.

6.10.2 Conclusion

The full and adequate implementation of the above mitigation and the CEMP will avoid or minimise the potential in-combination effects.

7. References

CSO (https://visual.cso.ie/?body=entity/censusmapping/) accessed February 2026

Kerry County Council, Kerry County Development Plan 2022 – 2028

BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Noise.

EPA Air quality data accessed 10/02/2026 https://airquality.ie/

EPA mapping data accessed 10/02/2026 https://gis.epa.ie/EPAMaps/

MHL Traffic and Transport Assessment, doc no. MHL_26010TT-Deerpark Killarney-TTA DOC 02 (13/03/2026).