# EIA Screening

## For Development at Gortnahomna More (townland), Castlemartyr, Co. Cork

on behalf of Marshall Yards Development Company Ltd

**November 2024**

McCutcheon Halley
CHARTERED PLANNING CONSULTANTS

# Document Control Sheet

| | | |
|---|---|---|
| **Client** | Marshall Yards Development Company Ltd | |
| **Project Title** | Castlemartyr | |
| **Document Title** | EIA Screening | |
| **Document Comprises** | **Volumes** | - |
| | **Pages** (Including Cover) | 27 |
| | **Appendices** | - |
| **Prepared by** | Aida Vaisvilaite | |
| **Checked by** | Majella O'Callaghan | |
| **Office of Issue** | Cork | |
| **Document Information** | **Revision** | B |
| | **Status** | Submitted |
| | **Issue Date** | November 2024 |

www.mhplanning.ie

CORK

6 Joyce House
Barrack Square
Ballincollig
Cork
P31 YX97

T. +353 (0)21 420 8710

DUBLIN

Kreston House
Arran Court
Arran Quay
Dublin 7
D07 K271

T. +353 (0)1 804 4477



McCutcheon Halley
CHARTERED PLANNING CONSULTANTS

# Table of Contents



# Table of Figures



# Table of Tables

# 1. Introduction

This Environmental Impact Assessment (EIA) Screening Report has been prepared by McCutcheon Halley Chartered Planning Consultants on behalf of Marshall Yards Development Company Ltd in relation to a proposed Large Scale Residential Development at Gortnahomna More (townland), Castlemartyr, Co. Cork.

The purpose of this report is to provide the required information to enable the competent authority, in this case Cork County Council, to determine whether an Environmental Impact Assessment Report is required or not, as specified in Schedule 7A of the Planning and Development Regulations 2001 (as amended) in respect of the proposed development. Where a project is of a specified type but does not meet, or exceed, the applicable threshold then the likelihood of the 'sub-threshold' project having significant effects (adverse and beneficial) on the environment needs to be considered.

## 1.1 Evidence of Technical Competence and Experience

This EIA Screening Report has been prepared by Aida Vaisvilaite of McCutcheon Halley Chartered Planning Consultants. Aida holds a Bachelor's degree in Arts, majoring in English and a Master's in Planning and Sustainable Development, both awarded by University College Cork.

Aida has over 3 years' experience working with multi-disciplinary teams and has provided input on a variety of projects. In particular, Aida has experience in the preparation of an EIA Screening report.

This EIA Screening Report has been reviewed by Majella O'Callaghan of McCutcheon Halley Planning Consultants. Majella holds an MSc in Urban and Regional Planning awarded by the Heriot Watt University, Edinburgh, a BA in Geography and Economics awarded by University College Cork and a Diploma in Project Management awarded by Central Institute of Technology, Perth, Australia.

Majella has over 12 years practical experience preparing Environmental Impact Assessments, EIA Screening and Scoping Reports and AA Screening Reports for a range of industries including mixed use development and residential development.

## 1.2 Summary of Proposed Development

Marshall Yards Development Company Ltd are applying for planning permission for a Large-Scale Residential Development (LRD) consisting of 150 no. of residential units and a 68 no. child place creche facility, 2 no. ESB substation and all associated site development works at Gortnahomna More, Castlemartyr, Co. Cork. It is proposed that the site will be accessed from the north via a new entrance point and priority junction along N25 Killeagh Road which is illustrated within the engineering documents prepared by Donnchadh O'Brien and Associates Consulting Engineers.

The proposed development comprises Phase 1 of a larger masterplan, the remainder of which will be subject to future planning applications.

# 2. Legislative Context

The Environmental Impact Assessment (EIA) requirements derive from EU Directives. The EIA Directive, Council Directive 2014/52/EU, amended Directive 2011/92/EU. The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 came into effect in September 2018, transposing Directive 2014/52/EU and giving further effect to Directive 2011/92/EU.

This EIA Screening Report is prepared based on the requirements of EU Directive 2014/52/EU which has the objective *'to ensure a high level of protection of the environment and human health, through the establishment of minimum requirements for environmental impact assessment (EIA), prior to development consent being given, of public and private developments that are likely to have significant effects on the environment'.*

Projects requiring EIA are listed in Schedule 5 (Parts 1 and 2) of the 2001 Regulations. In cases where a project is mentioned in Part 2 but is classed as 'sub-threshold', planning authorities are required under article 103 of the 2001 Regulations to request an EIAR where it considered that the proposed development is likely to have significant environmental effects.

The decision as to whether a development is likely to have significant effects on the environment must be taken with reference to the criteria set out in Schedule 7 and Schedule 7A of the 2001 Regulations outlined in section 2.3 below.

## 2.1 Methodology

This EIA Screening Report has been prepared with regard to the following guidance:

- Guidelines on the Information to be contained in Environmental Impact Assessment Reports (EIAR) (EPA, 2022);
- Environmental Impact Assessment of Projects Guidance on Screening (EU, 2017);
- Circular Letter PL 1/2017 – Implementation of Directive 2014/52/EU on the effects of certain public and private projects on the environment (EIA Directive). Department of Housing, Planning, Community, and Local Government;
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (Department of Housing, Planning, Community, and Local Government, 2018);
- Interpretation of definitions of projects categories of Annex I and II of the EIA Directive (EU, 2015).

## 2.2 Screening for a Mandatory EIA

As part of this screening assessment, McCutcheon Halley Planning Consultants have reviewed the project categories under Part 1 and Part 2 to determine if this proposed development satisfies any of the project categories. The subject development does not fall within development classes set out in Part 1 of Schedule 5 having regard to the nature and scale of the development.

Schedule 5, Part 2, Class (10)(b) requires the preparation of a mandatory EIA for projects which exceed the following thresholds:

> *(i) Construction of more than 500 dwelling units.*
>
> *(iv) Urban development which would involve an area greater than 2 hectares in the case of a business district1, 10 hectares in the case of other parts of a built-up area, and 20 hectares elsewhere.*

The proposed development comprises the construction of 150 no. residential units and once childcare facility on a net site area of 4ha and a gross area of 6.88ha. The project therefore does not meet the thresholds as prescribed by Class 10(b) of the 2001 Regulations, and therefore the project does not require a mandatory EIAR as set out in Schedule 5.

It is noted that the proposed development represents Phase 1 of a potential larger masterplan and that the remainder of the lands will be subject to future planning applications.

## 2.3 Screening for a Sub-Threshold EIA

In cases where a project is mentioned in Schedule 5, Part 2 but is classed as 'sub-threshold development', it is necessary for a planning authority to undertake a case by case examination about whether the development is likely to be associated with significant effects on the environment. In other words, screening for whether EIA is needed, must be undertaken. The criteria for assessing whether a development would or would not be likely to have significant effects on the environment are outlined in Schedule 7 of the 2001 Regulations (as amended). These criteria are defined as follows:

1. Characteristics of the proposed development;
2. Location of the proposed development, in terms of the environmental sensitivity of geographical areas likely to be affected by the proposed development;
3. Characteristics of the proposed impacts, in terms of the potential significant effects of the proposed development.

Article 4(4) of 2014/52/EU introduces a new Annex IIA to be used in the case of screening determination (i.e. information to be provided by the developer on projects listed in Annex II, which consists of:

1. A description of the project, including in particular:

a. A description of the physical characteristics of the whole project and, where relevant, of demolition works;
b. A description of the location of the project, with particular regard to the environmental sensitivity of the geographical areas likely to be affected.

2. A description of the aspects of the environment likely to be significantly affected by the project.
3. A description of any likely significant effects, to the extent of the information available on such effects, or the project on the environment resulting from:
   a. The expected residues and emissions and the production of waste, where relevant;
   b. The use of natural resources, in particular soil, land, water, and biodiversity.
4. The criteria of Annex III shall be taken into account, where relevant, when compiling the information in accordance with points 1 to 3.

The Directive also amends Annex III "Selection Criteria Referred to in Article 2(3)". The details to be considered in the new Annex III are as follows:

1. Characteristics of the Proposed Development
   The characteristics of the proposed development, in particular:
   - The size of the proposed development
   - The cumulation with other proposed developments
   - The use of natural resources
   - The production of waste
   - Pollution and nuisance
   - The risk of accidents, having regard to substances or technologies used.
2. Location of Proposed Development
   The environmental sensitivity of geographical areas likely to be affected by proposed development, having regard in particular to:
   a. The existing land use;
   b. The relative abundance, quality and regenerative capacity of natural resources in the area;
   c. The absorption capacity of the natural environment, paying particular attention to the following areas:
      i. Wetlands, riparian areas, river mouths;
      ii. Coastal zones and the marine environment;
      iii. Mountain and forest areas;
      iv. Nature reserves and parks;
      v. Areas classified or protected under national legislation, Natura 2000 areas designated by Member States pursuant to Directive 92/42/EEC and Directive 2009/147/EC.
      vi. Areas in which there has already been a failure to meet environmental quality standards laid

down in Union Legislation and relevant to the project, or in which it is considered that there is such a failure;

vii. Densely population areas;

viii. Landscapes and sites of historical, cultural or archaeological significance.

3. Types and Characteristics of Potential Impacts.
   The likely significant effects on the environment from the proposed development in relation to criteria set out under paragraphs 1 and 2 of this Annex with regard to the impact of the project on the factors specified in Article 3(a), taking into account:

- The magnitude and spatial extent of the impact (for example geographical areas and size of the population likely to be affected);
- The nature of the impact;
- The transboundary nature of the impact;
- The intensity and complexity of the impact;
- The probability of the impacts;
- The expected onset, duration, frequency, and reversibility of the impact;
- The cumulation of the impact with the other existing and/or approved projects;
- The possibility of effectively reducing the impact.

In compliance with the requirements of the 2014 Directive, this Screening Report provides details of the information specified in Annex IIA, taking account of the criteria in Annex III, and provides the information required under Schedule 7A of the 2001 Regulations.

The key issue for the competent authority in the context of the possible need for EIA of sub-threshold projects is whether or not such development is likely to have significant effects on the environment. Consideration of significant effect should not be determined by reference to size only, the nature and location of a project must also be taken into account. This report has been furnished to Cork County Council with the necessary information to make this decision.

## 2.4 Form of Decision

As stated previously, it is a matter for Cork County Council, as the competent authority, to determine whether the proposed development is likely to have significant effects on the environment such as to require an EIA to be carried out. If their screening determination reaches the conclusion that the proposed development is not likely to have significant effects on the environment, the Local Authority's attention is specifically drawn to the requirement that the Council's screening determination must comply with the requirements of Article 103 (1B), (1C), (3) and (3C) of the Planning and Development Regulations, as amended, which provide, in so far as relevant. Mitigation measures for the proposed development during the construction

and operational phases are set out in the supporting reports included with this application including, but not limited to;

- Construction Management Plan including a Resource and Waste Management Plan
- Operational Waste Management Plan
- Ecological Impact Assessment
- Appropriate Assessment Screening Report
- Arboriculture Assessment
- Planning and Design Statement
- Flood Risk assessment
- Drainage Impact Assessment
- Architectural Drawings
- Landscape Report and Drawings
- Infrastructure Design Report and Drawings
- Transportation Assessment and Mobility Management Plan; and
- A Stage 1 Road Safety Audit.

All mitigation measure have been taken into account in the context of this EIA Screening Assessment.

# 3. Information Required by the Annex II(A) of the 2014/52/EU

This section of the report responds to the requirement to provide; '*A description of the proposed development, including in particular: (a) a description of the physical characteristics of the whole proposed development and, where relevant, of demolition works*;'.

## 3.1 Physical Characteristics of the Whole Project and Demolition Works

The subject site for this application has a gross site area of 6.88ha and consists of undeveloped ground which has resulted in shrub willow growth within the northern portion of the site.

The northern boundary of the site fronts onto the N25 which is the main street within Castlemartyr and part of the main Cork to Waterford Road. The area surrounding the site is characterised by a mix of uses comprising mostly of residential and agricultural use with the lands to north, west and southwest having all been developed for residential use.

The subject site and proposed development form part of the larger landholdings which will be developed under separate planning applications as part of a potential masterplan.

There are no demolition works proposed as part of this development.

## 3.2 Project Description

The proposed development consist of the construction of 150 no. residential dwellings, a creche and all associated sire development works including

footpaths, parking, drainage and landscaping. The proposed creche is designed to cater for 68 no. children.

Associated site work will consist of footpaths, cycle paths, car and bicycle parking, drainage, fencing, bicycle and bin stores, lighting and landscaping/amenity areas. Access to the site will be via a new vehicle access point and pedestrian/cycle connection from the existing N25 Killeagh Road.

The development will include the provision of landscaping and open spaces and amenity areas for future residents.

Existing biodiversity will be enhanced and maintained throughout the landscaping proposals, particularly the provision of woodland habitat and other pockets woodland area in the form of scattered trees and wetland will be provided throughout the site. Further details of the landscaping proposed can be found within the landscape masterplan and proposed drawings prepared by Bernard Seymour Landscape Architects.

## 3.3 Cumulation with other Existing and/or Approved Plans and Projects

The subject site is bounded by the N25 on the north, which is the main street and part of the main Cork to Waterford Road. The area surrounding the site is characterised by a mix of uses comprising mostly of residential and agricultural use with the lands to north, west and southwest having all been developed for residential use.

A planning search has been carried out for the village of Castlemartyr. It is noted that at the time of writing this report, there were no significant planning applications within Castlemartyr. Most planning applications noted are for single dwellings, extensions or retention planning.

Cork County Council granted planning permission, ref. 22/5738, on the 8th of December 2022, for 2 no. residential dwellings on a site across from the subject site, fronting the N25. A commencement notice was submitted on the 19th of June 2023 for the construction of the two dwellings. The construction of these appears to be substantially complete.

| Ref. No. | Development | Decision | Address | Distance from Site |
|---|---|---|---|---|
| **19/4734** | Retention for an existing 24m high telecommunications antennae support structure on a concrete base, with associated equipment attached & equipment cabinets and cabin within a palisade fenced compound. | Granted with 2 no. Conditions on 28/06/2019 | Cronin Concrete Group, Ightermurragh, Ladysbridge, Co. Cork | Circa 1.8km |

| | | | | |
|---|---|---|---|---|
| **20/4771** | Replace the existing east boundary fence and vehicular access entrance gate with steel mesh fencing and gate and to also replace 4 no. existing gates within the site boundary. | Granted on 25/08/2020 with 4 no. Conditions | Gortnahomna More, Castlemartyr, Co. Cork | Circa 45m |
| **22/5738** | Permission for the demolition of existing shed and the construction of 2 no. dwelling houses, site entrances and all associated works | Granted with 22 no. Conditions on 08/12/2022 | Castlewell, Killeagh Road, Castlemartyr, Co. Cork | Circa 20m |
| **22/6414** | Alter elevations of existing detached bungalow, including the addition of projecting porch and bay-windows as well as changes to window/door fenestration together with conversion of existing garage to living accommodation as well as alteration/relocation of vehicular and pedestrian site entrances, with all associated site development works. | Granted with 12 no. Conditions on 07/02/2023 | Gortnahomna Beg, Killeagh Road, Castlemartyr, Co.Cork | Circa 20m |
| **22/6416** | Upgrade the existing Castlemartyr Wastewater Treatment Plant | Granted with 11 no. Conditions on 04/08/2023 | Castlemartyr Wastewater Treatment Plant, Ladysbridge Road, Bridgetown, Castlemartyr, Co.Cork | Circa 70m |

Table 3.1 Neighbouring Planning Applications


Figure 3.1 Neighbouring Planning Applications

The above planning applications have been subject to environmental assessment including an assessment of the implication of the proposed development to biodiversity and where required have set out mitigation measures that aim to avoid the potential for these developments to have significant effects to local biodiversity, alone or in-combination with other plans or projects. In view of the findings set out for these other development projects, it is concluded that this current project will not have the potential to combine with them to result in significant cumulative effects to local biodiversity.

It is also reasonable to assume that the development consents would incorporate conditions requiring protection of the environment during the construction phase. Given the nature of the recent applications in the immediate vicinity of the site, it is considered that some of these sites are already operating in a manner whereby construction work has already commenced. Given the proposed timing of this application (opening year approximately 2026), it is not considered likely therefore that the construction and operation of development will result in significant cumulative impacts.

Combination/cumulative effects of this proposed development with regards to permitted development have been considered in the NIS report prepared by Doherty Environmental Consultants Ltd. In addition to the NIS report, an Ecological Impact Assessment (EcIA) has also been prepared by DEC Ltd. This development was assessed for its potential adverse effects to the Natura 2000 sites and the accompanying reports concluded that the proposed development will not have significant effect on any habitats or species designated as conservation interests for any Natura 2000 sites. The EcIA concluded the site will not result in any residual impact to designated conservation areas and there will be no residual loss of habitat of conservation value. The proposed landscaping design and provision of woodland habitats as part of the design will have the potential to result in

minor net increase in the extent of woodland habitat and increase the floral diversity.

A detailed Construction Management Plan report has been prepared by Donnachadh O'Brien and Associates Consulting Engineers to outline how the development manages and adheres to best practice guidelines regarding surface water management during both construction and operational phases. Therefore, it is considered the significant adverse cumulative effects are unlikely on any Natura Sites 2000.

A Flood Risk Assessment has been undertaken by JBA Consulting and a specific hydrogeological assessment of the study area has been undertaken to identify the hydrogeological features in the area and within the report it outlines the post-development design has been assessed against climate change scenario. The assessment considers residual risk to the development such as;

- Blockage of Bridge structures along the Kiltha River
- Blockage of the swallow hole at the Dower River
- Additional cross catchment flow via the karst system to the Dower River.

Following a detailed survey, hydrological assessment and hydraulic modelling of the Kiltha River, the Dower River, the unnamed stream and the Coolmucky stream; the site has been demonstrated to be wholly within Flood Zone C and is not at risk of fluvial flooding from any of the modelled watercourses.

The proposed minimum FFL within the site is 12.25mOD, which covers the blockage scenario and produces the highest flood level at 11.41mOD during the 0.1 % AEP event. The minimum FFL of 12.25mOD provides a freeboard of 0.84m above the 0.1 % AEP residual risk event.

A traffic and Transport Assessment forms part of this LRD application and has been prepared by Traffic Insight. Within the transport assessment it illustrates that the proposed development would have no material impact on the performance of the road network within the sites vicinity.

## 3.4 Nature of Any Demolition Works

There are no demolition works proposed as part of this development.

## 3.5 The Use of Natural Resources

The ecological impact assessment completed and submitted with this application notes that the proposed development incorporates careful consideration of natural resource use, focusing on mitigating ecological impacts and promoting sustainable practices. One of the primary concerns is habitat loss, including the removal of approximately 51% of the existing willow scrub and a small portion of hedgerow. To address this, the landscape plan proposes measures to enhance habitat quality and biodiversity. Native species such as oak, alder, birch, hawthorn, Scots pine, and cherry will be

planted to establish ecological corridors and buffers, thereby enhancing the environmental value of the site.

The proposed 150 no. residential units and creche are not expected to have a high demand for water resources.

The report also discusses the use of natural resources during the construction and operational phases of the development. During construction, natural resources such as stone, gravel, and water will likely be used for infrastructure development, including roads, foundations, and landscaping. However, no extraordinary or unusual use of natural resources is anticipated during the operational phase. The development is designed to connect to the existing wastewater treatment plant (WWTP), and Uisce Éireann has confirmed that the WWTP has the capacity to accommodate the additional demand. This ensures that resource use for wastewater treatment will remain within existing infrastructure limits and will not place undue pressure on local ecosystems.

The submitted CEMP by DOBA Consulting Engineers outlines the strategy for reducing and minimising waste and recycling of materials where appropriate. Best practice procedures in general will minimise waste generated on site. This will have a positive environmental effect as waste to landfill will be minimised.

Overall, by integrating robust measures to protect and enhance natural resources while fostering biodiversity, the proposed development aligns with sustainable resource use and ecological preservation.

## 3.6 The Production of Waste

Residues and emissions from the construction phase of the development will be related to construction waste and emissions from construction plant. No out of the ordinary residues, or emissions, are likely during the construction phase of the development.

All proposed construction works will be completed in compliance with the Construction Environmental Management Plan (CEMP) that has been prepared for the project by Donnachadh O'Brien & Associates Consulting Engineers.

The CWMP includes measures to ensure that minimum waste is generated and maximum recycling, re-use, and recovery of waste with diversion from landfill during the construction stage.

Any waste arising during construction will be managed based on the Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Development Projects. Waste materials generated during site clearance and construction will be segregated on site, where it is practical. Where the on-site segregation of certain waste types is not practical, off-site segregation will be carried out.

There will be skips and receptacles provided to facilitate segregation at source. All waste receptacles leaving site will be covered or enclosed. Waste will be handled by an approved waste contractor holding a current waste

collection permit. The appointed contractor will collect and transfer the wastes as receptacles are filled. Any waste requiring disposal off-site will be reused, recycled, recovered or disposed of at a facility holding the appropriate registration, permit or licence, as required.

An Operational Waste Management Plan has been prepared by Donnachadh O'Brien & Associates Consulting Engineers and submitted with this application to ensure that the management of waste during the operational phase of the Proposed Development is undertaken in accordance with current legal and industry standards.

No out of the ordinary production of waste or residues is likely during the operational phase of the development. Operational waste generated will generally be domestic waste from the residential units and will be disposed of by a licensed waste contractor.

No significant negative impacts are anticipated due to production of wastes during construction or operation of the proposed development.

## 3.7 Pollution and Nuisances

The Construction and Environmental Plan Management Plan (CEMP) prepared by Donnachadh O'Brien & Associates Consulting Engineers and describes the environmental measures and procedures to be followed for the duration of the construction phase. It proposes mitigation measures where appropriate for managing noise, dust, suspended solids, accidental spillages, traffic and waste.

### 3.7.1 Air Quality

The CEMP includes an Environment Management Plan within section 5.5, which notes that the final contractors CEMP will include the full mitigation measures as described in the NIS/Ecology reports. The report notes the following Air Quality mitigation measures:

- Spraying exposed earthwork activities and site haul roads during dry weather;
- Provision of wheel washed;
- Covering stockpiles;
- Control of vehicle speeds, speed restrictions and vehicle access;
- Sweeping of hard surface roads.

Additionally, during the construction phase of the development 1.8 m hoarding will be provided around the site works which will minimise the dispersion of dust and any generators will be located away from sensitive receptors.

### 3.7.2 Noise and Vibration

The CEMP notes that the following mitigation measures will be implement during construction in order to reduce noise and vibration impact to nearby noise sensitive areas:

- Site compounds will be located away from noise sensitive areas and these will be restricted to normal working hours;

- The lifting of bulky items, dropping and loading of materials will be restricted to normal working hours.
- Effective exhaust silencer systems can be fitted to diesel engines;
- Control measures will be employed during cleaning of concrete mixers to ensure no impulsive hammering is undertaken;
- Materials will not be dropped from excessive heights;
- Demountable enclosures to screen operatives using hand tools and will be moved around the site as required;
- All plant items will be maintained to control noise measures;
- Sound insulation will be provided by constructing site hoarding around the site;
- Periodic construction noise monitoring will be undertaken to ensure compliance with the International Standards ISO 1996: 2017: Acoustics – Description, measurement and assessment of environmental noise.
- Noise conditions shall be adhered to as follows, subject to Cork County Councils conditions - 70dB(A) (LAeq 1 hour) between 0800 hours and 1800 hours Monday to Friday inclusive (excluding bank holidays) and between 0800 hours and 1300 hours on Saturdays when measured at any noise sensitive location in the vicinity of the site. Sound levels shall not exceed 45dB(A) (LAeq 1 hour) at any other time following completion of the site development works.

In addition, vibration limits will be applied for the duration of construction works.

### 3.7.3 Operational

During the operational stage it is considered that the proposed residential development would not have any negative impact in terms of pollution or nuisance.

The design incorporates energy efficiency measures to meet the standards of the recently introduced NZEB Part L Regulations and will thus positively contribute to a reduction in fossil fuel use and associated greenhouse gas emissions.

## 3.8 The Risk of Accidents, having regard to Substances or Technologies Used

The proposed development is residential in nature and is not at risk of major accidents, nor is the development as designed likely to increase the risk of a major accident in this location.

Section 3.8 of the Natura Impact Statement addresses the risk of accidents during the construction and operational phases, particularly regarding substances or technologies used that could pose environmental hazards. During the construction phase, potential risks include the spillage or leakage of hazardous substances such as hydrocarbons, cement-based materials, or other construction-related pollutants, which could infiltrate groundwater or

surface water systems. Similarly, during the operational phase, accidental fuel spills or failures in surface water management systems could lead to environmental contamination.

To mitigate these risks, comprehensive measures will be implemented. All hazardous substances will be stored in secure, bunded containers with impervious bases capable of holding 110% of their contents, preventing any accidental leakage. Refuelling activities will be confined to impermeable, designated areas, while drip trays will be placed under stationary machinery to capture potential leaks. Spill kits and oil absorbent materials will be available on-site, with trained personnel equipped to respond to incidents promptly. In addition, temporary construction site drainage will include perimeter drains with filtration systems to trap contaminants, and operational phase surface water discharges will be treated through oil and petrol interceptors.

An environmental emergency response plan will be developed to manage potential incidents, including protocols for containment and mitigation of spills. These measures, combined with robust surface water management systems, aim to eliminate or significantly reduce the likelihood of accidents impacting nearby European Sites, such as the Ballymacoda Bay SAC and SPA, thereby ensuring the project's compliance with environmental safeguards.

The AA screening report by Doherty Environmental addresses flood risk, stating that a Flood Risk Assessment (FRA) was conducted for the proposed development. The assessment indicates that the residential portion of the development site is located within Flood Zone C, meaning it is not at significant risk of flooding from sources such as tidal, fluvial (river), pluvial (rainfall-related), groundwater, or human/mechanical error sources. Thus, flood risk to the development and its surrounding areas is considered low, and no significant flood-related impacts are expected from the project.

No Seveso sites have been identified in the neighbouring areas.

Potential impacts during operation of the development are not anticipated, subject to compliance with building and fire regulations.

No risk of major accidents or disasters have been identified.

## 3.9 Risk to Human Health

Construction sites pose potential risk to the health and safety of the public. Health & Safety issues will be the primary concern for the appointed Contractor and will apply in respect of persons working on the site and in respect of passing pedestrians, motorists or other transport carriers. The Contractor will include provision for correct positioning of all warning and advisory signs, traffic cones, signals and warning lamps which may be necessary for the proper control of traffic and to minimise inconvenience to the general public caused by the operations.

CEMP details that the contractor shall comply with the requirements of the Safety, Health and Welfare at Work Act, 2005, and the Safety Health and Welfare at Work (Construction) Regulations, 2006. This will include the

formulation of a Health and Safety Plan to be implemented during the construction and maintenance phases. Site personnel will be provided with training in areas such as first aid and fire marshals.

The site will be provided with a secure boundary, as access by people who have not received the proper training and are unfamiliar with construction operations is dangerous. All access points to the site will be controlled in the form of gates or doors, which will be locked outside of working hours.

All staff areas will be well kept clean, and maps will be provided to identify first aid posts, material storage, spill kits, material and waste storage, and welfare facilities. Site lighting will be provided and fitted with motion sensors to reduce usage but keep the site safe and free from unauthorised access outside of working hours.

A Construction Traffic Management Plan has been prepared by DOBA Consulting Engineers which puts in place the support for the construction of the proposed development for programme of works, agreed routes to site and detail of a site liaison office and will be finalised by the main contractor (once appointed). The appointed contractor will be required to plan and manage deliveries and collections from the site to minimise the impact on the surrounding road network.

During the operational phase the risk to human health is considered to be negligible. The proposed design provides for the segregation of pedestrians and traffic and incorporates the principles of universal access and the requirements of Part M of the Building Regulations so that the development will be readily accessible to all, regardless of age, ability or disability.

The integration of energy efficient measures into the design will provide for healthier living standards for future occupants.

Significant negative impacts to human health as a result of construction and operation of the proposed development are not considered likely once mitigation measures are put into operation.

## 3.10 Location of the Project, with Regard to Environmental Sensitivities of Geographical Areas Likely to be Affected

### 3.10.1 The Existing and Approved Land Use

The subject site for this application has a gross site area of 6.88 ha and consists of undeveloped ground which has resulted in shrub willow growth.

The northern boundary of the site fronts onto the N25 which is the main street and part of the main Cork to Waterford Road. The area surrounding the site is characterised by a mix of uses comprising mostly of residential and agricultural use with the lands to north, west and southwest having all been developed for residential use.

The northern part of the site is zoned Existing Residential/Mixed Residential and Other Uses. The following zoning objective applies to this part of the site:

Objective ZU 18-9

*"The scale of new residential and mixed residential developments within the Existing Residential/Mixed Residential and Other Uses within the settlement network should normally respect the pattern and grain of existing urban development in the surrounding area. Overall increased densities are encouraged within the settlement network and in particular, within high quality public transport corridors, sites adjoining Town Centres Zonings and in Special Policy Areas identified in the Development Plan unless otherwise specified, subject to compliance with appropriate design/amenity standards and protecting the residential amenity of the area.*

*Other uses/non-residential uses should protect and/or improve residential amenity and uses that do not support, or threatens the vitality or integrity of, the primary use of these existing residential/mixed residential and other uses areas will not be encouraged."*

The southern section of the site is zoned for residential development in Castlemartyr and the following objectives apply:

*CM-R-01 – Medium B density residential development. To include connectivity with adjoining development to the north and west. The site contains mature hedgerows and scattered trees which are of important local biodiversity value.*

*CM-RAP-02 – Medium B density residential development. To include connectivity with adjoining development to the north and west. The site contains mature hedgerows and scattered trees which are of important local biodiversity value.*

The proposed development is in line with these objectives.

### 3.10.2 Transboundary Impacts

Given the location of the proposed development there will be no transboundary impacts.

### 3.10.3 The Relative Abundance, Quality, and Regenerative Capacity of Natural Resources in the Area

The proposed project involves the 150 no. residential units, 1 no. childcare facility and all associated ancillary site development works including access, footpaths, parking, drainage, landscaping and amenity areas.

The proposed development will connect with existing surface water and foul water services.

The AA Screening report prepared by Doherty Environmental Consultants Ltd highlights the area's geological and hydrological characteristics, which feature karstic limestone bedrock that supports rapid interchange between

surface and underground water systems. This groundwater is moderately to highly vulnerable, with potential discharge paths to nearby rivers (Kiltha and Dower) and ultimately Ballymacoda Bay, a sensitive ecological site. Based on the conclusions of the Screening report for Appropriate Assessment, a Natura Impact Assessment (NIS) was prepared by the ecologist to inform the competent authority during its Appropriate Assessment of the project and its potential to result in adverse effects to the integrity of the Ballymacoda Bay European Sites, alone or in-combination with other plans or projects.

The site's natural resources, particularly groundwater, are crucial but fragile, necessitating protective measures to prevent potential pollution during construction and operation. No direct surface watercourses intersect the site, though indirect groundwater links emphasize the need for careful water management to safeguard the region's ecological health.

While there is potential for impact, the NIS report confirms that with careful safeguards and management practices, significant negative effects on natural resources can be minimized.

### 3.10.4 The Absorption Capacity of the Natural Environment

The proposed development is not expected to result in significant impacts to biodiversity or to the existing environment.

An Ecological Impact Assessment (EcIA) has been prepared by Doherty Environmental Consultants Ltd which notes that the natural environment at the project site includes habitats of varying ecological value. The most notable habitats identified are willow scrub, hedgerows, and areas supporting the bee orchid (a species of county importance). While some habitats are of lower ecological value, such as bramble scrub and arable land, others like willow scrub and hedgerows are considered key ecological receptors (KERs). The site also supports faunal species such as bats (soprano pipistrelle, common pipistrelle, and Leisler's bat), birds like yellowhammer (a red-listed species), and common terrestrial mammals.

The EcIA notes that, provided the mitigation measures are carried out in full, the proposed development is unlikely to result in significant residual impacts on biodiversity. To address the loss of 51% of the willow scrub habitat, the project will create 1.17 hectares of new woodland using native species such as oak, alder, and Scots pine, enhancing habitat quality and biodiversity on-site. Hedgerow losses, which account for only 2% of existing habitat, will be mitigated by retaining the majority of the hedgerows and planting additional native species to strengthen ecological connectivity. The rare bee orchid will be translocated to a designated area within the landscaped site, with a managed mowing regime to ensure its long-term survival. For bats, public lighting will be carefully designed to minimize light spill, preserving critical commuting and foraging routes. Measures to manage invasive species include pre-construction surveys, containment strategies, and cleaning protocols for machinery and equipment. Additionally, robust pollution control measures, such as silt fences and secure storage for hazardous materials, will protect nearby watercourses and groundwater systems. Collectively, these mitigation actions are expected to enhance the site's

ecological value, support biodiversity, and reduce the environmental footprint of the development.

The report concludes that there will be no significant impacts on designated sites, habitats, flora, or fauna, provided the proposed mitigation measures are fully implemented. The nearest designated site, Clasharinka Pond pNHA, located approximately 300 meters away, and the Ballymacoda Bay European Sites downstream, are not expected to experience any direct impacts from the development. Hydrological pathways connecting the project site to Ballymacoda Bay will be carefully managed, with mitigation measures ensuring that surface water runoff will not affect water quality. Additionally, habitats of ecological importance, such as willow scrub and hedgerows, will be compensated through habitat creation and enhancement. Specific measures, such as the translocation of the bee orchid and the design of low-impact lighting for bats, will safeguard sensitive flora and fauna. Collectively, these efforts are expected to avoid significant adverse effects on biodiversity and ensure the ecological integrity of the surrounding environment.

### 3.10.5 Landscape and Visual Impacts

The proposed development will inevitably alter the site, transforming it from a greenfield site to a residential use site. This change is an expected outcome of the residential zoning designation of the site and the previous planning permissions on site. It is considered that the changes are also in keeping with the suburban built-up nature of the wider area.

The proposed design comprises of two-three storey buildings which is consistent with its surrounding environment. The proposed design respects the existing topography on site ensuring an almost negligible visual impact for the surrounding properties.

The retention of existing boundary trees and hedgerows (where possible) and a number of trees within the site will provide valuable landscape infrastructure and screening relative to adjacent sites.

Potential visual impacts during the construction phase would be associated to temporary works, site activity and vehicular movements to and from the application site. Temporary works such as fencing, gates, machinery and plant equipment will be required for the construction of the development. All of these impacts will be temporary in nature. The proposed development will consist of new residential buildings and road infrastructure within the area which will replace the existing field which has been previously stripped.

Impacts of the operational phase will be minimal and will be mitigated in the medium to long term as tree planting on the site matures and integrates into the local landscape.

Overall, it is considered that the broader landscape character area and visual context has the capacity to absorb a proposed residential development of this scale in landscape and visual terms. The proposed development will have a positive visual impact as it will remediate the unfinished housing estate.

### 3.10.6 Land and Soil

Information on underlying soil type and bedrock was provided by the Geological Survey of Ireland database and the EPA database and interactive map viewer (https://gis.epa.ie/EPAMaps/SEA).

The subsoils on the site are Sandstone till derived from Devonian sandstone and are identified as of sandy texture. The ground investigations carried out by DOBA show that the southern portion of the site consists of stiff orange brown to reddish brown sandy gravelly clays and the northern portion of the site consist of gravelly clayey sand. The site is underlain by a range of Lower Carboniferous, Dinantian-aged rock formations, namely the Little Island Formation, the Cork Red Marble Formation and Waulsortian Limestones. This geological makeup indicates a karstic environment, with high groundwater vulnerability and rapid water interchange between surface and underground systems. This characteristic has implications for water management, as any surface contaminants could quickly reach groundwater sources if not properly managed.

The site does not form part of a geological heritage area.

### 3.10.7 Water Environment

Information on water features, water quality and Water Framework Directive (WFD) status of watercourses in proximity to the site was determined from the EPA website and interactive map viewer https://gis.epa.ie/EPAMaps, and www.catchments.ie.

The proposed development will connect with the existing foul sewer network in the area.

The Appropriate Assessment (AA) Screening and Natura Impact Statement (NIS) prepared by Doherty Environmental have assessed the potential impact of the proposed development on the nearby waterbodies. The NIS report thoroughly assesses the potential impacts of the proposed development on nearby waterbodies, particularly focusing on the hydrological connection between the project site and the Ballymacoda Bay European Sites via surface and groundwater pathways. During construction, the risk of contamination from pollutants such as hydrocarbons, silt, and cement-based materials was identified, with the potential to affect water quality in the Kiltha River, which drains into Ballymacoda Bay. Similarly, during the operational phase, accidental spills or untreated discharges from the development's surface water management system were noted as potential threats to downstream waterbodies.

To evaluate these risks, the report utilized a Source-Pathway-Receptor model, identifying surface water and groundwater as the primary pathways. Groundwater beneath the site is influenced by karstic geology, enabling rapid interchange between surface water and groundwater systems, which could transfer pollutants to the Kiltha River and, ultimately, to the Ballymacoda Bay SAC and SPA.

Mitigation measures proposed include implementing a Sustainable Drainage System (SuDS) to manage surface water flow, using attenuation tanks and

hydrobrakes to control discharge rates, and installing oil and petrol interceptors to filter contaminants. During construction, temporary drainage systems, spill response protocols, and secure storage for hazardous materials are planned to prevent contamination. These measures aim to ensure that potential impacts on nearby waterbodies are minimized, safeguarding water quality and protecting the conservation objectives of connected European Sites.

The proposed development is not located within a coastal zone or within a wetland area.

#### 3.10.8 Cultural Heritage and Archaeology

John Cronin and Associates has prepared an archaeological impact assessment which forms part of the application. The assessment examines the potential impacts that the proposed development may have on the recorded and potential archaeological heritage resource of the area. The subject lands were assessed through a combination of desktop surveys, site inspections, geophysical surveys, and targeted archaeological testing in 2017 as part of a previous application. These investigations included lands to the south of the subject site which are outside the area under consideration. Nothing of archaeological interest was identified within the boundary of the current proposed development site. The AIA summarises the results of previous surveys and investigations and outlines mitigation measures.

One area of archaeological interest was identified outside the proposed development site, in a field to the south of Field C, and the AIA compiled by Danial Noonan Archaeological Consultancy recommended that an Archaeological Exclusion Zone measuring 38 metres by 40 metres (1,520 sq. m) should be established within the site. This area is outside the current proposed development site but is within land that is owned by the applicant. It is recommended that this exclusion zone is marked using temporary boundary fencing and signage during any development at this site, despite being outside the redline planning boundary, in order to avoid any interference to the area of archaeological sensitivity.

# 4. Screening Determination

The potential for impacts arising during the construction and operational phases have been considered above and the characteristics of the likely effects arising from the proposed development are rated using the descriptive terminology presented in the EPA (2022) Guidelines on the Information to be contained in Environmental Impact Assessment.

## 4.1 Characteristics of Potential Impacts

We note the criteria of Paragraph 3 of Schedule 7, Characteristics of Potential Impacts:

> *"The potential significant effects of proposed development in relation to criteria set out under paragraphs 1 and 2 above, and having regard in particular to:*

*- the extent of the impact (geographical area and size of the affected population),*

*- the transfrontier nature of the impact*

*- the magnitude and complexity of the impact,*

*- the probability of the impact,*

*- the duration, frequency and reversibility of the impact".*

These criteria are dealt with in the report above and the Table 1 below summarises the predicted post-mitigation significance, quality, and duration of the identified likely effects.

It should be noted that given the nature and scale of the proposed development, there is no likelihood of any trans frontier impacts arising from either the construction or operational phases

| Aspect | Phase | Potential Effect | Extent | Probability | Significance of Effects | Quality of Effect | Duration |
|---|---|---|---|---|---|---|---|
| **Landscape** | **C** | Loss of open area and character as a result of development of a greenfield area | Local | Likely | Moderate | Negative | Short-term |
| | **O** | Increased planting as part of landscape masterplan | Local | Likely | Moderate | Positive | Long-term |
| **Visual** | **C** | Perceived negative changes due to removal of vegetation and emergence of plant and machinery | Local | Likely | Moderate | Neutral | Short-term |
| | **O** | Negative perception of proposed development, until landscaping scheme matures | Local | Likely | Slight | Neutral | Medium-term |
| **Biodiversity** | **C** | Disturbance during construction stage | Local | Likely | Not significant | Neutral | Short-term |
| | **O** | Increased planting and biodiversity on site | Local | Likely | Moderate | Positive | Long-term |
| **Land & Soil** | **C** | Loss of greenfield site | Local | Likely | Moderate | Neutral | Long-term |
| | **O** | None predicted | - | - | - | - | - |
| **Human Health** | **C** | None predicted | - | - | - | - | - |
| | **O** | None predicted | - | - | - | - | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Water** | **C** | Spills/leaks from plant entering the surface water drainage system. | Local | Not likely | Not significant | Neutral | Short-term |
| | **O** | None predicted | - | - | - | - | - |
| **Air Quality & Climate** | **C** | Reduction in air quality as a result of construction traffic and HGVs, and emissions from construction plant and machinery | Local | Likely | Not significant | Neutral | Short-term |
| | **O** | None predicted | - | - | - | - | - |
| **Noise** | **C** | Increase in noise as a result of construction activity, and operation of plant and machinery | Local | Likely | Slight | Negative | Short-term |
| | **O** | None predicted | - | - | - | - | - |
| **Cultural Heritage** | **C** | Potential impact to undiscovered sub surface remains | Local | Not Likely | Not Significant | Neutral | Short Term |
| | **O** | None Predicted | N/A | N/A | N/A | N/A | N/A |

Table 4.1 Potential Effects Table

### 4.1.1 Cumulative Effects

Additional traffic and activities during the construction phase may result in some negative impacts on passers-by and local neighbours, however these impacts will be temporary, lasting only for the duration of the construction phase and within restricted hours of the day and therefore will not be significant.

### 4.1.2 Residual Effects

Once the proposed mitigation measures are implemented significant residual impacts are not anticipated.

# 5. Conclusion

Development of the site for residential use is appropriate in the context of the site's residential zoning objective and national policy. Likely positive effects are forecast as the development will provide much needed sustainable residential accommodation.

The most likely impacts on the environment, without appropriate mitigation measures are considered to be:

- Dust, noise and traffic impacts associated with the construction process; and
- Impacts to local amenity and potential risk to pedestrians or road users.

A number of measures are proposed to mitigate the identified potential impacts, including:

- Development of a Construction and Environmental Waste Management Plan to mitigate construction related impacts; and
- A Construction Traffic Management Plan to mitigate construction traffic impacts.

Having regard to the nature, extent, and the characteristics of the likely impacts identified for the construction and operational phases, it is considered that the proposed residential development at the subject site will not give rise to a likely significant environmental effect and accordingly a sub-threshold EIA is not required.