

**Castlemartyr Wastewater Treatment Plant
Upgrade**
Environmental Impact Assessment Screening
Report

October 2022

Turley

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Leon Murray
leon.murray@turleyplanning.ie

Client

Turley Planning Ireland

Our reference

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1. Introduction

1.1 Overview

Turley¹ (the Agent), in association with a wider design team, has been engaged by Irish Water² (the Applicant) to undertake an Environmental Impact Assessment (EIA) Screening in relation to a planning application for Permission for development to upgrade the existing Castlemartyr Wastewater Treatment Plant (WwTP) at this site of circa 0.34 hectares at lands at Ladysbridge Road (R632), Castlemartyr, Co. Cork. (No Eircode available). The site is generally bounded by: Castlemartyr Resort access road to the north; Castlemartyr Woods to the south; Ladysbridge Road (R632) to the east; and Kiltha River to the west.

The development will consist of the demolition of the existing: aeration tank; inlet works; forward feed pumping station; picket fence thickener; and site boundary post and wire fence. The development will also consist of works to upgrade the existing Castlemartyr WwTP including provision of: secondary / biological treatment facilities (including: 2 no. anoxic tanks (circa 115 cubic metres), 3 no. aeration tanks (circa 342 cubic metres); 2 no. 8 metre diameter settlement tanks); a forward feed pumping station (circa 19 cubic metres); above-ground storm tank with circa 255 cubic meters of storage; tertiary treatment for phosphorus removal (comprising chemical dosing and filtration including 1 no. disc filter); a sludge management system (including the re-purpose of the existing clarifier tank to new picket fence thickener); an emergency stormwater overflow chamber; provision of circa 32 metres of below ground inlet sewer; circa 15 metres of below ground outfall pipeline (to discharge flows to the existing outfall location at the Kiltha River); a surface water drainage interceptor; a treated effluent outfall headwall to the Kiltha River (discharging to existing outfall location); and the upgrade of the existing inlet works including 2 no. fine screens and grit removal facility. The works will also consist of: provision of a new control building (circa 79 square metres); an ESB sub-station (circa 22 square metres); a permanent back-up generator and associated fuel tank; access gates and boundary fencing; all hard and soft landscaping; manholes; and all other associated site excavation, infrastructural and site development works above and below ground.

1.2 Purpose of this EIA Screening Report

The purpose of this EIA Screening Report is to inform the competent authority, in this case Cork County Council, as to whether the proposed expansion and upgrade of the Castlemartyr WwTP and associated works, referred hereafter as the 'the proposal' or 'proposed development', are likely to have significant effects on the environment such that an EIA be conducted and an EIA Report (EIAR) should be prepared.

This EIA Screening Report contains the necessary information to enable the competent authority, to undertake an EIA Screening Assessment and determine whether an EIA is required for the proposed development.

¹ 4 Pembroke Street Upper, Dublin, D02 VN24

² Colvill House, 24-26 Talbot Street, Dublin 1

This EIA Screening report is presented in accordance with the information as required as by Schedule 7A of the *Planning and Development Regulations 2001*, as amended (the Regulations).

1.3 Structure of EIA Screening Report

Table 1.1 details the structure of this report.

Table 1.1: Structure of the Castlemartyr WwTP Upgrade EIA Report

Section	Title	Description
1	Introduction	This section provides information on the proposal, the parties involved and the purpose of this report.
2	Project Description	This section provides a detailed description of the proposed development.
3	EIA Screening Methodology	This section details the methodology used in the preparation of this EIA Screening Report.
4	Characteristics of the Proposed Development	This section provides a detailed description of: the rationale for the proposal; the existing facility; the proposed development; and the proposals compliance with the Water Framework Directive.
5	Location of the Proposed Development	This section provides details regarding the proposal's site location and description.
6	Types and Characteristics of Potential Impacts	This section identifies the types and characteristics of the potential impacts the proposed development could have on the receiving and wider environment.
7	Possible effects on the Environment	This section analyses the proposal in the context of environmental legislation, policy and guidance in order to appraise the proposals compliance from an environmental perspective.
8	Conclusions and Recommendations	This section provides conclusions on the proposal based on the information provided and assessed in this report.

A separate Natura Impact Statement (NIS) has also been prepared for the proposed development.

1.4 Statement of Competency

In accordance with EIA Directive 2014/52/EU, we confirm that experts involved in the preparation of this EIAR Screening are fully qualified and competent in their respective fields. Each has extensive proven expertise in the relevant field concerned, thus ensuring that the information provided herein is complete and of high quality.

Table 1.2 provides information on the suitably qualified personnel who contributed to this report including their relevant experience and expertise.

Table 1.2: Suitably Qualified Personnel

Topic	Contributor	Company	Qualifications
Planning	León Murray	Turley	Senior Planner MIPI, MRTPI
Engineering	Conor Savage	Doran Consulting	Senior Engineer MEng,
Water Services	Denis O'Connor	EPS	ECI Design Manager BE Hons
Environment	Kate Harrington	Thorne Ecology	Project Ecologist MSc MCIEEM

2. Project Description

2.1 Site Location

The subject site is located at the existing Castlemartyr Wastewater Treatment Plant (WwTP) at a site of circa 0.34 hectares at lands at Ladysbridge Road (R632), Castlemartyr, Co. Cork. (No Eircode available). The site is generally bounded by: Castlemartyr Resort access road to the north; Castlemartyr Woods to the south; Ladysbridge Road (R632) to the east; and Kiltha River to the west.

The subject site is situated c.380m south of the village centre of Castlemartyr, Co. Cork and c.700m east of the Castlemartyr Resort (see **Figure 2.1**). The site is accessed from the R632 Road via an existing lane leading to Castlemartyr forest recreation area.



Figure 2.1: Aerial View of Subject Site and Surrounds

Source of base image: Google Earth

2.2 Site Description

The subject site comprises of woodland and the existing Castlemartyr WwTP which consist of a combined effluent and storm water discharge arrangement. The existing treatment plant includes an inlet works, storm water overflow, Flow to Full Treatment Pumping Station, secondary treatment (aeration and settlement), picket fence thickener and final effluent outfall. There are limited views towards the site from the public road. The WwTP is surrounded by a 2.4m security fence and a mature woodland. (See **Figure 2.2 – Figure 2.5**).



Figure 2.2: View from private access lane towards access of existing WwTP



Figure 2.3: View from access lane towards existing WwTP showing position/scale of existing infrastructure and existing fencing detail



Figure 2.4: View towards existing clarifier tank located on the site.



Figure 2.5: View from discharge point adjacent to Kiltha River (approximately 40m west of the site) towards existing WwTP

2.3 Project Rational

The proposal to upgrade the Castlemartyr WwTP is required in order to accommodate planned growth. No new residential developments can be serviced within the area until the existing facility has been upgraded.

This rationale is specified within the East Cork Municipal District Local Area Plan (LAP) 2017, which states that:

“The waste water treatment plant serving the village is also at capacity and is not in a position to accept influent. Nutrient removal is required prior to any further development taking place in Castlemartyr. The waste water treatment plant will need to be upgraded in order to facilitate further development in the village.”

With regards to new residential development in Castlemartyr, Policy DB-01 of the LAP states that:

“...within the development boundary of Castlemartyr it is an objective to encourage the development of up to 235 houses during the plan period”.

This objective cannot be satisfied unless the WwTP is upgraded to include nutrient removal to accommodate the additional load that would be created by an increased population. As identified in the publicly available EPA license details a number of submissions have previously been made (between 2011 and 2013) advising that the WwTP was discharging untreated wastewater into the Kiltha River. The existing WwTP does not have a storm retention tank. Therefore, during storm events there is a risk of overflow resulting in untreated wastewater discharging directly to the Kiltha River. This event also occurs when the WwTP is over capacity.

The proposed development consists of works to upgrade the WwTP to increase its capacity and its capability, providing secondary treatment to achieve *Urban Waste Water Treatment Directive (UWWTD)* standards and be *Water Framework Directive 2000/60/EC (WFD)* compliant. It will also provide storm water storage on the site adjacent to the existing WwTP.

In conclusion, this project is essential to facilitate the future growth of Castlemartyr, reduce the potential for significant environmental impacts and improve the water quality of the Kiltha River.

2.4 Existing WwTP

The existing WwTP consists of a combined effluent and storm water discharge arrangement.

The existing treatment plant includes an inlet works, storm water overflow, flow to Full treatment pumping station, secondary treatment (aeration and settlement), picket fence thickener and final effluent outfall. The WwTP is surrounded by a 2.4m security fence.

The existing WwTP has the capacity and capability to accommodate 2000PE.

Photos of the existing WwTP site are included in **Section 2.2** (see **Figure 2.2 – Figure 2.5**).

2.5 Proposed WwTP Upgrades

The proposal consists of the expansion and upgrade of the existing Castlemartyr WwTP to facilitate an increased treatment capacity and capability.

The development will consist of the demolition of the existing: aeration tank; inlet works; forward feed pumping station; picket fence thickener; and site boundary post and wire fence. The development will also consist of works to upgrade the existing Castlemartyr WwTP including provision of: secondary / biological treatment facilities (including: 2 no. anoxic tanks (circa 115 cubic metres), 3 no. aeration tanks (circa 342 cubic metres); 2 no. 8 metre diameter settlement tanks); a forward feed pumping station (circa 19 cubic metres); above-ground storm tank with circa 255 cubic meters of storage; tertiary treatment for phosphorus removal (comprising chemical dosing and filtration including 1 no. disc filter); a sludge management system (including the re-purpose of the existing clarifier tank to new picket fence thickener); an emergency stormwater overflow chamber; provision of circa 32 metres of below ground inlet sewer; circa 15 metres of below ground outfall pipeline (to discharge flows to the existing outfall location at the Kiltha River); a surface water drainage interceptor; a treated effluent outfall headwall to the Kiltha River (discharging to existing outfall location); and the upgrade of the existing inlet works including 2 no. fine screens and grit removal facility. The works will also consist of: provision of a new control building (circa 79 square metres); an ESB sub-station (circa 22 square metres); a permanent back-up generator and associated fuel tank; access gates and boundary fencing; all hard and soft landscaping; manholes; and all other associated site excavation, infrastructural and site development works above and below ground.

The proposed control building (GFA 79sq.m.) will be constructed of a galvanised structural grade steel sections consisting of framework and purlins. The roof will be constructed with 120mm Kingspan KS 1000 RW FIREsafe composite panels and finished with white enamel coated flat metal interior and Kingspan polycarbonate insulated roof lights. The side panels will be constructed with 100mm Kingspan KS 1000 RW FIREsafe composite panels and finished with white enamel coated flat metal interior. The unit will have 1 double steel door (RC4 Security Spec), 1 single steel pedestrian door (RC4 Security Spec) and 4 top opening double-glazed PVC windows. The ESB substation (GFA 21.6sq.m.) will be constructed of a non-flammable cladding and will have a flat roof. It will be accessible via ESB approved doors.

2.6 Construction Methodology

Wastewater in the village is currently collected in a partially combined drainage and sewerage network which discharges to a pumping station on the village main road prior to being pumped to a header manhole at the entrance to Castlemartyr Wood near the WwTP.

The existing WwTP consists of a combined effluent and storm water discharge arrangement which was separated in 2016. The existing treatment plant includes an inlet works, storm water overflow, Flow to Full Treatment (FFT) Pumping Station, secondary treatment (aeration and settlement), picket fence thickener and final effluent outfall.

Irish Water own additional adjacent lands to the west and south of the current WwTP site, which will allow for its expansion (see **Figure 4.1**). The proposed upgrade has a design PE of 3400 (current PE 2400) and upon completion, treated effluent shall comply with the Urban Wastewater Treatment Directive (UWWTD) Standards.



Figure 4.1: View from within existing site towards the proposed extension area (to the south west)

The upgrades and new treatment units listed in **Section 4.4** will extend into the surrounding scrub / wooded area, as shown on the Site Location Map (Dwg. No. 10015026-DRC-XX-XX-DR-Y-1006-Planning App - Site Location map) and Preliminary Site Layout (Dwg. No. 10015026-DRC-XX-XX-DR-Y-1007-Planning App - Site Layout) drawings prepared by Doran Consulting and submitted as part of this planning application. The majority of the works will be remote from the Kiltha River. However, works will be undertaken to the existing outfall. This will take place at the location of the existing discharge pipe and will comprise of the construction of a headwall at the riverbank.

Construction of the proposed plant will be phased. The existing plant will operate throughout the offline construction of the new main process. Once completed, flows can be switched to the new process with temporary shutdown and switchover facilitated with tankering of flows offsite if necessary to reduce the risk of effluent spillage. Once the new WwTP is near completion and in operation, the existing inlet works and picket fence thickener will be decommissioned.

2.7 Operation of the Proposed Development

The normal operation of the proposed development will be fully automated. Castlemartyr WwTP will have its own automation control centre where the plant's operation will be monitored. Telemetry / Alarms will also be available remotely to the operator's personal device when not present at the plant.

Power for the proposed pumping station will be provided by electricity from the national grid. Back-up diesel generators will also be provided.

2.8 Compliance with Water Framework Directive (WFD)

The WwTP that is the subject of this planning application has been designed to produce a discharge standard complying with 12mg/L BOD, 1.1mg/L ammonia and 0.18mg/L orthophosphate.

This will ensure that the water quality of the river continues to comply with maximum allowable concentrations as defined in the European Communities Environmental Objectives (Surface Waters) (Amendment) Regulations 2019 (SI No.77 of 2019).

In conclusion, the proposal provides secondary and tertiary treatment that will produce a final effluent whose loadings will not cause the receiving watercourse to exceed WFD chemical quality concentrations. Therefore, the proposal complies with the requirements of the WFD.

3. EIA Screening Methodology

3.1 Legislation

Directive 2011/92/EU as amended by Directive 2014/52/EU (the EIA Directive) sets out the requirements for EIA, including screening for EIA. Projects listed in Annex I of the EIA Directive require mandatory EIA while projects listed in Annex II require screening to determine whether an EIA is required or not. Annex I and Annex II of the EIA Directive have been transposed into Irish Law in the Regulations and in particular Schedule 5 (Part 1 and Part 2).

3.2 Screening for Mandatory EIA

All projects can be placed into one of the following two categories:

1. Those that **exceed the thresholds** laid down in planning policy and therefore have a mandatory requirement to prepare an EIAR; or
2. Those projects that are **sub-threshold** and must be assessed on a case-by-case basis to determine whether or not they are likely to have significant effects on the environment.

This first part of the EIA Screening exercise is to determine if EIA is required as set out in the Annex 1 of the EIA Directive, and the mandatory and discretionary provisions of the *Planning and Development Act 2000*, as amended (the Act) and Schedule 5 of the Regulations. Section 172 of the Act provides the legislative basis for mandatory EIA.

3.2.1 Screening for Mandatory EIA in the context of the Proposed Development

The proposed development is not listed in Annex 1 (EIA Directive) or Schedule 5 (Part 1) of the Regulations and therefore does not require mandatory EIA.

3.3 Screening Sub-threshold Development

Part 10 of the Regulations defines 'sub-threshold development' as "*development of a type set out in Part 2 of Schedule 5 which does not equal or exceed, as the case may be, a quantity area or other limit specified in that Schedule in respect of the relevant class of development.*"

For projects that fall below a class or threshold specified in Schedule 5, it is the decision of the Competent Authority to determine if an EIA (and the associated EIAR) is required to be completed. This is determined by examining if the 'sub threshold' development is likely to result in significant environmental effects. Significant environmental effects may arise due to the characteristics of the potential effects based on the nature and extent of the proposed development, and / or its location in relation to the characteristics of the receiving environment, particularly sensitive environments.

3.3.1 Screening Sub-threshold Development in the context of the Proposed Development

An examination of the relevant sections of Part 2 of Schedule 5 has been completed. Based on the nature and extent of the proposed development, Section 10 of Part 2 ‘Infrastructure projects’ and Section 11 of Part 2 ‘Other projects’ have been selected as being relevant in this case and is examined in **Table 3.1** below.

Table 3.1: Planning and Development Regulations 2001, as amended, Schedule 5, Part 2 – Thresholds

Schedule 5, Part 2 – Thresholds	Assessment
<i>“11(c) Waste water treatment plants with a capacity greater than 10,000 population equivalent as defined in Article 2, point (6), of Directive 91/271/EEC not included in Part 1 of this Schedule.”</i>	The proposed development comprises an extension of and upgrade works to an existing WwTP. The proposed development will not result in the capacity of the WwTP being greater than a 10,000 population equivalent. Threshold is not reached.

Schedule 7 of the Regulations is deemed to be one and the same as Schedule 7A. Therefore, Schedule 7A is used to form the basis of this assessment “*Information to be provided by the applicant or the developer for the purposes of Screening Sub-Threshold development for Environmental Impact Assessment*” together with Schedule 7 “*Criteria for determining whether development listed in Part 2 of Schedule 5 should be subject to an Environmental Impact Assessment*”³. The assessment is undertaken under three principal headings:

- Characteristics of the Proposed Development;
- Location of the Proposed Development; and,
- Types and Characteristics of the potential Impacts.

These three headings, together with the associated Schedule 7 criteria, are used as the basis for the examination of likely significant effects on the environment and are discussed in the following sections of this EIA Screening Report.

³ Paragraph 4 of Schedule 7A of the *Planning and Development Regulations 2001* (as amended) requires that: ‘*The compilation of the information at paragraphs 1 to 3 shall take into account, where relevant, the criteria set out in Schedule 7.*’ (Emphasis added). In this report, therefore, the information has been set out under the more detailed headings provided for under Schedule 7. In effect, this ensures that all of the information required under Schedule 7A has been furnished. It also presents the information in a manner that facilitates the competent authority in addressing the appropriate criteria in its screening assessment.

4. Characteristics of the Proposed Development

The characteristics of the proposed development have been assessed in the sections that follow with regard to the criteria as set out in Annex III of Directive 2014/52/EU and Schedule 7A of the Regulations.

4.1 The size and design of the whole of the proposed development

The proposal consists of the upgrade of the existing Castlemartyr WwTP to facilitate an increased treatment capacity and capability.

The development will consist of the demolition of the existing: aeration tank; inlet works; forward feed pumping station; picket fence thickener; and site boundary post and wire fence. The development will also consist of works to upgrade the existing Castlemartyr WwTP including provision of: secondary / biological treatment facilities (including: 2 no. anoxic tanks (circa 115 cubic metres), 3 no. aeration tanks (circa 342 cubic metres); 2 no. 8 metre diameter settlement tanks); a forward feed pumping station (circa 19 cubic metres); above-ground storm tank with circa 255 cubic meters of storage; tertiary treatment for phosphorus removal (comprising chemical dosing and filtration including 1 no. disc filter); a sludge management system (including the re-purpose of the existing clarifier tank to new picket fence thickener); an emergency stormwater overflow chamber; provision of circa 32 metres of below ground inlet sewer; circa 15 metres of below ground outfall pipeline (to discharge flows to the existing outfall location at the Kiltha River); a surface water drainage interceptor; a treated effluent outfall headwall to the Kiltha River (discharging to existing outfall location); and the upgrade of the existing inlet works including 2 no. fine screens and grit removal facility. The works will also consist of: provision of a new control building (circa 79 square metres); an ESB sub-station (circa 22 square metres); a permanent back-up generator and associated fuel tank; access gates and boundary fencing; all hard and soft landscaping; manholes; and all other associated site excavation, infrastructural and site development works above and below ground.

Construction works will be established within the footprint of the development boundary and will be constructed in a controlled manner in order to minimise disruption to Castlemartyr and the surrounding area.

The overriding purpose of the proposed development is to provide a long-term and sufficient wastewater treatment plant that will cater for existing and future development in Castlemartyr and the surrounding area. The proposed development will ensure that wastewater generated from the continued growth and economic development of Castlemartyr is appropriately treated in order to safeguard human health and the environment and will be carried out in compliance with the relevant EU Directives and national regulations on water quality.

It is anticipated that the size and design of the whole of the proposed development would not be likely to have a significant effect on the environment.

4.2 Cumulation with other existing development and / or development the subject of a consent for proposed development for the purposes of section 172(1A) (b) of the Act and / or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment

A review of existing and / or approved projects that may have the potential to result in cumulative impacts has been undertaken. This section considers plans and projects within the area.

The assessment found that the proposed development is not specified in Part 2 of Schedule 5 and does not meet or exceed any thresholds in that Part. Therefore, this assessment is required by the planning authority to determine, on a case-by-case basis, if the proposed development in cumulation with other developments would be likely to have significant effects on the environment.

Cumulative impacts refer to a series of individual impacts that may, in combination, produce a significant impact. The underlying rationale of this cumulative or 'in-combination' assessment is to take account of cumulative impacts from existing or proposed plans and projects and these will often only occur over time.

A review of plans and projects (recently granted planning applications) was undertaken in the vicinity of the proposed development and assessed in **Appendix 1** of this EIA Screening Report.

Appendix 2 of this EIA Screening Report provides an assessment of 'other' likely future planned projects that are currently being progressed by Cork County Council, Cork City Council and Irish Water in the vicinity, to include:

- Cork Lower Harbour Main Drainage Project;
- New Wastewater Treatment Plant on the Lee Road Water Treatment Plant Site; and
- National Leakage Reduction Programme.

During the construction phase in-combination effects, could include combined impacts on the traffic environment, population and human health (noise, air quality, disturbance, or increased risk of accidents) or from accidents / pollution events that may impact adversely on water quality.

The assessment found that the proposed development is largely within / close to an established urban environment (Castlemartyr) which is identified as a "Key Village" within the *Cork County Development Plan 2014*.

Any potential adverse cumulative effects are likely to occur during the construction phase and will be short-term in nature. There is potential for significant positive long-term cumulative effects in-combination with this proposed development and other projects in the area that will facilitate the long-term sustainable development of Castlemartyr.

The proposed development is not likely to result in significant adverse impacts either alone or in combination with the existing planned or likely future projects.

4.3 The nature of any associated demolition works

The development will consist of the demolition of the existing: aeration tank; inlet works; forward feed pumping station; picket fence thickener; and site boundary post and wire fence.

There are no Protected Structures or Recorded Monuments identified on the site.

The structures that require to be demolished have been found to not be of ecological value and no negative impacts are predicted as a result of the demolition works.

Prior to demolition of structures, a building survey will be undertaken to ensure the appropriate management and disposal of all demolition waste is undertaken in accordance with relevant waste management legislation.

It is anticipated that the nature of the demolition works with the proposed development would not be likely to have a significant effect on the environment.

4.4 The use of natural resources, in particular land, soil, water and biodiversity

According to the Natura Impact Statement prepared by Thorne Ecology and submitted as part of this Application the surrounding habitats consist of mixed broadleaved woodland, conifer plantation and depositing / lowland rivers.

The demolition and construction phases of proposed development will involve the excavation of topsoil, soil, rock and naturally occurring excavation material that will be reused within the proposed development where possible. The proposed works will also include the removal of trees and vegetation. External construction materials including gravel will be sourced off-site.

It is anticipated that throughout the demolition, construction and operation of the scheme the development would not result in the use of large amounts of natural resources greater than that associated with comparable developments or to the extent that would have a significant impact on the environment.

It is anticipated that the use of natural resources, in particular land, soil, water and biodiversity for the proposed development would not be likely to have a significant effect on the environment.

4.5 The production of waste

It is acknowledged that waste will be generated during the demolition, construction and operation of the proposed development but it is unlikely that the waste generated will be significant.

Notwithstanding, the appointed Contractor will implement a Construction and Environmental Management Plan (CEMP). The CEMP will ensure that all waste generated by the proposed will be removed off-site and disposed of appropriately. All excess construction materials will be returned to the suppliers.

It is anticipated that the production of waste associated with the proposed development would not be likely to have a significant effect on the environment.

4.6 Pollution and nuisances

As with all planning applications, there will be potential for dust and noise to be produced during the construction period. However, it is considered that this impact will be short-term.

The Contractor for the proposed development shall continuously monitor dust over the variation of weather and material disposal to ensure the limits are not breached throughout the project.

Furthermore, standard noise prevention measures will be incorporated into the construction works. Noise prevention measures include:

- Noise monitoring stations, which will be monitored daily, will be located on site and at recommended locations in the vicinity of the site to record background and construction noise activity;
- The best means practical will be used to minimise the noise produced by all on site operations;
- Proper maintenance of all operating plant to ensure noise emission compliance;
- All operating plant will be selected on the basis of incorporating noise reducing systems, and at a minimum be fitted with effective exhaust silencers;
- Compressors will be fitted with acoustically lined covers, which will remain closed while the machines are in operation;
- Plant such as pumps and generators which are required to work outside of normal working hours will be enclosed with acoustic enclosures; and
- There will be strict adherence to the site working hours stipulated in the Planning Conditions.

It is anticipated that the pollution and nuisances arising from the development would not be likely to have a significant effect on the environment.

4.7 The risk of major accidents, and / or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge

Throughout the demolition and construction phases of the development, applicable building and fire regulations and appropriate environmental controls will be put in place.

Furthermore, there are no technologies, materials or substances proposed which may cause concern.

The development is neither a Seveso site nor near any Seveso sites.

The lands have been zoned under the *East Cork Municipal District Local Area Plan 2017* and therefore have been subject to both a Strategic Environmental Assessment and a Strategic Flood Risk Assessment.

It is anticipated that the proposed development would not be likely to have a significant effect on the environment through risk of major accidents or disasters.

4.8 The risks to human health

There are no foreseen risks to human health during the construction or operation of the proposed development.

As noted, appropriate noise and pollution (including water) mitigation measures are to be put in place during the demolition and construction phases of the development (see **Section 4.6**).

Once operational, the proposed development will improve the water quality in the area which will be of benefit to human health.

It is anticipated that the proposed development would not be likely to have a significant effect on the environment in respect of risk to human health.

5. Location of Proposed Development

5.1 The existing and approved land use

The concentrated nature of the proposed development results in the lands on which the scheme will be implemented falling into 2 no. land use type and 1 no. zoning objective.

The total site area of the proposed development is 0.34 hectares. The existing land uses of the lands required for the proposed development include: lands associated with the existing wastewater infrastructure; and woodland.

The subject site is identified in the *East Cork Municipal District Local Area Plan 2017 (LAP)* as being located within the 'Settlement Boundary' of Castlemartyr (see **Figure 5.1**). A small portion of the site in the north-west corner is not zoned. Zoned areas in the LAP that have been developed are shown as part of the 'Existing Built Up Area'.

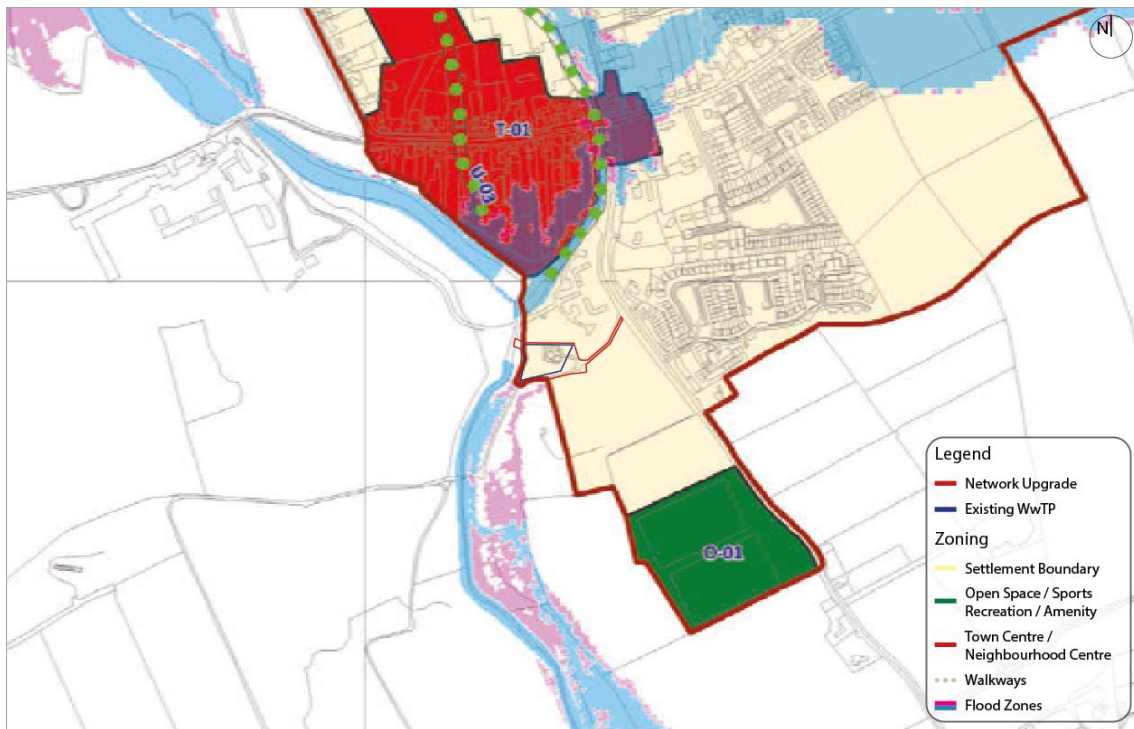


Figure 5.1: Castlemartyr Zoning Map

Source of basemap: *Castlemartyr Settlement Map [extract], Section 4.3, East Cork Municipal District Local Area Plan (LAP) 2017*

The assessment considered the potential impacts of the proposed development on the existing and approved land uses; with the following elements being identified as potential impacts:

- Permanent loss of woodland lands to accommodate the expansion of the WwTP and temporary loss within the proposed construction corridor of the proposed pipeline routes during construction;
- Temporary disruptions such as temporary change to access arrangements, services and drainage;

- Construction related traffic, noise and dust generation;
- Removal of trees and hedgerows;
- Spread of harmful weeds or diseases; and
- Restrictions on future land use changes and construction activities within the area of the permanent wayleave along the proposed sewer and outfall pipeline routes.

The above potential impacts will be reduced through the implementation of best practice construction techniques, including those used to avoid and reduce generation of dust and noise during construction. Following construction, woodlands lands within the construction corridor will be reinstated. This will be undertaken during the appropriate season to reduce impacts.

5.2 The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground)

The proposed development is not likely to have a significant effect on the quality and regenerative capacity of natural resources in the area.

As previously stated in Section 4.4, the surrounding habitats consist of mixed broadleaved woodland, conifer plantation and depositing / lowland rivers.

The proposed works will involve the removal of some vegetation in order to facilitate the development. Notwithstanding, the regenerative capacity of the areas outside of the facility but within the development site will revert to woodland. A belt of screen planting is also proposed external to the boundary fence.

Due to the characteristics of the natural resources of the existing environment, the proposed development will not impact on the quality and regenerative capacity of the area. Therefore, no likely significant adverse effects are predicted.

5.3 The absorption capacity of the natural environment, paying particular attention to specific areas

5.3.1 Wetlands, riparian areas, river mouths

The subject site is in close proximity to the Kiltha River.

The proposed upgrade of the WwTP to increase its capacity and its capability will provide secondary treatment in order to achieve *Urban Waste Water Treatment Directive (UWWTD)* standards and be *Water Framework Directive 2000/60/EC (WFD)* compliant.

Works in close proximity to the Kiltha River will be managed. Treated effluent will combine with stormwater overflow (SWO) from the storm tanks and the emergency overflows from the

SWO chamber in an outfall chamber downstream of the final effluent flowmeter and discharge into the adjacent Kiltha River.

It is anticipated that the proposed development would not be likely to have a significant effect on the absorption capacity of the natural environment.

5.3.2 Coastal zones and the marine environment;

The Kiltha River is a tributary of the Womagh River which flows into the Celtic Sea at Youghal Harbour, c.15km east of the proposed development.

Works in close proximity to the Kiltha River will be managed. Treated effluent will combine with stormwater overflow (SWO) from the storm tanks and the emergency overflows from the SWO chamber in an outfall chamber downstream of the final effluent flowmeter and discharge into the adjacent Kiltha River.

It is anticipated that the proposed development would not be likely to have a significant effect on the absorption capacity of the natural environment.

5.3.3 Mountain and forest areas

There are no mountains within the study area of the proposed development.

The proposed development is located within the Castlemartyr Recreational Woodlands. This woodland was once part of a larger demesne that originated around the latter end of the 17th century. Much of the planting is conifer, with some broadleaf planting remaining from 18th Century.

The subject site is managed by the Applicant, with areas of the woodlands to the north and south of the site being managed by Coillte; namely Barn Wood and Pigeon Wood to the north and Mitchell's wood to the south. There are a number of amenity walks located within the woodlands in the Coillte managed sections. The Kiltha River runs through Mitchell's Wood to the south and a watercourse is located in Pigeon Wood to the north.

During demolition and construction works there may be some impact to users of the amenity space, primarily in terms of noise and air quality and the use of part of the amenity space for construction compounds etc. These impacts will be minimised by use of mitigation measures. It is anticipated that that once operational, the proposed development will not impact on the quality of the amenity.

It is considered that the development will not be likely to lead to significant environmental effects on the Castlemartyr Recreational Woodland.

5.3.4 Nature reserves and parks

An online search of the National Parks and Wildlife Service database found that there are no nature reserves in close proximity to the application site.

There are a number of parks and open spaces in the surrounding area, most notably, the Castlemartyr Recreational Woodlands in which the subject site is located.

As per **Section 5.3.3**, during demolition and construction works there may be some impact to users of the amenity space, primarily in terms of noise and air quality and the use of part of the amenity space for construction compounds etc. These impacts will be minimised by use of mitigation measures. It is anticipated that that once operational, the proposed development will not impact on the quality of the amenity nor impact the absorption capacity of the natural environment.

It is considered that the development will not be likely to lead to significant environmental effects on any nature reserves or parks. Therefore, it will not impact on the absorption capacity of the natural environment.

5.3.5 Areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive

A Natura Impact Statement (NIS) has been prepared by Thorne Ecology for the proposed Castlemartyr WwTP upgrade in order to evaluate the significance of potential effects on European sites from the proposed Castlemartyr WwTP upgrade, alone and / or in combination with other plans or developments.

It is determined that, following the implementation of mitigation measures for the protection of water quality and to prevent spread of invasive species during construction, no effects are likely to arise to QI and SCI in European sites, from the proposed Castlemartyr WWTP Upgrade.

On the basis of objective scientific information, it is the considered opinion of Thorne Ecology, that, in completing this Natura Impact Statement to inform Appropriate Assessment, in respect of the described proposed Castlemartyr development, either individually or in combination with other projects and plans, it is not likely to give rise to significant effects on European sites.

It is considered that the development will not be likely to lead to significant effects on areas classified or protected under legislation.

5.3.6 Areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure

There are no records of the application site being located in an area which has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure.

It is considered that the development will not be likely to lead to significant effects on the environment.

5.3.7 Densely populated areas

There are no inhabitants within the proposed development boundary. However, the site is located c.380m south of the village centre of Castlemartyr, Co. Cork. The closest residential receptors of Forest Walk are located c.100m east of the subject site along the R632. Two self-catering blocks of terrace houses that form part of the Castlemartyr Resort are located c.40m north-east of the subject site.

The existing residential developments within Castlemartyr, including Forest Walk, are low density residential areas.

The *East Cork Municipal District Local Area Plan* allows for the provision of an additional 235 no. houses in Castlemartyr within its timeframe. According to the 2016 census, Castlemartyr had a population of 1,600 persons. Consequently, of the proposed additional houses, it is anticipated that the population density in Castlemartyr will increase in the future.

The Castlemartyr land use zoning map of the *East Cork Municipal District Local Area Plan (LAP)* identifies the subject site within the 'Settlement Boundary' of Castlemartyr in an 'Existing Built-Up Area'. The Castlemartyr land use zoning map in Volume 4 South Cork of the *Draft Cork County Development Plan 2022-2028* identifies the subject site as an 'Existing Residential / Mixed Residential / and Other Uses', with the lands to the north and west being designated with the same zoning. The lands to the south are zoned 'Green Infrastructure' and the lands to the west are not zoned. Therefore, it is considered that no further residential development will occur in the immediate vicinity of the subject site within the timeframe of the *Draft Cork County Development Plan 2022-2028*.

This location is deemed to have sufficient capacity to absorb the short-term impacts of the proposed development on residential amenity during the construction phase. A CEMP will be prepared and agreed with Cork County Council prior to commencement of construction.

5.3.8 Landscapes and sites of historical, cultural or archaeological significance

The landscape value and sensitivity for Castlemartyr is categorized by the East Cork Municipal District Local Area Plan 2017 as "*medium and of local importance*".

The subject site is located within an Architectural Conservation Area (see **Figure 5.2**).

There are a total of 5 no. Protected Structures within the village, namely St. Anne's Church of Ireland, Castlemartyr Castle, St. Theresa's Convent (formerly Castlemartyr House), Castlemartyr School and Castlemartyr Tower House. There are no Protected Structures located within the vicinity of the subject site (see **Figure 5.2**).

The nearest recorded building of Architectural Heritage as identified on the NIAH online survey is Gortnahomna More, Castlemartyr, Cork (Reg. No. 20825015), located c.150m north-east of the subject site (see **Figure 5.3**).

There are no recorded monuments within the proposed development lands. The nearest recorded monuments comprise of a bridge (Ref. CO077-054004) c.320m north of the subject site in Castlemartyr village and a castle tower house (CO077-005003) c.510m north-west of the subject site within the Castlemartyr Resort.

Given the established woodland around the subject site and its distance from the nearest recorded building and monument, it is considered that the proposed development will not have adverse impacts on the natural and heritage assets located within the surrounds.

Therefore, it is considered that there will be no likely significant effects on the landscapes and sites of historical, cultural or archaeological significance environment as a result of the proposed development.

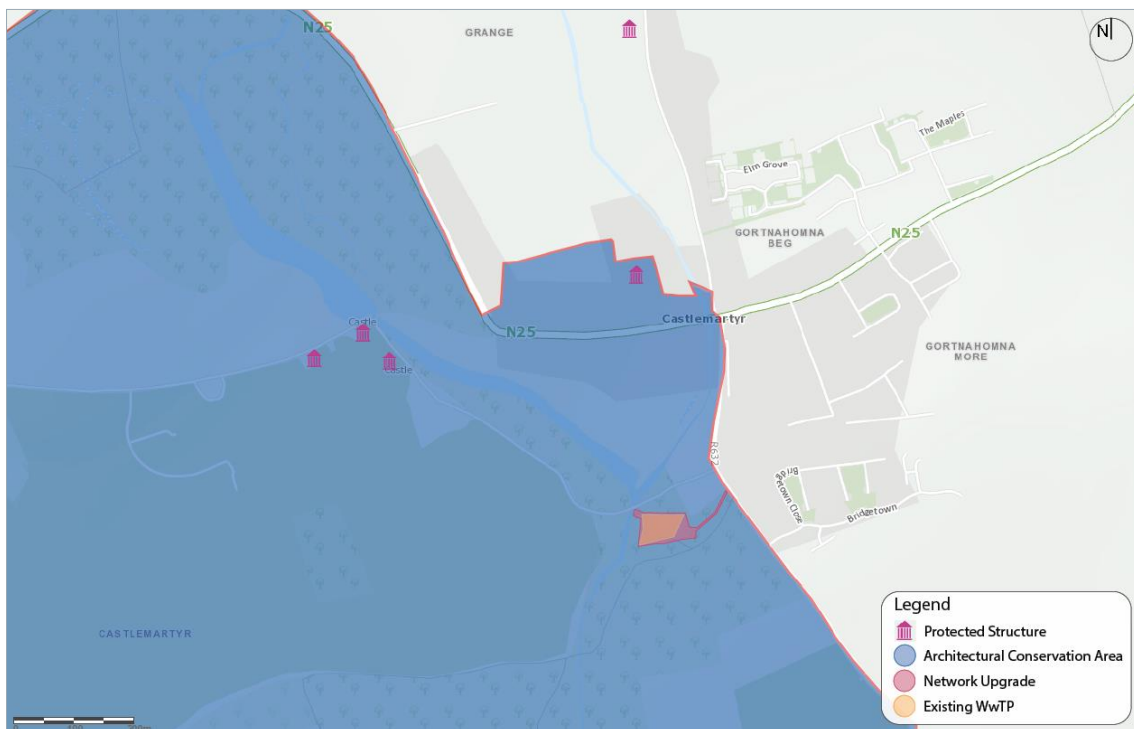


Figure 5.2: Castlemartyr Protected Structures and Architectural Conservation Areas

Source of basemap: *Volume 4 Maps, Cork County Development Plan [extract]*

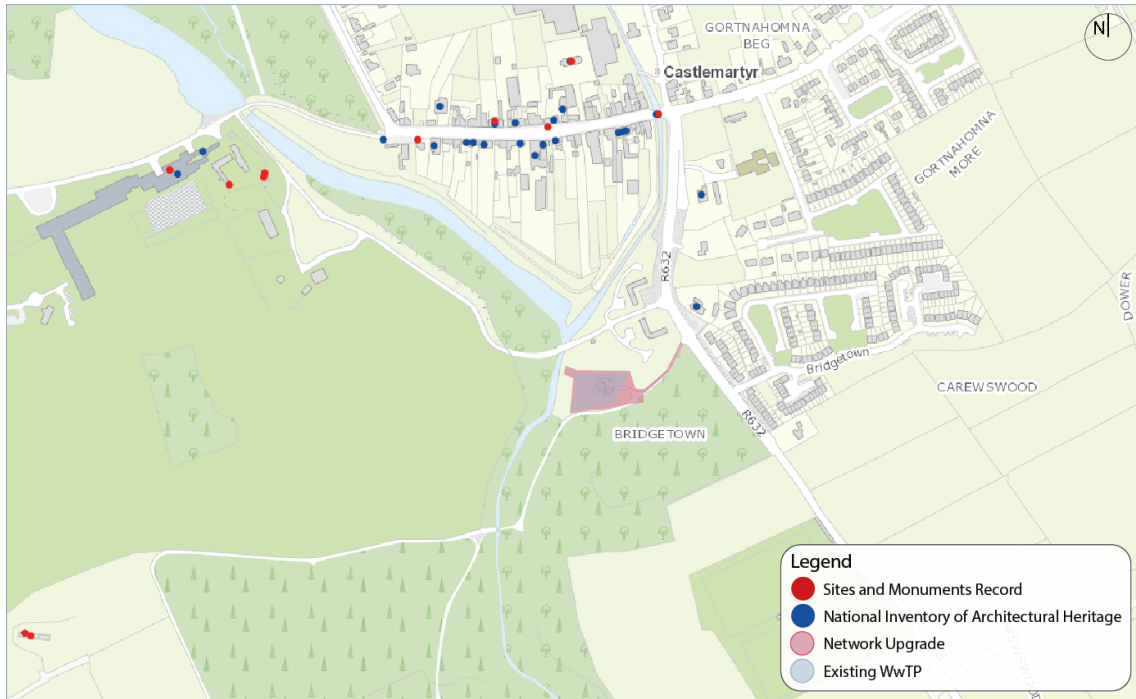


Figure 5.3: Sites and Monuments Record / National Inventory of Architectural Heritage Map

Source of basemap: <https://maps.archaeology.ie/HistoricEnvironment/>

6. Types and Characteristics of Potential Impacts

6.1 The magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected)

The demolition and construction works are expected to have minimal impacts over an 18-month period on the immediate area surrounding the application site. Peak construction traffic will occur during the importing and exporting of material. Given the modest volume of construction traffic, it is not expected that construction traffic will have a significant effect on existing traffic in proximity to the site. Access to the site for construction vehicles will be from the Regional Road R632. The development works are not considered to be to an extent which would have a likely significant effect on the environment.

The NIS and prepared by Thorne Ecology, submitted as part of this application, concluded, on the basis of objective information, that the proposed development, either individually or in combination with other plans or projects, in view of best scientific knowledge, is not likely to give rise to impacts which would constitute significant effects in view of the conservation objectives of any European site.

The characteristics of the impacts are not considered to be of a magnitude or spatial extent to result in complex impacts that will result in significant adverse effects.

It is anticipated that the proposed development would not be likely to have a significant effect on the environment.

6.2 The nature of the impact

The nature of the impacts of the proposed development would not be considered likely to have significant effects on the environment. During the construction phase, the proposed project may give rise to impacts on the traffic environment, emissions to air and noise, risk of pollution, nuisance and risk of accidents. However, the scale of the works, when viewed individually and cumulatively, is considered to result in a slight to moderate short-term negative impact during the construction phase.

The proposed development is not expected to give rise to significant waste materials. Notwithstanding, the appointed Contractor will implement a Construction and Environmental Management Plan (CEMP). The CEMP will ensure that all waste generated by the proposed will be removed off-site and disposed of appropriately. All excess construction materials will be returned to the suppliers.

It is anticipated that the nature of the proposed development would not be likely to have a significant effect on the environment.

6.3 The transboundary nature of the impact

The Waterford County Boundary is located within close proximity (c. 12km east) of the proposed development.

Based on the nature of the impacts contained within the footprint of the subject site and the methods of construction to be employed, it is considered that the proposed development is not likely to result in any transboundary impacts.

6.4 The intensity and complexity of the impact

There are no significant, large or complex impacts associated with the proposed upgrade works.

The most complex aspect of this project is likely to be construction of the proposed gravity network sewer to the outfall at the Kiltha River. It is considered that these works are not intense or complex.

It is anticipated that the intensity and complexity of the proposed development would not be likely to have a significant effect on the environment.

6.5 The probability of the impact

It is considered that the probability of significant impacts as a result of the proposed development is unlikely.

Notwithstanding, the probability of potential temporary minor impacts is likely i.e. a surplus of construction materials, noise generated during the demolition and construction phase (including traffic noise) and an increase in traffic.

It is anticipated that the probability of impacts as a result of the proposed development would not be likely to have a significant effect on the environment.

6.6 The expected onset, duration, frequency and reversibility of the impact

The proposed development, once operational, is likely to have long-term, positive impacts.

The temporary demolition and construction phase impacts can be managed / avoided through controls and practices that will be set out in the CEMP to be prepared and implemented by the appointed Contractor.

The proposed development will ensure that wastewater generated from the continued growth and economic development of Castlemartyr is appropriately treated in order to

safeguard human health and the environment. The works will be carried out in compliance with the relevant EU Directives and national regulations on water quality.

6.7 The cumulation of the impact with the impact of other existing and / or development the subject of a consent for proposed development for the purposes of section 172(1A) (b) of the Act and / or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment

When viewed in the context of both the EIA threshold criteria and types of projects listed in Schedule 5 that require EIA, the nature of the impacts of the proposed development would not be considered likely to have significant effects on the environment.

The cumulative impacts, when viewed individually and cumulatively, are not considered likely to result in significant adverse effects.

6.8 The possibility of effectively reducing the impact

All works will be subject to the implementation of a CEMP which will be prepared by the appointed Contractor, in agreement with Cork County Council prior to construction. These controls will detail the appointed Contractor's measures to control and reduce traffic, pollution and nuisance such as construction hours, phasing and implementing emissions controls.

It is anticipated that the measures outline in the CEMP will have the possibility of effectively reducing the impact of the proposed development on the environment.

7. Possible Effects on the Environment

7.1 Overview

The following section briefly assess the proposed development in the context of environmental topics referred to in Article 3 of Directive 2014/52/EU.

1. Population and Human Health;
2. Biodiversity;
3. Land and Soil;
4. Water;
5. Air and Climate;
6. Material Assets;
7. Cultural Heritage;
8. Landscape;
9. Interactions; and
10. Risks of Major Accidents and / or Disasters.

7.2 Population and Human Health

As set out in this planning application, the proposed expansion and upgrade of the existing WwTP will provide a significant improvement to the water services in Castlemartyr.

The proposal will have the following economic, social and environmental benefits from a population and human health perspective:

- It will assist with the delivery of the National Planning Framework, supporting the development of a rural community;
- It will facilitate residential development and job creation in the area;
- It will improved water quality in the Kiltha River; and
- It will support the protection of biodiversity.

During the construction period there will be some short term and temporary impacts due to the operations required to construct the proposed development. The proposed development has been designed and sited in a manner to reduce the potential impacts on human beings where possible.

A CEMP (including phasing and waste management) will be prepared by the appointed Contractor and will implement best practice construction techniques and mitigation measures to minimise construction impacts.

The proposed development will be at least 90m from any permanent private residences and noting the low intensity of the proposed construction works, it is envisaged that there will be no significant impacts to human beings arising from the proposals.

In addition, temporary disruptions will occur on the R632 during the construction phase with the delivery of goods and services to the site.

In terms of the operational phase, the proposed development would provide many economic, social and environmental benefits including improvements to the water quality and the ability to facilitate the residential development of the area.

Notwithstanding, it is acknowledged that the proposed development will increase the size and capacity of the existing WwTP. The potential for amenity impacts (noise and odour) has been taken into account in the design of the development, such as the inclusion of screen fencing.

It is considered that the proposed development will not create any significant adverse effects with respect to population or human health.

7.3 Biodiversity

An Ecological Impact Assessment report has been prepared by Thorne Ecology and is submitted in support of the proposed development.

The above-mentioned report reviewed and assessed the potential biodiversity impacts of the proposed development.

The potential negative effects arising from the Project can mostly be addressed through the mitigation measures outlined in this report. There will be no cumulative effects arising with any other plans or projects. The only residual significant effect relates to the unavoidable loss of woodland as a result of the existing site location. The migration measures outlined herein will be specified in the Contractors requirements and implemented in full.

7.4 Land and Soil

The potential impacts on the geological environment were considered in terms of sensitive geological receptors. The soils and geology information were obtained from spatial mapping published by GSI.

No geological heritage areas were found within the surrounding area.

There is no indication of existing landfills, contaminated land or quarries identified within the surrounding area.

The Dairygold Co-Operative Society, located c.2.5km to the north of the subject site, is an EPA Licenced Integrated Pollution Prevention Control (IPPC) Facility. There are no previous industries which could have potentially contaminated land found within the area.

According to the Bedrock Polygons 100k data, the subject lands are made up of Waulsortian Limestones which are described as massive unbedded lime-mudstone. This form of limestone forms part of the Carboniferous system (See **Figure 7.1**).

The lands to the north of the subject site are Cork Red Marble Formation which are described as red brecciated calcilutite limestone. The lands further north are labelled Little Island Formation which are described as massive and crinoidal fine limestone.

Minimal earth works are required as part of the works. Minor localised areas of cut and fill will be required to provide mains to the existing outfall.

Loss of soil resource under the proposed development is deemed to be minimal in the context of the wider area. Any soil removed from site will be used elsewhere to allow a cut / fill balance.

Therefore, it is considered that the proposed development will not likely result in any significant adverse environmental impacts on the land and soil of the area.

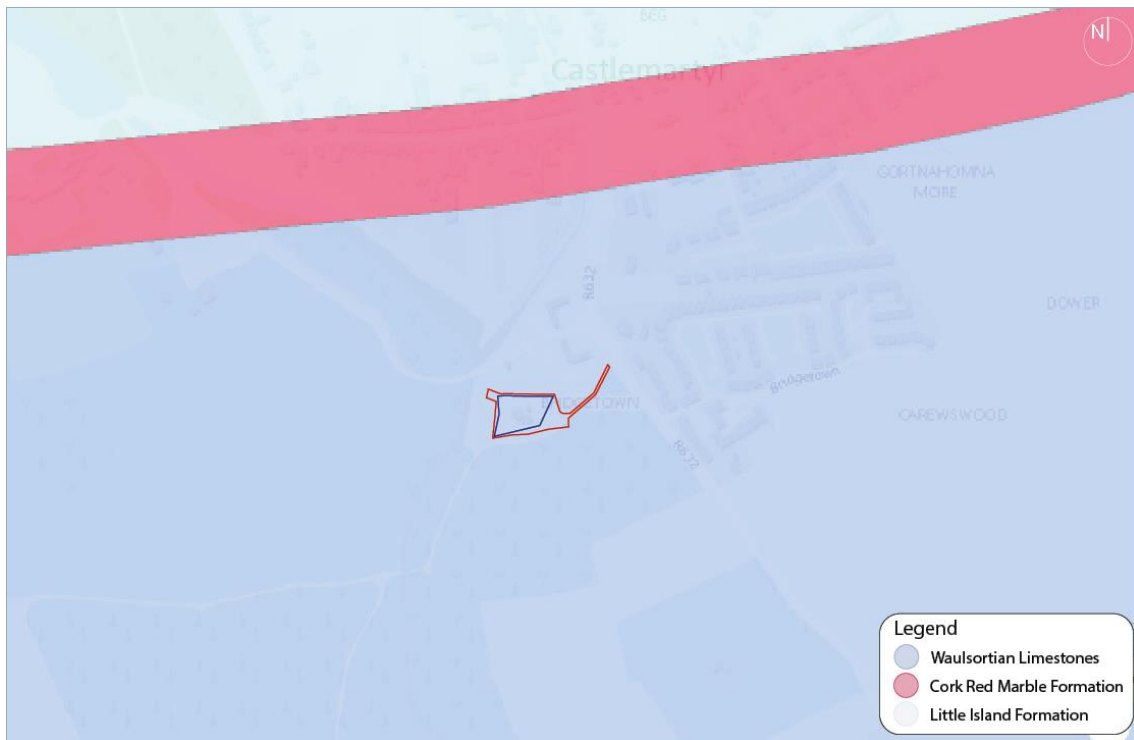


Figure 7.1: Castlemartyr Bedrock Polygons 100k

Source of basemap: *ARCGIS [extract]*

7.5 Water

The subject site is located adjacent to the Kiltha River which is a tributary of the Womanagh River. The Womanagh River flows into the Celtic Sea at Youghal Harbour, c.15km east of the proposed development. According to the EPA GIS data, the Womanagh River has a river status of 'Moderate' and 'Good' to the north and south of Castlemartyr respectively.

The proposed development is to be connected to the existing Castlemartyr Wastewater Treatment Plant / existing sewers for both surface water and foul water. The outfall for the

facility is located to the west of the subject site and discharges into the Kilha River. The proposed development will retain, replace, and extend the existing sewer to the outfall.

The proposed development does not cross any designated watercourses (water features which are classified and monitored by the EPA under the Water Framework Directive).

According to GIS data, the groundwater recharge for the majority of the subject site is categorised as *“Moderate permeability subsoil overlain by well drained soil”*, with a small portion in the south of the site being categorised as *“High permeability subsoil (sand & gravel) overlain by well drained soil”*.

The Floor Risk Assessment report states that a review of the OPW flood maps indicated the site is located in Flood Zone C where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding).

The subject site is located c.450m west of the Public Supply Source Protection Area of Whitegate Dower RWSS.

The assessment of the change in runoff rates indicates that the extended land use and any resulting increase in runoff rates are considered minimal due to the proposed surface being predominantly granular.

Current Pollution Prevention Guidelines (PPGs) shall be adhered to as standard practice for all work around watercourses to prevent pollution (including muddy runoff) for construction of the proposed development and future maintenance work.

A detailed Construction Environmental Management Plan will be prepared by the contractor for the proposed development and will be required to adhere to the relevant guidelines.

During the operational phase, surface water from the development will directly infiltrate into underlying sub-soil as the majority of the proposed works will be on soil and gravel.

Noting the scale, nature and characteristics of the proposed development, there will be no requirement for significant site works or excavation. In light of this, it is anticipated there will not be any significant adverse environmental impacts on the existing groundwater conditions.

7.6 Air and Climate

In terms of air quality, it is noted that the proposed development is located in an area defined by the EPA as ‘Region: Rural West’ and it is also noted that at the time of writing this report that the interactive Air Quality Index for Health accessible at <https://gis.epa.ie/EPAMaps/> states that the air quality for this region is ‘3 - Good’⁴.

Thus, it is considered that the location of the proposed development is not considered to be particularly sensitive to additional emissions and that the surrounding environments are

⁴ This index ranges from 1 – Good to 10 Very Poor

mainly influenced by emissions from road transport on the adjacent roads of the N25 and R632.

With regards to the construction phase, the proposed development will lead to the production of greenhouse gas (GHG) emissions from traffic and the fuel used by mobile plant and equipment. However, these impacts are not anticipated to create any significant adverse effects as they will be short term and temporary in nature and will also be transient as construction moves along the route.

There is potential for dust from site construction works such as excavations, earthworks and the movement of site traffic on paved and unpaved roadways. Dust can be spread onto the public roads and along public access paths by vehicles entering and exiting the site.

The appointed Contractor will prepare a CEMP that will ensure dust management measures are implemented to reduce / avoid any potential dust impacts.

Noting the above and the nature, size and location of the development, it is anticipated there will not be any significant adverse effects on air quality and climate.

7.7 Material Assets

Land use within the proposed site comprises an existing WwTP and an associated access road. The lands surrounding the existing wastewater treatment plant comprise of trees and other vegetation.

IW are the owners and occupiers of the WwTP. They own the majority of the subject site, with the Castlemartyr County Hotel Resort Limited owning the remainder of the subject site (a Letter of Consent is submitted in support this application).

With regards to utilities and services, all construction activities will be carried out in consultation with the relevant service provider and undertaken in compliance with the relevant guidance and development standards.

A minor increase on the demand for relevant utilities and services will be required during the operational phase of proposed development including electricity, telecommunications and water supply.

The proposed development will maintain the existing access road and will expand and upgrade the existing WwTP.

Given that the increased demand on utilities and services will be minor in nature, it is considered that there will be no significant effects on the existing networks.

It is anticipated there will not be any significant adverse effects on the material assets.

7.8 Cultural Heritage

The subject site is located within an Architectural Conservation Area (see Figure 5.2).

There are a total of 5 no. Protected Structures within the village, namely St. Anne's Church of Ireland, Castlemartyr Castle, St. Theresa's Convent (formerly Castlemartyr House), Castlemartyr School and Castlemartyr Tower House. There are no Protected Structures located within the vicinity of the subject site (see **Figure 5.2**).

The nearest recorded building of Architectural Heritage as identified on the NIAH online survey is Gortnahomna More, Castlemartyr, Cork (Reg. No. 20825015), located c.150m north-east of the subject site (see **Figure 5.3**).

There are no recorded monuments within the proposed development lands. The nearest recorded monuments comprise of a bridge (Ref. CO077-054004) c.320m north of the subject site in Castlemartyr village and a castle tower house (CO077-005003) c.510m north-west of the subject site within the Castlemartyr Resort.

Given the established woodland around the subject site and its distance from the nearest recorded building and monument, it is considered that the proposed development will not have adverse impacts on the natural and heritage assets located within the surrounds.

Therefore, it is considered that there will be no likely significant effects on the landscapes and sites of historical, cultural or archaeological significance environment as a result of the proposed development.

7.9 Landscape

The landscape value and sensitivity for Castlemartyr is categorized by the East Cork Municipal District Local Area Plan 2017 as *"medium and of local importance"*.

A portion of the Castlemartyr Recreational Woodlands, in which the subject site is located, is situated within the development boundary of the village. It provides a valuable amenity to the village and has local biodiversity value. It is also noted that an amenity walk is proposed within the LAP along the River Kilha and ends c.50m north of the subject site (see **Figure 5.1**).

The proposed works will involve the removal of some vegetation in order to facilitate the development. Notwithstanding, the regenerative capacity of the areas outside of the facility but within the development site will revert to woodland. A belt of screen planting is also proposed external to the boundary fence.

The natural screening around the subject site and its distance from the proposed walk will ensure that it will have a minimal visual impact on the receiving environment and the Castlemartyr Recreational Woodland.

Therefore, it is considered that there will be no likely significant effects on the landscapes as a result of the proposed development.

7.10 Interactions

As previously stated in Section 4.2, a review of existing and / or approved projects that may have the potential to result in cumulative impacts has been undertaken. A review of plans and projects (recently granted planning applications) was undertaken in the vicinity of the proposed development and assessed in Appendix 1 of this EIA Screening Report.

During the construction phase in-combination effects, could include combined impacts on the traffic environment, population and human health (noise, air quality, disturbance, or increased risk of accidents) or from accidents / pollution events that may impact adversely on water quality.

The assessment found that the proposed development is largely within / close to an established urban environment (Castlemartyr) which is identified as a “Key Village” within the *Cork County Development Plan 2014*.

Any potential adverse cumulative effects are likely to occur during the construction phase and will be short-term in nature. There is also potential for significant positive long-term cumulative effects in-combination with this proposed development and other projects in the area that will facilitate the long-term sustainable development of Castlemartyr. The appointed Contractor will prepare and implement a CEMP that will include measures to minimize / remove any potential adverse cumulative effects that are likely to occur.

Furthermore, the NIS prepared by Thorne Ecology and submitted as part of this application concluded that the proposed development, either individually or in combination with other projects and plans, it is not likely to give rise to significant effects on European sites.

Given the nature and scale of development identified in the area, it is considered that no cumulative or interactive effects are predicted to occur if one or all of these proposals are development at the same stage.

7.11 Risk of Major Accidents

Noting the nature, size and location of the proposed development as well as the proposed design and mitigation measures, it is not considered that the proposal will create a risk of major accidents.

8. Conclusions and Recommendations

This report has been prepared in accordance with Schedule 5 and Schedule 7A of the *Planning and Development Regulations 2001* (as amended) and has had due regard of the criterion set out within the European Directive 2014/52/EU. The report has assessed the proposed development in terms of the possible effects on the environment. Through an EIA screening methodology of EIA thresholds, it has been established that an EIAR is not required to accompany the subject application.

The proposed development has been assessed against the criterion for sub threshold projects. It has been established that it is anticipated that the proposal would not be likely to have a significant effect on the environment as result of the characteristics of the proposed development, location of proposed development or the characteristics of potential impacts.

It has been established that an Environmental Impact Assessment Report (EIAR) is not required to accompany the subject application.

Appendix 1: Relevant Cumulative Developments

Turley carried out an online planning history search of adjacent sites to identify any relevant applications that could inform / impact on the proposed development. The sections that follow provides an overview of the relevant planning history in the area.

Cork CoCo Reg. Ref. 167031 (ABP Ref. PL04.249108)

An application under Cork CoCo Reg. Ref. 167031 was submitted on 08 December 2016 for development at Mogeely and Killamucky, Mogeely, Co. Cork. The site is located c.2.5km north of the Castlemartyr WwTP. The development proposal sought the construction of a new cheese production facility and a significant upgrade of the existing Dairygold Food Ingredients (DFI) facility including the expansion of the existing WwTP.

The application was granted permission on 04 August 2017 subject to 32 No. conditions. Notable conditions include Condition No. 9 and No. 14 which relate to wastewater: a wastewater pump sump or chamber spillage high-level alarm and a continuous TON and ammonia monitoring system, respectively.

A Third-Party Appeal under ABP Ref. PL04.249108 was lodged on 24 August 2017. The Board upheld the decision of the Council and issued a Grant Permission with revised conditions (18 no. conditions in total) on 24 April 2018. Notable conditions include Condition No. 8 and No. 11 which reiterate Condition No. 9 and No. 14 attached to the Councils Grant Permission. The Board also added a second part to Condition No. 11, stating that:

“(b) A remotely actuated valve shall be incorporated at the end of the proposed treated effluent pipeline before the connection to the Irish Water discharge chamber. This valve shall be closed immediately on detection of any non-compliance in the quality of the treated effluent.”

To note, prior to any upgrade works and the granting of CORK COCO Reg. Ref. 167031, there were two licensed emission points to the Kiltha River from this installation. One emission point discharged combined treated process and domestic wastewater to the Kiltha River and the second emission point discharged storm water discharges to the Kiltha River.

It was proposed as part of the upgrade works for CORK COCO Reg. Ref. 167031 to revise the existing wastewater and storm water drainage networks, with treated wastewater no longer discharged to Kiltha River. Instead this treated wastewater stream will be discharged into the North Island Great Channel via a newly constructed pipeline which will connect into the existing Middleton Main Drainage Outfall at Rathcoursey.

The new storm water drainage network will discharge into the adjacent Kiltha River at two existing outfall locations. Prior to discharging to the Kiltha River, the storm water networks will discharge into a storm water monitoring / divert chamber, via full retention petrol interceptors. The storm water monitoring chamber will analyse the storm water for pH, conductivity and temperature. A risk of significant impact on the water quality of the Kiltha River is not envisioned.

We understand that this development has been implemented.

This application is of significance to the Castlemartyr WwTP upgrade works application as the DFI facility will have a significant positive impact on the water quality of the Kilha River; with treated wastewater no longer being discharged to the river from this facility.

Cork CoCo Reg. Ref. 175371

An application under Cork CoCo Reg. Ref. 175371 was submitted on 02 June 2017 for development at Castlemartyr Country Hotel Resort, Castlemartyr, Co.Cork. The site is located c.450km north-west of the Castlemartyr WwTP. The development proposal sought the demolition of an existing two storey former gym to south of the Castlemartyr Hotel and Castle and the construction of a two storey replacement wedding / conferencing building to include associated parking for 61 cars to south via an upgraded maintenance access road.

The application was granted permission on 20 March 2018 subject to 32 no. conditions.

Cork CoCo Reg. Ref. 165161

An application under Cork CoCo Reg. Ref. 165161 was submitted on 13 May 2016 for development at Gorknagark / Inchiquin, Killeagh, Co. Cork. The site is located c.8km north-east of the Castlemartyr WwTP. The development proposal sought to restore a quarry to agricultural land by placing on the site surplus construction materials i.e inert soil / rock, concrete and topsoil.

The application was granted permission on 15 December 2016 subject to 31 no. conditions.

**Appendix 2: Existing / Future Planned Projects
by Cork County Council and Irish
Water in the Vicinity of the
Proposed Development**

The three large strategic water upgrade projects listed below are existing / future planned project for Irish Water, working in partnership with Cork County Council and Cork City Council:

1. Cork Lower Harbour Main Drainage Project

The Cork Lower Harbour Main Drainage Project has reached a significant milestone as raw sewage from Cobh Town is now treated before its safe discharge to sea. This final step in the Cork Lower Harbour Main Drainage Project brings to an end the decades long practice of discharging the equivalent of 40,000 wheelie bins of raw sewage into Cork Harbour every day.

Irish Water invested €144 million in the Cork Lower Harbour Main Drainage Project to address this issue and to ensure that wastewater from the agglomerations of Ringaskiddy-Crosshaven-Carrigaline, Ringaskiddy village, Passage-Monkstown and Cobh town, is collected and fully treated before safe discharge to the sea through an outfall at Dog Nose Point.

Irish Water constructed a state of the art wastewater treatment plant in Shanbally connecting the towns of Crosshaven and Carrigaline, so that by 2017 the equivalent of 20,000 wheelie bins of raw sewage was treated daily.

The sewer network was then expended to connect the towns of Ringaskiddy, Shanbally, Passage West and Monkstown to the treatment plant, so that the equivalent of 30,000 wheelie bins daily of raw sewage was treated by early 2019.

A vital link between Cobh and Monkstown was then created by completing two of the longest horizontal directional drills in the country to install sewer pipes some 60m under the Lee Estuary – a feat of engineering.

The Cobh Networks contract is the final part of the Cork Lower Harbour Project and included building 7km of sewer pipes and 5 pumping stations in Cobh. This expanded network collects the raw sewage from the town of Cobh that until now, discharged untreated through 19 outfall pipes directly to the harbour.

2. New Wastewater Treatment Plant on the Lee Road Water Treatment Plant Site

The existing Lee Road Water Treatment Plant (WTP) provides approximately 70% of Cork City's total treated water supply. Water is taken from the River Lee and treated water is then pumped to reservoirs in the North West of the city through a system of rising mains. This project will provide much needed upgraded facilities to safeguard the water supply for Cork City.

Drinking water treatment at the site began in 1879. Since then, there have been several upgrades to the facilities but no major upgrades since the 1950s. The Cork City Water Supply Scheme is included on the Environmental Protection Agency's (EPA's) Remedial Action List (RAL) which identifies water supplies that are in need of improvement.

Irish Water has started construction of a new water treatment plant on the existing site at Lee Road. Irish Water will maintain water supply throughout construction. Once works are complete, the upgraded and modernised plant will provide a more secure water supply for the future of Cork City.

3. National Leakage Reduction Programme

Much of Ireland's drinking water is lost to leaks before it reaches our taps. To conserve this precious resource we're investing €500 million up to the end of 2021 in fixing leaks to provide a more reliable water supply.

Every day Irish Water currently lose about 40% of its treated water through leaks before it even reaches the taps. Leaks can be difficult to find because they happen in the vast and complex network of pipes below ground. Many of these pipes are now old and damaged and need to be repaired or replaced to improve our water quality and supply. Despite the challenges, Irish Water are making progress. In 2018 the rate of leakage nationally was 46%, and Irish Water are on track to achieve a national leakage rate of 38% by the end of 2021.

As part of the national Leakage Reduction Programme, Irish Water is working with Local Authorities across the country, including Cork County Council and Cork City Council, to fix 1,500 leaks per month.

Turley Office
4 Pembroke Street Upper
Dublin
D02 VN24

T +353 (0) 1517 58 56

Turley