





**ENVIRONMENTAL
SOLUTIONS LTD**

ENVIRONMENTAL IMPACT ASSESSMENT SCREENING REPORT

**N72 CHRISTCHURCH JUNCTION,
FERMOY,
Co. CORK**

2023

Declaration

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1.0 INTRODUCTION

1.1 PROJECT BRIEF

Panther Environmental Solutions Ltd (PES Ltd) were commissioned by Roadplan Consulting Ltd to carry out an environmental impact assessment screening report in support of a Part 8 planning application with Cork County Council.

The applicant is seeking permission for the redesign of the junction between the N72 national secondary road and the R639 regional road adjacent to Christchurch in Fermoy.

The subject site boundaries are clearly defined on the accompanying design drawings prepared by Roadplan Consulting Ltd.

This EIA Screening document has been prepared on behalf of and for the exclusive use of the applicant by PES Ltd with respect to the above proposed development and the corresponding application for planning to Cork County Council.

This EIA Screening Report has been prepared with regard to:

- Schedules 5 and 7 of the Planning and Development Regulations 2001 (as amended),
- Planning and Development Act 2000 as amended
- Roads Act 1993 as amended
- European Union (Roads Act 1993) (Environmental Impact Assessment) (Amendment) Regulations, 2019 (S.I. 279/2019)
- Directive 2014/52/EU of 16 April 2014 amending Directive 2011/92/EU
- The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018)
- European Union (Roads Act 1993) (Environmental Impact Assessment) (Amendment) Regulations, 2019 (S.I. 279/2019)
- Guidelines on the information to be contained in Environmental Impact Assessment Reports, Environmental Protection Agency, 2022
- Environmental Impact Assessment of Projects: Guidance on Screening, European Commission, 2017
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment August 2018
- Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development 2003
- Circular Letter: PL 05/2018 27th August 2018 Transposition into Planning Law of Directive 2014/52/EU amending Directive 2011/92/EU on the effects of certain public and private projects on the environment (the EIA Directive) and Revised Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment.
- Circular Letter: PL 10/2018 22 November 2018 Public notification of timeframe for application to An Bord Pleanála for screening determination in respect of local authority or State authority development
- Office of the Planning Regulator (May 2021) Environmental Impact Assessment Screening- Practice Note

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1.2 DESCRIPTION OF THE DEVELOPMENT

1.2.1 Site Location

The proposed development site is located in Fermoy town centre, Co. Cork, which would be considered urban in nature. The site is located at approximate ING Coordinates E-181138 , N-098857.

The project site is comprised of the junction of the N72 national secondary road and the R639 regional road, adjacent to the Anglican Christ Church in Fermoy. The project site also includes minor sections of Church Hill and Allen’s Walk.

The R639 road leading north of the junction connects to Exit 14 of the M8 motorway, c.2.6km from the junction, and leads northward to Mitchelstown. The N72 west road leads to Castletownroche and Mallow, west of Fermoy. The N72 south road leads through Fermoy town then west to Tallow, Cappoquin and Dungarvan.

The surrounding area is primarily residential terraced housing fronting local roads, with religious buildings and recreational areas also comprising dominant features of the area. Entrances to businesses are present, but commercial activity density is higher outside of the project area.

The topography of the site falls generally south from c.40m AOD above Christ Church to the River Blackwater.

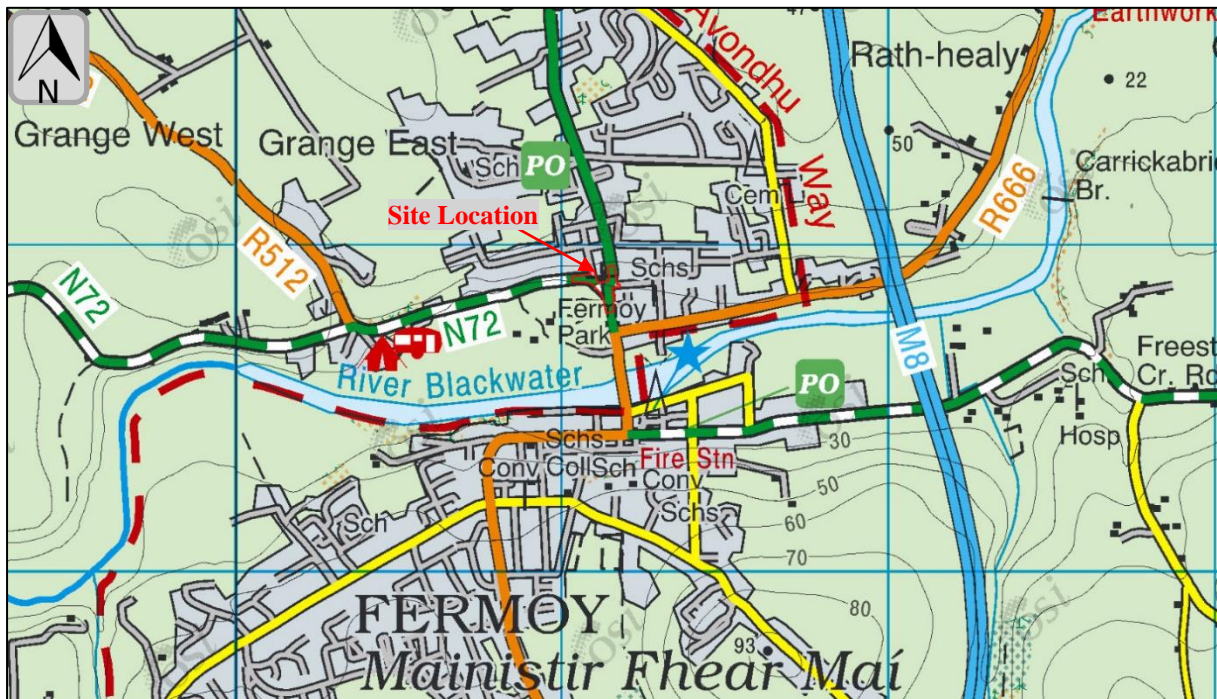


Figure 1.1: Site Location (Discovery Maps)

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Prior to the commencement of the development, the site is in a state of existing made ground comprising of road and mixed pavement, as per **Figure 1.2**.

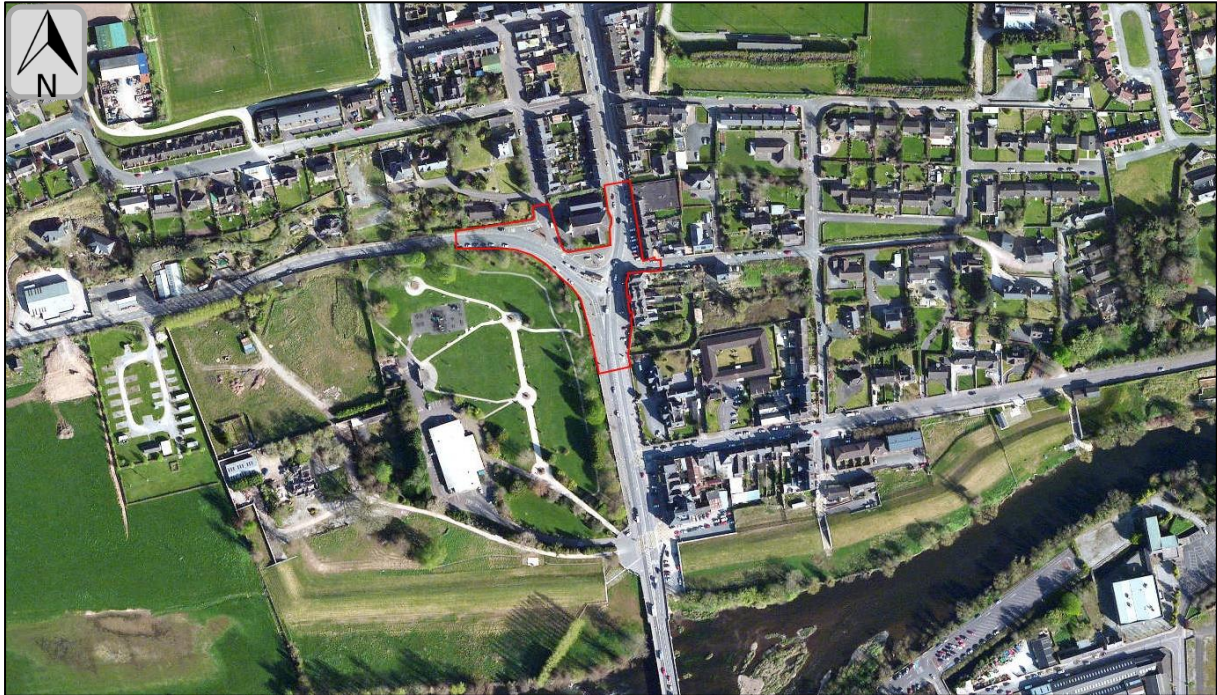


Figure 1.2: Aerial Image (OSI Digital)

1.2.2 Description of the Development

The applicant is seeking permission for the improvement of N72 Christchurch Junction, Fermoy, to include:

- Junction traffic safety improvements
- Pedestrian improvements

The project area is approximately 6,330 m² or 0.63ha. The length of roads within the project area is approximately 385m.

The proposed scheme has been designed in accordance with the Design Manual for Urban Roads and Streets (DMURS). The DMURS provides guidance relating to the design of urban roads and streets.

The following design elements are proposed:

- Removal of left turn slip road from N72 (S) to N72 (W)
- Removal of left turn lane from N72 (W) to R639
- Removal of traffic islands throughout
- Reduction in carriageway widths and turning radii via extension of public realm areas and revision of kerb lines aligning with the Design Manual for Urban Streets as much

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as possible considering the requirement to accommodate large numbers of HGV's on the N72

- Incorporation of controlled pedestrian crossing facilities across the N72 (W)
- Incorporation of a raised table across the junction extending into all approaches.
- Modification of the junction between the N72 (W) and Church Hill comprising realignment of the Church Hill approach, removing the left turn slip lane and right turning facility from the N72, narrowing the junction mouth, and providing an uncontrolled pedestrian crossing.
- Modification of the junction between the R639 and Allen's Walk comprising realignment of the Allen's Walk approach, narrowing the junction mouth, providing an uncontrolled pedestrian crossing, modifying parking at the junction to improve visibility, and extension of the footpath at the junction mouth to define the junction and improve pedestrian facilities.
- Modifying existing parking on the eastern side of the N72, immediately south of the junction, resulting in a reduction of 6 no. parking spaces.
- Incorporation of Sustainable Drainage Systems and enhancement of public realm areas.
- Resurfacing the vehicular carriageway within the scheme extents
- Relocation of existing gullies with new connections to the existing surface water drainage system.

The existing roadside gullies and carrier pipe system along the extents of the scheme will be utilised to drain the proposed scheme, with gullies relocated to suit the revised kerb lines. No new carriageway drainage systems are proposed.

Drainage of public realm areas will be accommodated within SUDS components. It is proposed that 1.5m roadside strips of low-level planting will be provided in the vicinity of the junction, with larger extents of both low level planting and some trees to be located outside visibility splays.

It is expected that construction will commence in the mid-late 2023, subject to approval. The expected duration of the construction works will be approximately 6 months. The construction works would occur on a phased bases, with separate sections of the project active at any one time to minimise traffic disruptions.

During the construction phase, the breaking of kerbs, road-surface and removal of traffic islands will be undertaken. Aside from these activities, there are no demolition works required for the completion of the proposed development.

Given that Christchurch Junction is a heavily trafficked area, and that existing traffic will need to be facilitated during the works, the Construction Contractor will be required to develop and implement a detailed Construction Traffic Management Plan (CTMP) at the outset to ensure that traffic disruption is managed.

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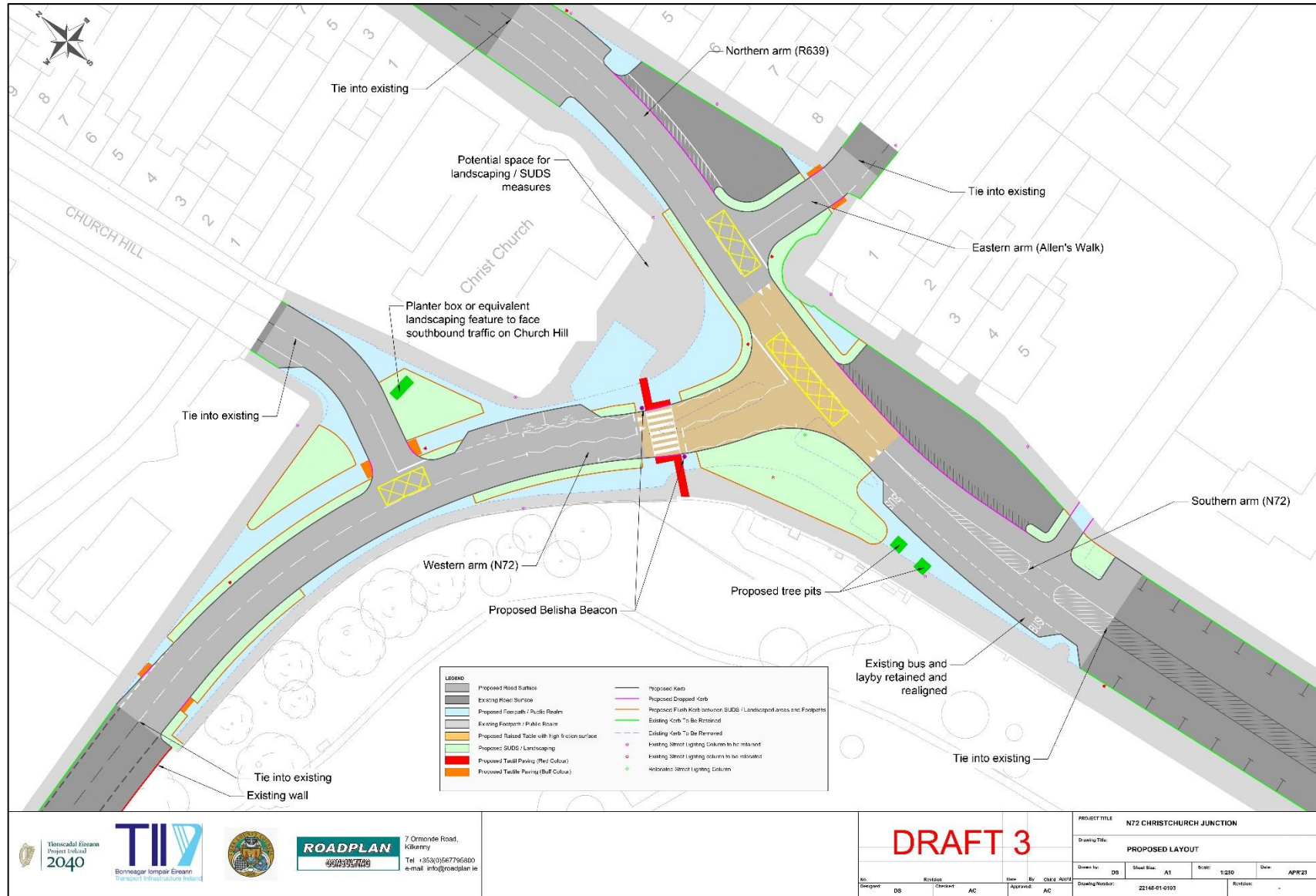


Figure 1.3: Proposed Layout Plan (RoadPlan Consulting, Drawing No: 22148-01-0103)

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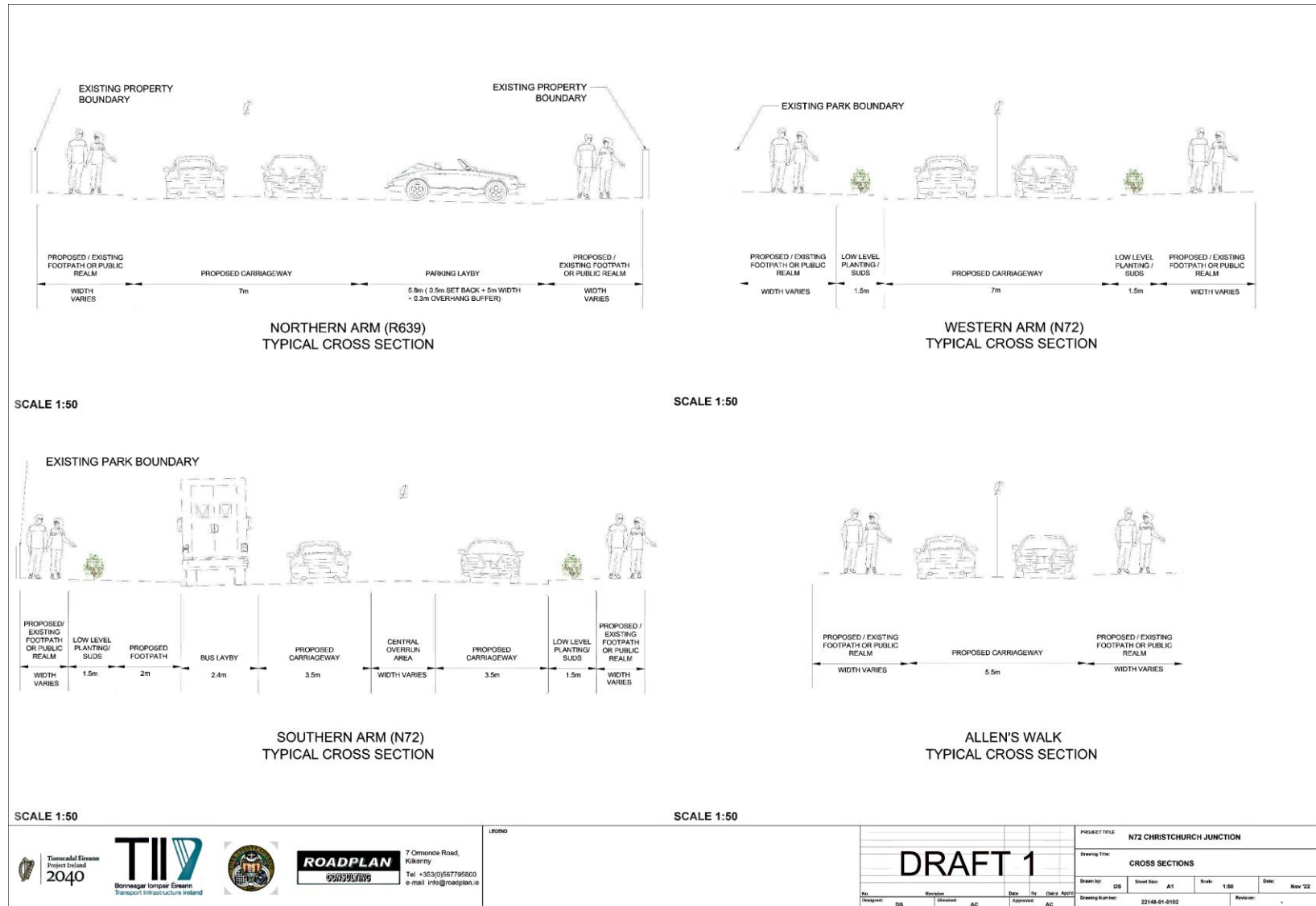


Figure 1.4: Proposed Cross Sections (RoadPlan Consulting, Drawing No: 22148-01-0102)

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2.0 PES LTD - COMPETENCY & EXPERIENCE

PES is a leading environmental consulting firm based in Carlow, Ireland. PES was formed in 2005 by environmental consultant Mr. Mike Fraher who has over three decades of experience working in the environmental consultancy industry, both in Ireland and in the United Kingdom.

The PES team are competent and experienced in preparing environmental planning documents. PES has completed environmental works in a wide range of industries including construction, waste management, industrial and intensive agriculture.

This Environmental Impact Assessment Report Screening has been prepared by experienced environmental consultants within PES Ltd.

Mr Mike Fraher has over 30 years of consultancy experience and has a B.Sc. Degree in Environmental Sciences from the University of Glamorgan, Cardiff in Wales and a Diploma in Food Sciences from Cork Institute of Technology.

Mr. Martin O’Looney has over nine years’ consultancy experience and has a B.Sc. Degree in Environmental Science and Technology from Sligo Institute of Technology.

Dr. Ross Donnelly-Swift has a BSc (Hons) Biology from Maynooth University NUI, a MSc Environmental Science from Trinity College Dublin and a PhD Biosystems Engineering from University College Dublin.

Mr. Nial Ryan has over six years’ consultancy experience and has a BSc. in Applied Physics from Dublin City University, an MSc. in Medical Device Regulatory Affairs, a Certificate in Introduction to AutoCAD, and a Certificate in Environmental, Health & Safety Management, all from Institute of Technology, Carlow.

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3.0 LEGISLATIVE CONTEXT & MANDATORY EIA REVIEW

The requirements for Environmental Impact Assessment (EIA) are derived from Council Directive 85/337/EEC (as amended by Directives 97/11/EC, 2003/35/EC, and 2009/31/EC) and as codified and replaced by Directive 2011/92/EU of the European Parliament and the Council on the assessment of the effects of certain public and private projects on the environment (amended in turn by Directive 2014/52/EU).

This EIAR Screening is drafted based on the requirements of EU Directive 2014/52/EU. Under the Directive, 2014/52/EU of the European Parliament and of the Council of 16th April 2014 “*The assessment of the effects of certain public and private projects on the environment*” Annex I and Annex II class activities are described.

EIA Directives were transposed into Irish law under the Planning and Development Regulations 2001, as amended.

3.1 SCHEDULE 5 OF THE PLANNING & DEVELOPMENT REGULATIONS, 2001.

Schedule 5, of the Planning and Development Regulations 2001 refers to development for the purposes of Part 10 (Environmental Impact Assessment Report) of the planning regulations.

The first step in screening is to determine whether a project is listed in either Part 1 or Part 2 of Schedule 5, which describes the thresholds of Part 1 projects, which require a mandatory Environmental Impact Assessment Report (EIAR), or Part 2 projects which may have the potential to pose a risk to the environment and require screening to determine if an EIAR is required.

Schedule 7 is to be used in the case of screening determination (i.e. information to be provided by the developer on projects listed in Part 2). Schedule 7A details the criteria for determining whether a sub-threshold development would or would not be likely to have significant effects on the environment.

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3.2 ROADS ACT 1993, AS AMENDED.

Section 50 (1) of the Roads Act (1993) (as substituted by S.I No. 279 of 2019 and amended by S.I. 486 of 2019) specifies road developments for which an Environmental Impact Assessment is mandatory.

The thresholds for mandatory EIA of a road development are set out in section 50(1)(a) which states:

“50. (1) (a) A road development that is proposed that comprises any of the following shall be subject to an environmental impact assessment:

- (i) the construction of a motorway;*
- (ii) the construction of a busway;*
- (iii) the construction of a service area;*
- (iv) any prescribed type of road development consisting of the construction of a proposed public road or the improvement of an existing public road.”*

The ‘prescribed types of road development’ in section 50(1)(a)(iv) are set out in Part V Environmental Impact Assessment of the Road Regulations 1994 (S.I. No. 119 of 1994) (as amended) which states the following:

“(8). The prescribed types of proposed road development for the purpose of subsection (1)(a)(iv) of section 50 of the Act shall be—

- (a) the construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area, or 500 metres or more in length in an urban area;*
- (b) the construction of a new bridge or tunnel which would be 100 metres or more in length.”*

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3.3 SCHEDULE 7 OF THE IRISH STATUTORY INSTRUMENT (S.I. NO. 296 OF 2018)

The Annex III EIAR screening criteria of Directive 2014/52/EU are transposed into Irish law as Schedule 7, (parts 1 to 3) of the Irish Planning and Development Regulations 2001.

Schedule 7, sets out the Irish Member States criteria used for determining the likelihood of significant impacts from a development on the environment.

Part 1: Characteristics of the Proposed Development

The characteristics of proposed development, in particular;

- (a) the size and design of the whole of the proposed development,
- (b) 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,
- (c) the nature of any associated demolition works,
- (d) the use of natural resources, in particular land, soil, water and biodiversity,
- (e) the production of waste,
- (f) pollution and nuisances,
- (g) 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, and
- (h) the risks to human health (for example, due to water contamination or air pollution).

Part 2: Location of the Proposed Development

The environmental sensitivity of geographical areas likely to be affected by the proposed development, with particular regard to;

- (a) the existing and approved land use,
- (b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground,
- (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 legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive and;
 - (vi) 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;
 - (vii) densely populated areas;
 - (viii) landscapes and sites of historical, cultural or archaeological significance.

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Part 3: Characteristics of the Potential Impacts

The likely significant effects on the environment of proposed development in relation to criteria set out under paragraphs 1 and 2, with regard to the impact of the project on the factors specified in paragraph (b)(i)(I) to (V) of the definition of ‘environmental impact assessment report’ in section 171A of the Act, taking into account;

- a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);
- b) the nature of the impact;
- c) the transboundary nature of the impact;
- d) the intensity and complexity of the impact;
- e) the probability of the impact;
- f) the expected onset, duration, frequency and reversibility of the impact;
- g) 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, and;
- h) the possibility of effectively reducing the impact.

The flow chart below describes the EIAR Screening process. This infographic is commonly referred to in EIAR Screening reports and is taken from the Environmental Protection Agency’s 2017 “*Draft Guidelines on the Information to be Contained in Environmental Impact Assessment Reports*”.

Schedule 7A, sets out the Irish Member States criteria used for determining the likelihood of significant impacts from a sub-threshold development on the environment.

1. 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, and
 - (b) a description of the location of the proposed development, with particular regard to the environmental sensitivity of geographical areas likely to be affected.
2. A description of the aspects of the environment likely to be significantly affected by the proposed development.
3. A description of any likely significant effects, to the extent of the information available on such effects, of the proposed development on the environment resulting from;
 - (a) the expected residues and emissions and the production of waste, where relevant, and
 - (b) the use of natural resources, in particular soil, land, water and biodiversity.
4. The compilation of the information at paragraphs 1 to 3 shall take into account, where relevant, the criteria set out in Schedule 7.

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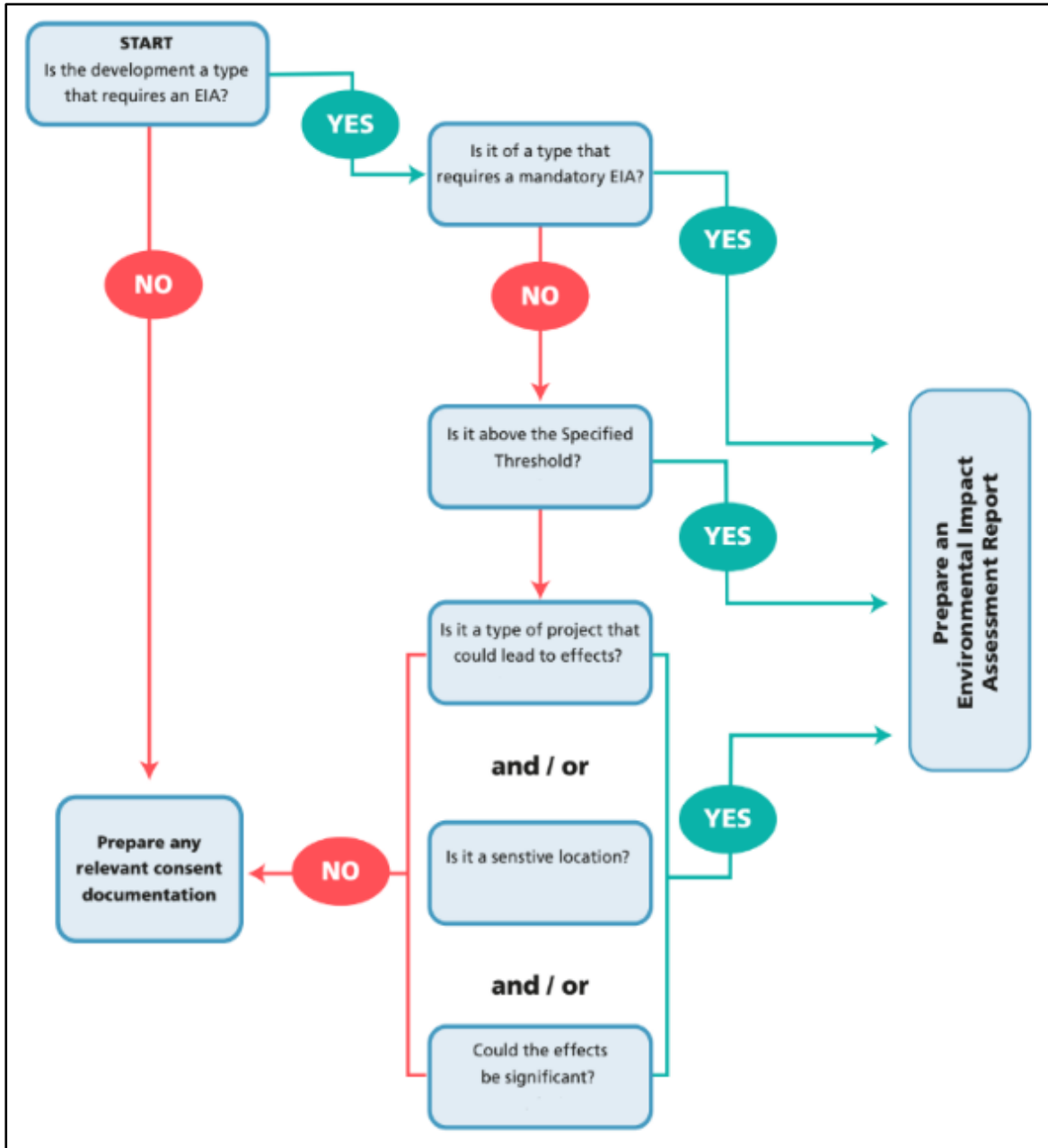


Figure 3.1: E.I.A. Screening Process Flow Chart

The overall purpose of this Screening Report is to identify and detail the findings of desktop and available field studies using the precautionary principle undertaken to analyse the impacts, if any, of the proposed development on the receiving environment and, based on the results, decide whether or not an EIAR is required.

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3.4 PROPOSED DEVELOPMENT AND EIA THRESHOLDS

The development would not fall under any of the classes of development listed in Part 1 of Schedule 5 of the Planning and Development Regulations and a mandatory EIA is not applicable.

The proposed development could be considered to be categorised under Schedule 5: Part 2:

10. Infrastructure projects

(b) (iv) Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere

(In this paragraph, “business district” means a district within a city or town in which the predominant land use is retail or commercial use.)

European Commission (2015) Interpretation of definitions of project categories of annex I and II of the EIA Directive suggest that projects with similar characteristics, but are not explicitly mentioned in the EIA Directive could include: bus garages, train depots; Construction projects such as housing developments, hospitals, universities, sports stadiums, cinemas, theatres, concert halls and other cultural centres. Projects to which the terms ‘urban’ and ‘infrastructure’ can relate, such as the construction of sewerage and water supply networks, urban transport schemes (i.e. bus lanes, tramlines, bus, tram and/or metro stops) could also be included in this category.

The road and pedestrian network within the project area are not specifically zoned within the Fermoy Town Development Plan, however, the surrounding area is zoned for residential, Open-Space – Sports – Recreational – Amenity, and Institutional – Civic – Educational, associated with existing land use. Therefore, this would not be considered a business district.

At approximately 0.63ha, the project would fall below all of the thresholds included in this development category. There is also no direct reference to traffic safety or pedestrian improvements and it cannot be presumed that the project is an ‘urban development’ that falls under this threshold definition.

The project would also not fall under the classes of development outlined in S. 50(1)(a) of the Roads Act, 1993, as amended, or Article 8 of the Roads Regulations, 1994 (Road development prescribed for the purposes of S. 50(1)(a) of the Roads Act, 1993), as detailed in **section 3.2**. The project would not be a motorway, busway or service area. The length of roads within the project area is approximately 385m, would not be realigned, widened to provide for four or more lanes, or include a new bridge or tunnel.

This sub-threshold EIA screening assessment has been carried out in accordance with the criteria listed in Schedule 7 and Schedule 7A of the Planning Regulations, in consideration of the sensitivities of the area.

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4.0 PART I – CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

This section assesses the potential impacts of the development due to the scale and characteristics of the activities proposed to be carried out.

4.1 SIZE AND DESIGN OF THE PROJECT

The applicant is seeking permission for the improvement of N72 Christchurch Junction, Fermoy, to include junction traffic safety improvements and pedestrian improvements. The project area is approximately 6,330 m² or 0.63ha. The length of roads within the project area is approximately 385m.

As stated within the Design Report (Report Ref: 22148-01-001) prepared by Roadplan Consulting Ltd, this scheme has been designed in accordance with the DMURS and there are no Relaxations or Departures from the DMURS standard associated with the design.

Therefore, it is not considered that the size or design of the rising main would necessitate the completion of an Environmental Impact Assessment Report (EIAR).

4.2 CUMULATION WITH OTHER DEVELOPMENTS

4.2.1 Existing Activities in the Area & Operational Cumulative Effects

The project site is located in Fermoy town centre, which would be considered urban in nature.

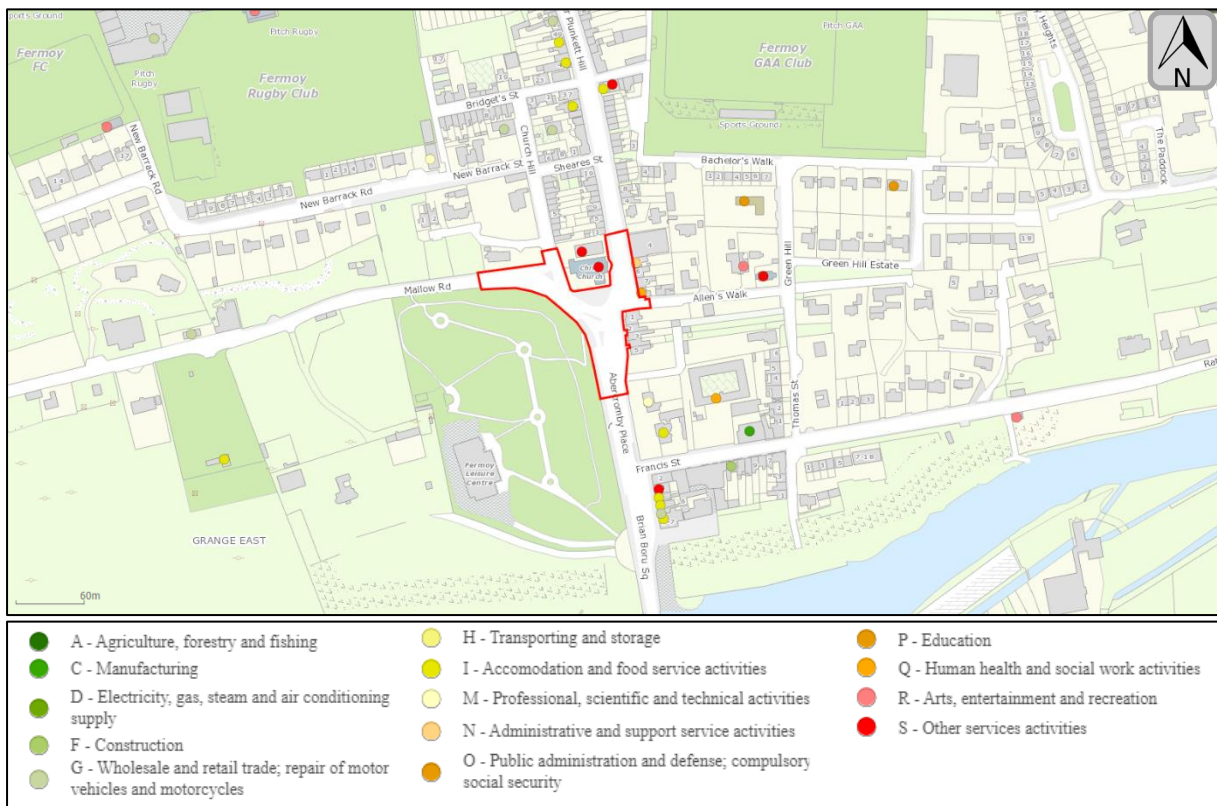


Figure 4.1: Commercial Activities per NACE Code

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Commercial and industrial facilities located in the vicinity of the project site are shown in **Figure 4.1** above. The data points are classified by the standard European nomenclature of productive economic activities. (NACE) code. These include a *Human health and social work activities (Q)*, *Other Services Activities (S)*, *Administrative and support activities (N)*.

The majority of the buildings in the locality consist of residential properties. Commercial premises include a GP Clinic, Physical Therapy Clinic, and Solicitors offices. Christ Church Presbyterian Church is also located adjacent to the project area. In the wider area there are further commercial activities, and of particular note Fermoy Rugby and GAA club grounds to the north.

The operational activity of the proposed development would be the conveyance of vehicular and pedestrian traffic. It is not considered that there would be significant in-combination effects with the business and service activities and the completed project. While businesses and services in the area would contribute to the vehicular and pedestrian traffic, there would be no significant alteration pre- and post-development. The provision of controlled crossing facilities would improve pedestrian safety for patrons of local services.

There are no other known planned road improvement projects within the vicinity of the project.

4.2.2 Cumulation with Construction Projects

Local planning files were assessed to identify plans or projects in the area which would have the potential to commence during the construction phase of the project.

Table 4.1: Potential In-Combination Planning Developments

Planning Ref	Decision Date	Development Description	Approx. Distance from Project
205774	20/05/21	1.)The demolition of a single storey commercial and three storey dwelling unit. 2) The construction of three storey residential development (Total 9 no. apartment units) and the creation of a new vehicular entrance off of Oliver Plunkett Hill.	0m E
205237	15/06/21	The demolition of existing structures on site and the construction of 1) 1 no. garden centre with ancillary homeware section and restaurant/café; 2) refurbishment of an existing shed and cottage on site 3) the provision of a pedestrian footpath along the N72	(development) c.150m SW (footpath) 0m W
215929	30/08/21	Construction of 2 no. detached dwellings. Extension of duration to: 15/6583.	c. 60m E
214542	08/11/21	Demolition of an existing open-air stand, and construction of all-weather playing pitch, hurling wall, floodlighting and car park.	c. 60m NE
226081	04/11/22	The construction of extensions to existing dwelling house.	c.180m WNW

While it is not known at this time if the above approved developments will commence construction during the project construction phase, there is a potential for in combination construction effects. However, the construction phase of each project would be temporary and

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the adoption of standard construction management practices would prevent significant environmental impacts or nuisance.

Therefore, it is not considered that cumulative environmental effects from the proposed development requires further investigation within an EIAR.

4.3 USE OF NATURAL RESOURCES

Natural resources are considered to be the physical resources in the environment, which may be either of human or natural origin. These include land, soil, water and biodiversity.

The construction process would include the use of various raw materials and should not require excessive levels of any one natural resource. Resources required for the development include minor use of energy and water, and the use of stone fill material, sand, concrete, aggregate stone, asphalt, pavement slabs, kerbing, signage and lighting materials, which would be sourced from standard suppliers and local quarries where available. Small quantities of topsoil and/or compost would be used for the installation of SUDS features along with plant saplings. Final quantities and specification of materials would be confirmed at the detailed design stage. There would be expected to be no uncommon use of natural resources for construction of the project.

The overall development would take place within a relatively small area (c. 0.63ha) with no significant land take or alteration of current land use.

The operational phase of the development would cause no significant use of natural resources.

It is not considered that the use of natural resources for the proposed development would require further investigation within an EIAR.

4.4 GENERATION OF WASTES AND BY-PRODUCTS

The management of waste is regulated under the Waste Management Acts, 1996– 2003, and associated regulations.

The anticipated volumes of waste generated as a result of the construction phase of the development are anticipated to be minor. Due to the nature of the proposed works, excavations would be expected to be limited and shallow. Wastes would comprise primarily of removed asphalt, kerbing, pavement bricks / slabs and metal signposts. C&D waste would be appropriately segregated, removed from site and disposed of in a suitable licenced facility via a suitably permitted waste contractor.

Other potential construction wastes may include general waste from workers. These wastes would be appropriately segregated and recycled or disposed of.

There would be no anticipated generation of wastes during the operational phase of the development.

As waste volumes generated on-site are anticipated to be very small, it is not considered that this would require an EIAR for further investigation of potential impacts.

4.5 POLLUTION AND NUISANCE

4.5.1 Pollution

4.5.1.1 Air Pollution

Air quality in the region would be expected to be principally influenced by traffic, commercial and residential activities within Fermoy town.

The development site is located in Air Zone D (Rural Ireland) and within the Air Quality Index Region of *Small Towns (Fermoy – Zone ID 33)*, which has a status of '3 – Good' (last updated: Tue 25-May-2021 on <https://gis.epa.ie/EPAMaps/>). However, there is no currently active monitoring station in Fermoy.

The main potential sources of air pollutants from the construction of the development would be combustion by-products from the operation of machinery and dust generated from excavations. Potential impacts from dust are discussed in **section 4.5.2**.

Air emissions from construction machinery would be expected to be minor in a regional context. The potential for construction dust emissions is discussed further under nuisances in this report.

There would be anticipated to be no significant alteration to emissions to air from the site during the operational phase, as the project would facilitate the same volume of traffic as existed prior to the project.

This would not be anticipated to require an EIAR for further assessment.

4.5.1.2 Water Pollution

There are no natural surface water features within the site boundary. Rain falling within the site would be collected within the existing municipal surface water network and discharge to the River Blackwater approximately 200m south of the project area.

Construction practice would follow Transport Infrastructure Ireland (TII) publications. TII (June 2015) Road Drainage and the Water Environment recommends following practice outlined within NRA (2008) *Guidelines for the Crossing of Watercourses during Construction of National Road Schemes* and CIRIA 648 *Control of Water Pollution from Linear Construction Projects*.

There would be no significant volumes of fuels, oils or other chemicals stored on-site during the construction phase of the development. The construction working area active at any one time would be limited as the project progresses in phases, limiting the potential for the generation of suspended solids or the entrainment of concrete into surface-water. Best practice construction measures such as silt and sediment controls will be installed prior to the commencement of any construction works. There would not be anticipated to be a significant risk to water quality during such works within the site boundary.

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The scheme will not involve any substantial changes to the roadside drainage network, reconnecting to the existing network, so there will be no change from the baseline scenario during the operational phase of the project.

It is not considered that risks of water pollution would require an EIAR for further assessment.

4.5.2 Nuisances

Nuisances can be defined as activities or emissions which are of a nature which can reasonably be expected to cause annoyance. As nuisances are defined on the basis of annoyance and infringement upon amenity, sensitive receptors are typically residences, service or amenity areas.

Typical nuisances which may occur from similar projects would include noise and dust during construction.

As per **Figure 4.2**, land use within the vicinity of the project area is primarily residential, with Fermoy Town Park and Playground on the western boundary and Christ Church Presbyterian Church on the northern boundary.

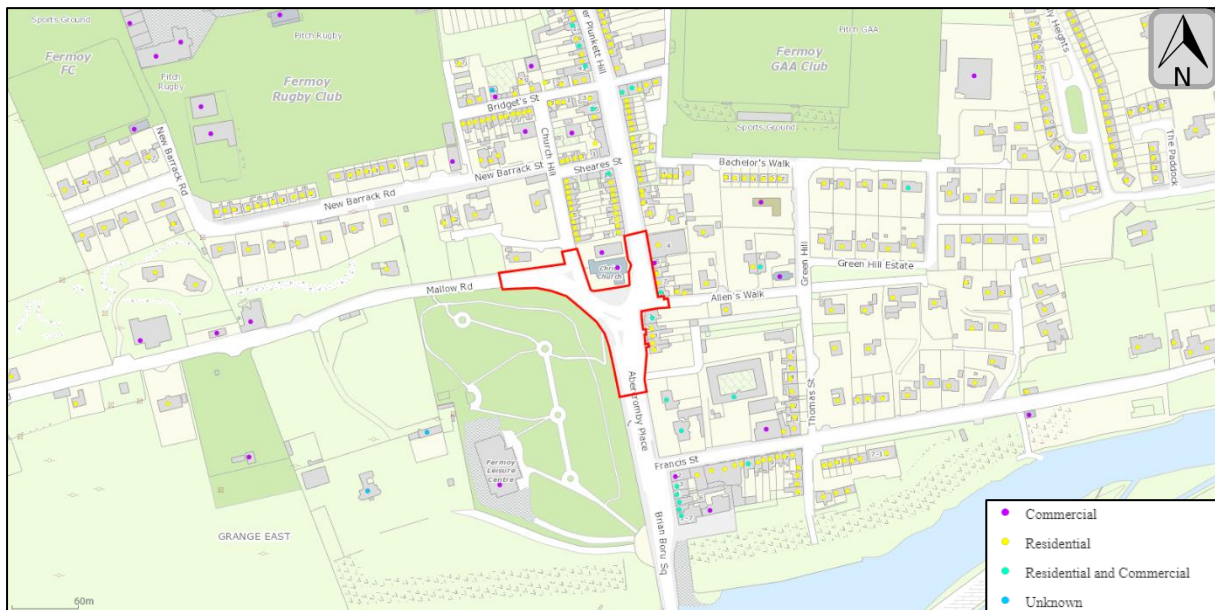


Figure 4.2: Residential and Commercial Distribution (MyPlan.ie)

4.5.2.1 Noise

Baseline Noise Survey

The baseline noise survey was carried out on the 30th January 2023 by PES Ltd. Weather during the survey was dry and cool, with temperatures ranging from 6-9°C. Wind conditions during the monitoring survey were principally calm to light air, from a south-westerly direction, with wind speeds of less than 5 m/s or 10 knots. The Sound Level Meter was also fitted with a windshield to minimise interference from meteorological conditions during all monitoring periods.

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The equipment used for the noise monitoring was a Cirrus CR:171B Sound Level Meter (serial No: G071199), a MK:224 Microphone (serial no: 216368A) and a CR:515 Acoustic Calibrator (serial no: 54060). The CR:171B and the MK:224 were both calibrated externally on the 4th of October 2022. The CR:515 was calibrated externally on the 16th of August 2022. A calibration check of 94 dB(A) at 1kHz was carried out on the instrument before and after measurement. The calibrator is a Class 1 grade, which conforms to IEC 60942:2003. The difference between the initial calibration value, any subsequent calibration check, and a final calibration checks on completion of measurements did not exceed 0.5 dB, and the instrument calibration was found to be satisfactory.

Table 4.2: Location of Noise Monitoring Points

Ref.	Grid Ref		Location Type	Location
	X	Y		
NM1	181042	098910	Noise Monitoring Location	N72 westbound, pavement on boundary of Fermoy Town Park.
NM2	181087	098956	Noise Monitoring Location	Church Hill Street.
NM3	181162	098943	Noise Monitoring Location	R639 Oliver Plunkett Hill
NM4	181157	098825	Noise Monitoring Location	Pavement beside residences on N72 southbound.

Grid Ref source: <https://irish.gridreferencefinder.com/>

All measurements were taken at:

- 1.2 – 1.5m height above local ground level
- >3.5m away from reflective surfaces

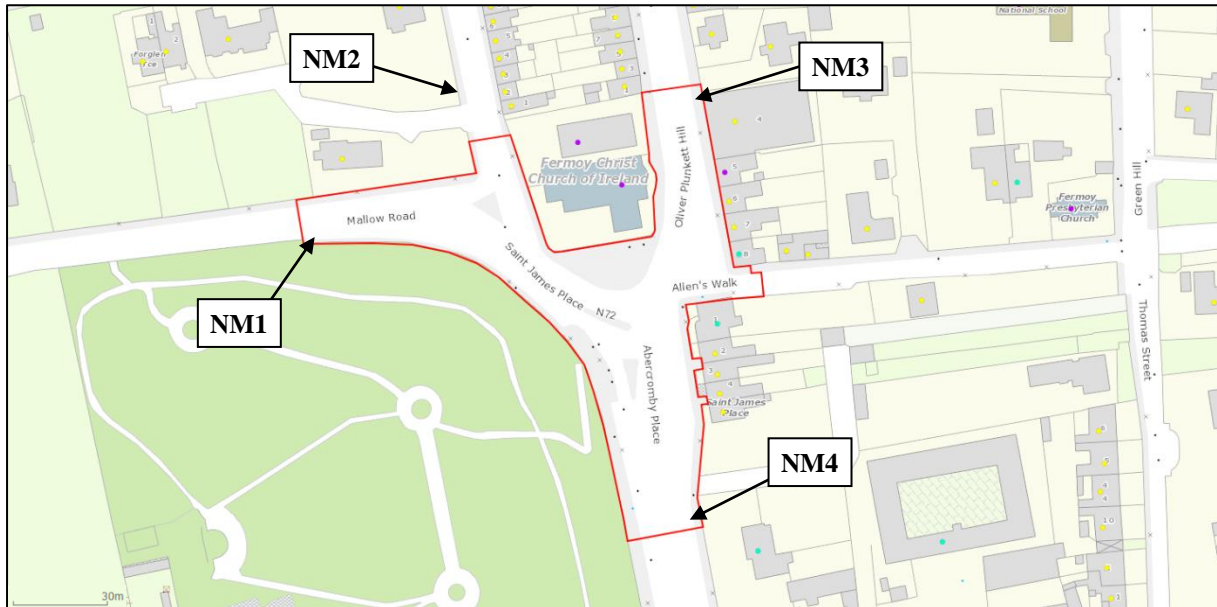


Figure 4.3: Noise Monitoring Locations (MyPlan.ie)

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Table 4.3: Noise Monitoring Survey Results

Location Ref	Date / Time	Noise Results		Notes
NM1	30/01/23 10:15	L _{Aeq}	70.2	<ul style="list-style-type: none"> • Frequent traffic on adjacent N72 (4.9 passing / minute). • Continuous distant traffic within the town. • Frequent birds singing in surrounding trees. • Intermittent pedestrians passing and talking.
		L ₁₀	74.6	
		L ₉₀	52.3	
NM2	30/01/23 10:48	L _{Aeq}	58.2	<ul style="list-style-type: none"> • Frequent traffic on N72 @ c. 50m (5.2 passing / minute). • Continuous distant traffic within the town. • Intermittent engine and knocking noise from forklift operating at tyre store at top of the hill. • Frequent birds singing in surrounding trees. • Intermittent pedestrians passing and talking.
		L ₁₀	59.8	
		L ₉₀	50.5	
NM3	30/01/23 11:28	L _{Aeq}	74.7	<ul style="list-style-type: none"> • Frequent traffic on adjacent R639 (13.7 passing / minute). • Continuous distant traffic within the town. • Frequent birds singing. • Intermittent pedestrians passing and talking.
		L ₁₀	78.0	
		L ₉₀	65.5	
NM4	30/01/23 12:02	L _{Aeq}	73.9	<ul style="list-style-type: none"> • Frequent traffic on adjacent N72 (17.2 passing / minute). • Continuous distant traffic within the town. • Frequent birds singing. • Intermittent pedestrians passing and talking.
		L ₁₀	72.1	
		L ₉₀	63.9	

Total LAeq = 72.1 dB

Total LAeq (rounded to nearest 5 dB) = 70.0 dB

Operational Noise Impact

It is not anticipated that there would be a significant alteration to the existing noise environment following completion of the project.

Existing traffic volumes are expected to continue during the operational phase and the existing speed limit of 50 km/h would be maintained.

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Construction Noise Impact

This section analyses the potential impacts of the noise generated during the construction phase of the proposed development on local sensitive receptors.

Relevant Noise Legislation & Guidance

British Standard BS 5228-1:2009(+A1 2014)

Best practice guidelines are taken from the British Standard BS 5228 – 1: 2009 (+A1 2014): ‘Code of Practice For Noise And Vibration Control On Construction And Open Sites – Noise’. BS 5228 sets out an approach for setting appropriate construction noise limits for noise sensitive premises; occupied premises outside a site used as a dwelling (including gardens), place of worship, educational establishment, hospital or similar institution, or any other property likely to be adversely affected by an increase in noise level.

The BS 5228 ‘ABC Method’ calls for the designation of the noise environment into a specific category (A, B or C) based on existing ambient noise levels in the absence of construction noise. This then sets a threshold noise value that, if exceeded, indicates a significant noise impact is associated with the construction activities as summarised in **Table 4.4** below.

Table 4.4: Threshold of Potential Significant Effect at Dwellings (BS 5228)

Assessment category and threshold value period	Threshold value, in decibels (LAeq, T)		
	Category A ^(a)	Category B ^(b)	Category C ^(c)
Night-time (23.00–07.00)	45	50	55
Evenings and weekends ^(d)	55	60	65
Daytime (07.00–19.00) and Saturdays (07.00–13.00)	65	70	75

NOTE 1: A potential significant effect is indicated if the LAeq, T noise level arising from the site exceeds the threshold level for the category appropriate to the ambient noise level.
NOTE 2: If the ambient noise level exceeds the Category C threshold values given in the table (i.e. the ambient noise level is higher than the above values), then a potential significant effect is indicated if the total LAeq, T noise level for the period increases by more than 3 dB due to site noise.
NOTE 3: Applied to residential receptors only.

a) Category A: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are less than these values.
b) Category B: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are the same as category A values.
c) Category C: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are higher than category A values.
d) 19.00–23.00 weekdays, 13.00–23.00 Saturdays and 07.00–23.00 Sundays.

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Construction Noise Limits, Impact and Control

As shown in **Table 4.3**, the average ambient noise levels (when rounded to the nearest 5 dB) are higher than category A values in **Table 4.4**.

Therefore, the site would be designated as *Category C* and the following recommended noise limits would apply to the site during the construction phase of the development:

Assessment category and threshold value period	Threshold value, in decibels (LAeq, T)
Night-time (23.00–07.00)	55
Evenings and weekends ^(d)	65
Daytime (07.00–19.00) and Saturdays (07.00–13.00)	75

There is potential for noise nuisance impacts during the construction phase of the development. However, this would be mitigated by the phased construction, with activities only occurring in close proximity of sensitive receptors for short periods of the overall project. The overall project is also temporary in nature, anticipated to occur over approximately 6 months. However, it is recommended that appropriate construction noise management is implemented for the project.

All construction activities should take place during standard working hours of Weekday Daytime (07.00–19.00) and Saturdays (07.00–13.00).

Any works which, by necessity, are required to be carried out outside of these times should be notified to any potentially effected local residents in good time and prior to specified works commencing.

It is recommended that guidance on control of noise, as per The National Roads Authority's 'Guidelines for the Treatment of noise and vibration in National Road Schemes' (2004) be followed during the construction phase.

It is not considered that further assessment within an EIAR would be required for nuisance noise risk.

4.5.2.2 Vibration

The main potential source of vibration during the construction programme is associated ground-breaking activities.

As detailed in **section 5.2.6**, the proposed development is located in immediate proximity to several protected structures and recorded monuments. Recorded monuments would be subject to statutory protection under Section 12 of the National Monuments (Amendment) Act 1994. However, the level of vibration caused during the construction phase is unlikely to generate any significant impacts on surrounding structures. Thus, significant impacts to protected structures within the vicinity of the proposed development are unlikely.

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Prior to the undertaking of any works within the vicinity of protected structures and monuments, relevant method statements will be prepared by the contractor and submitted to DCC for prior approval.

Residual vibration effects will be controlled by the implementation of best construction practice. Examples of measures to be employed include the use of suitable vibration isolators in equipment mountings and ensuring that materials are lowered rather than dropped from heights. A full list of proposed measures will be proposed and implemented by the contractor in advance of the construction works.

It is not considered that further assessment within an EIAR would be required for nuisance vibration risk.

4.5.2.3 Dust

Operational

There would be anticipated to be no significant change in the current dust environment as a result of the proposed development, as the project site would continue to be used as a public road.

Construction

Dust may arise from the breaking of existing road surfaces and imported aggregate materials. The potential for dust emissions during the project would be expected to be minimised due to phasing the development, with smaller working areas active at any one time. Therefore, the quantities of materials available to generate dust would be small. The potential for construction dust dispersion depends on the local meteorological conditions such as rainfall, wind speed and wind direction.

The impact that dust from the site may have on the surrounding area may be assessed with the use of **Table 4.5** below.

Table 4.5: Assessing the Criteria for the Impact of Dust from Construction with Standard Controls in place. (National Road Authority)

Source		Potential Distance for Significant Effects from the Source (meters)		
Scale	Description	Soiling	PM ₁₀ *	Vegetation
Major	Large construction sites, with high use of haul roads	100m	25m	25m
Moderate	Moderate sized construction sites, with moderate use of haul roads	50m	15m	15m
Minor	Minor construction sites, with limited use of haul roads	25m	10m	10m

* Significance based on the 2005 standard, which allows 35 daily exceedances/year of 50 µg/m³

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The proposed development is of minor scale. Therefore, receptors beyond the 25m radius would not be expected to be significantly affected by dust as the bulk of any airborne particles will have settled and dispersed.

Works are proposed to be carried out within 10-25m of receptor locations, particularly along St. James Place, Church Place, Oliver Plunkett Hill and Church Hill.

The likelihood of these properties being impacted by soiling or PM₁₀ particulates would be lessened by the progressive phasing of development and short duration that works will take in the vicinity of the properties.

Construction dust control is a common part of construction management practices. Dust dispersal from the site could be further managed by implementing typical dust control methods such as using water bowsers, sprays or vapour mists in very dry weather and covering any stockpiles of sand, gravel or silt on site.

Cognisance should be taken of the guidelines published by the Institute of Air Quality Management (IAQM), "*Assessment of dust from demolition and construction 2014*"

Impacts associated with dust during construction would not be likely to be significant and would not be considered to require further assessment through EIAR.

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4.6 RISKS OF MAJOR ACCIDENTS AND RISKS TO HUMAN HEALTH

As noted in the EIA Directive 2014/52/EU, precautionary actions need to be put in place for certain projects which, “*due to their vulnerability to major accidents and/or natural disasters (such as flooding, sea level rise or earthquakes) are likely to have significant adverse effects on the environment*”.

It is not anticipated that there would be a significant risk of environmental impacts as a result of accidents during the operational phase due to the nature of activities that will be taking place (operation of a public road).

The scale of construction occurring at any one time would be small, with limited quantities of materials present as the development of the site progresses. Typical construction methods and practices would be anticipated to adequately mitigate against accidents or risks to human health.

The site does not fall within the Seveso III Regulations or European Communities (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2015.

It is not considered that the site is at a significant risk of natural disasters.

As shown in **Figure 4.4**, OPW National Catchment Flood Risk Assessment and Management (CFRAM) river flood maps show no part of the project site is in a zone of *High Probability* (1:10 year flood) or *Medium Probability* (1:100 year flood). A small portion of the south-eastern corner, nearest to the River Blackwater, is indicated as potentially being in a zone of *Low Probability* (1:1000 year flood).

Fermoy Municipal District Local Area Plan 2017 online map viewer indicates that designated Flood Zones A & B overlap the southern boundary of the site (**Figure 4.5**). However, the Fermoy Town Development Plan 2009-2015 details that the area benefits from the provision of flood defence (**Figure 4.6**).

National Indicative Fluvial flood mapping shows the site is not located within any fluvial, pluvial flood zones, as per **Figure 4.7**.

The proposed site is not in an area prone to landslides or earthquakes.

Risks to human health would not be expected to change significantly as a result of the construction or operational phase of the development. There are no recorded drinking water abstractions in close proximity to the site.

Therefore, risks associated with major accidents or human health would not be considered to require an EIAR for further assessment.

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Figure 4.4: OPW CFRAM River Flood Extents Map

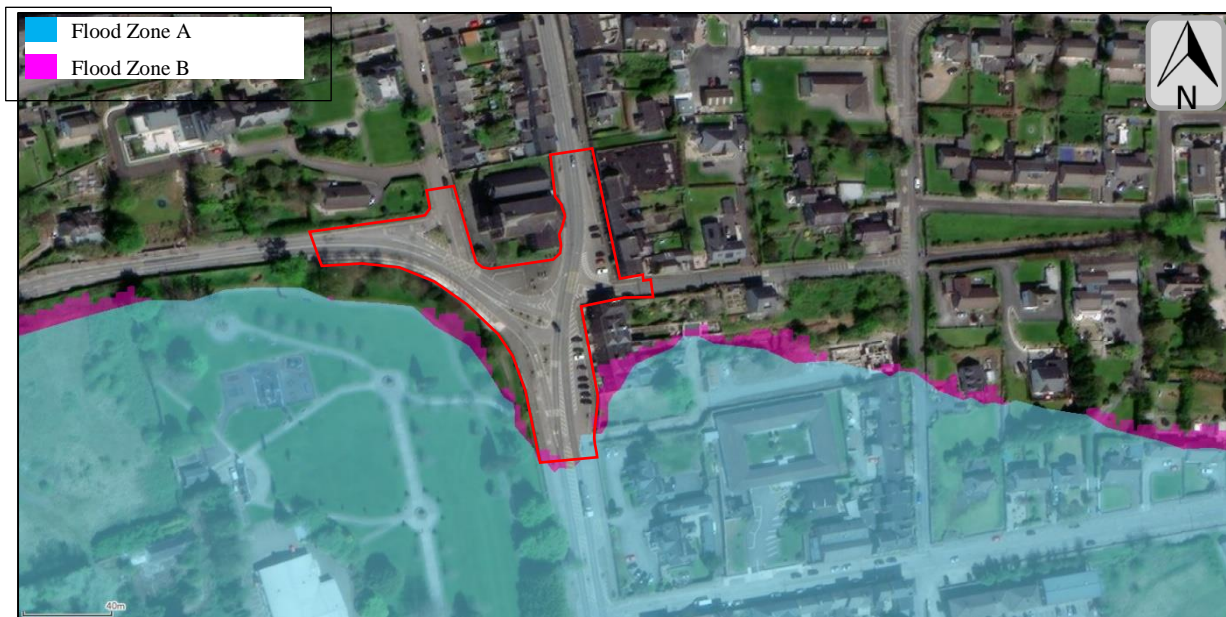


Figure 4.5: Fermoy Municipal District Local Area Plan 2017

(<https://corkcoco.maps.arcgis.com/apps/webappviewer/index.html?id=636e600103264fd4b1ba0ff1a73966e1>)

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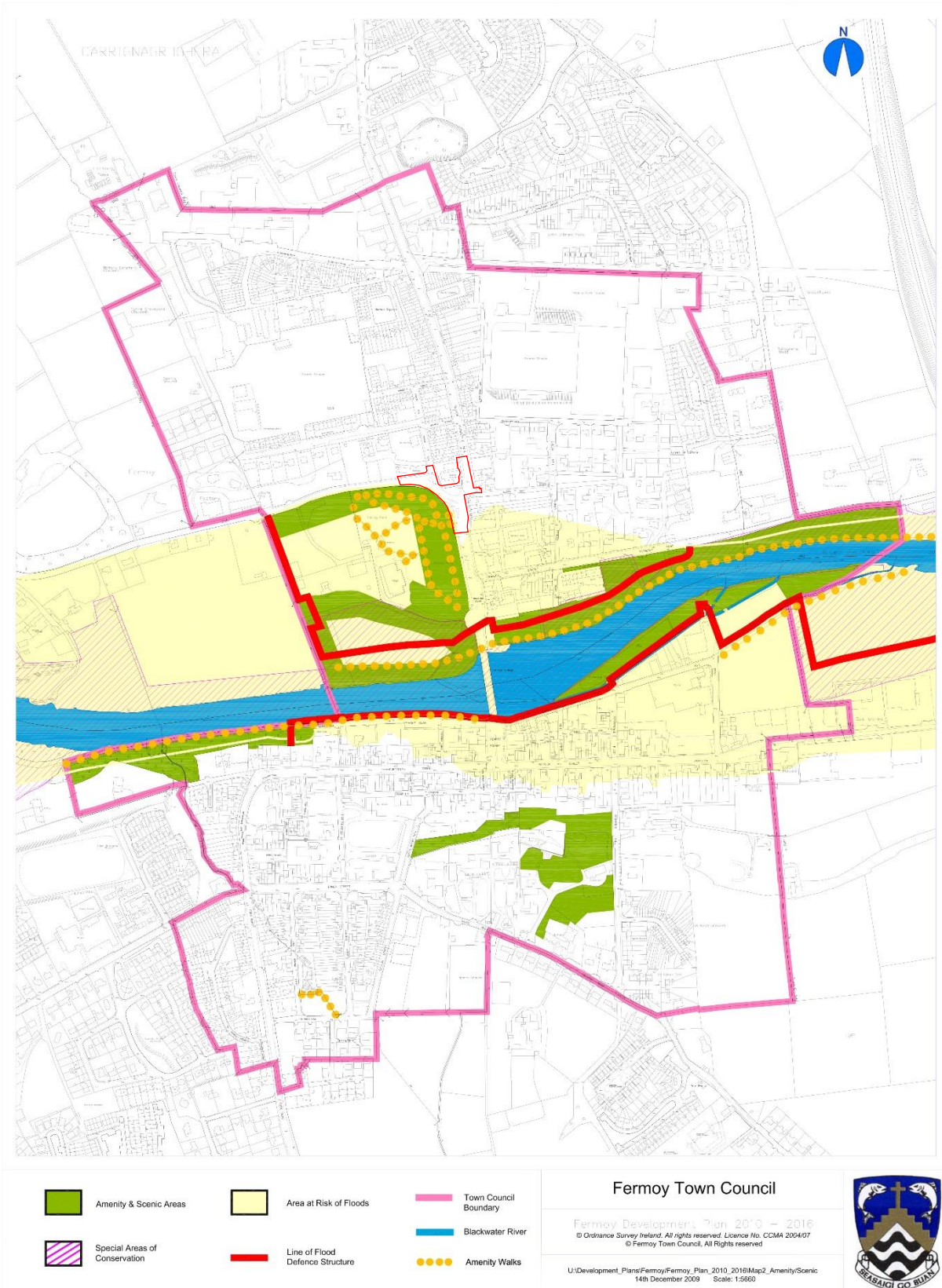


Figure 4.6: Constraints / Potential Map – Fermoy Town Development Plan 2009-2015

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Figure 4.7: OPW National Indicative Fluvial Map (NIFM)

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5.0 PART II – LOCATION OF THE DEVELOPMENT

This section assesses the potential impacts of the development due to the sensitivities of the proposed location.

5.1 EXISTING AND APPROVED LAND USE

The development is located near the Fermoy Town Centre. The Fermoy Town Development Plan 2009-2015 shows surrounding areas zoned for Residential, Open Space / Recreation / Amenity and Institutional / Civic / Educational. The project area is not zoned.

Existing land use within the project area is currently public roads, pavement and parking. Land uses would not be altered as part of the proposed development.

Therefore, it is not considered that an EIAR would be required in order to further assess potential impacts on land use.

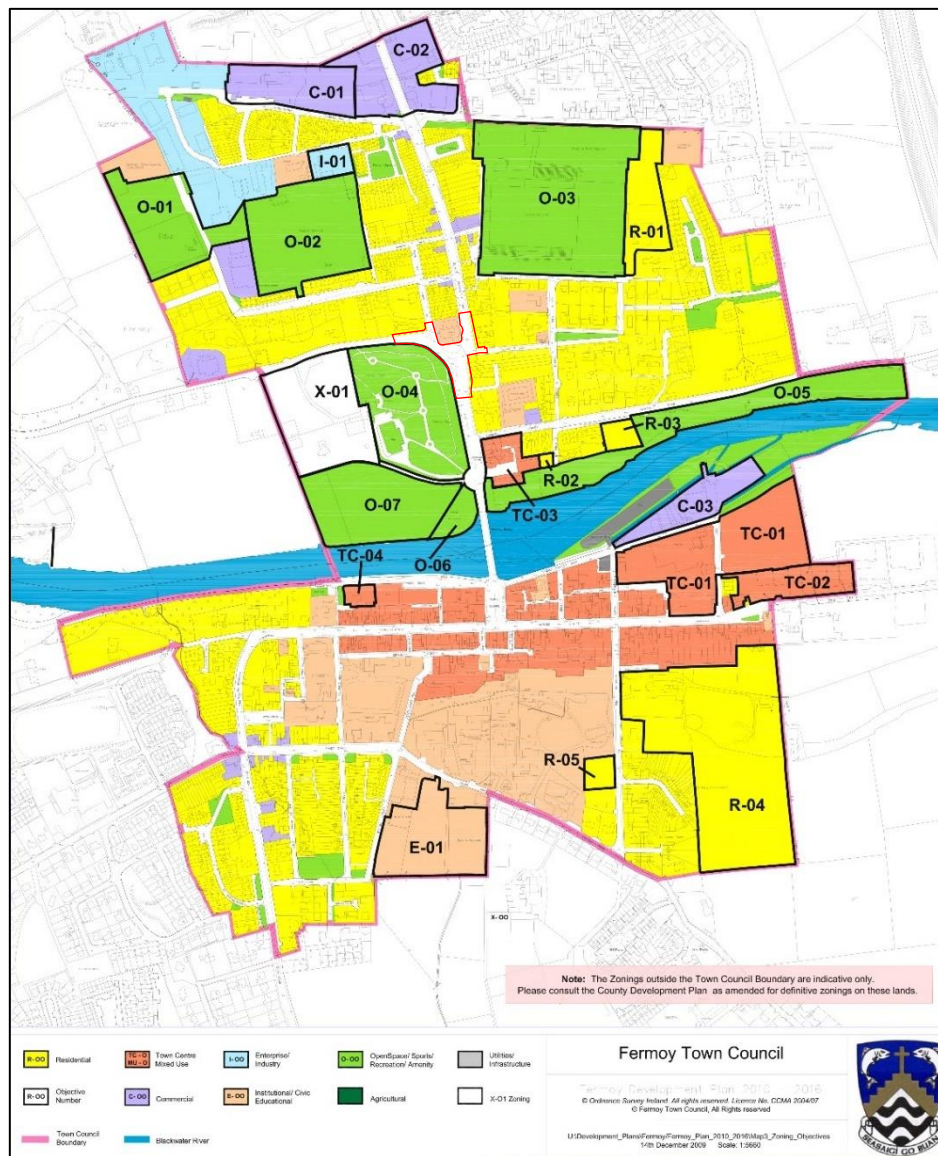


Figure 5.1: Zoning Map – Fermoy Town Development Plan 2009-2015

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5.2 ABSORPTION CAPACITY OF THE NATURAL ENVIRONMENT

This section assesses the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground.

5.2.1 Soil & Bedrock

The site is located on “made ground”, as per **Figure 5.2**. Below this layer, well drained mineral of alluvial type soils may be encountered.

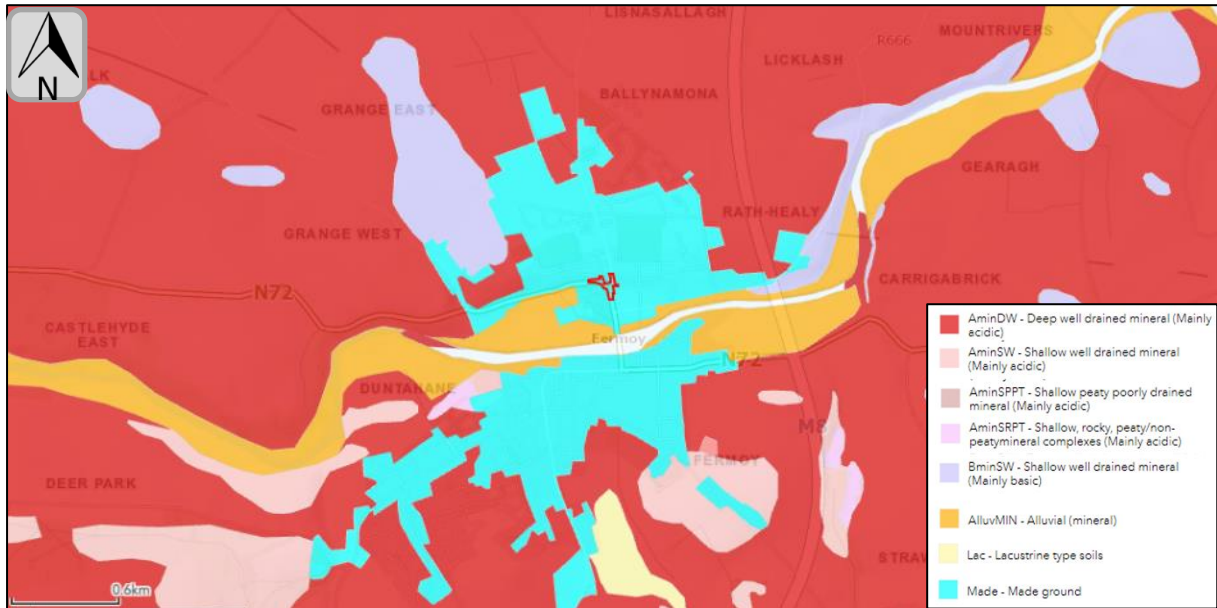


Figure 5.2: Teagasc Soils (GIS Maps)

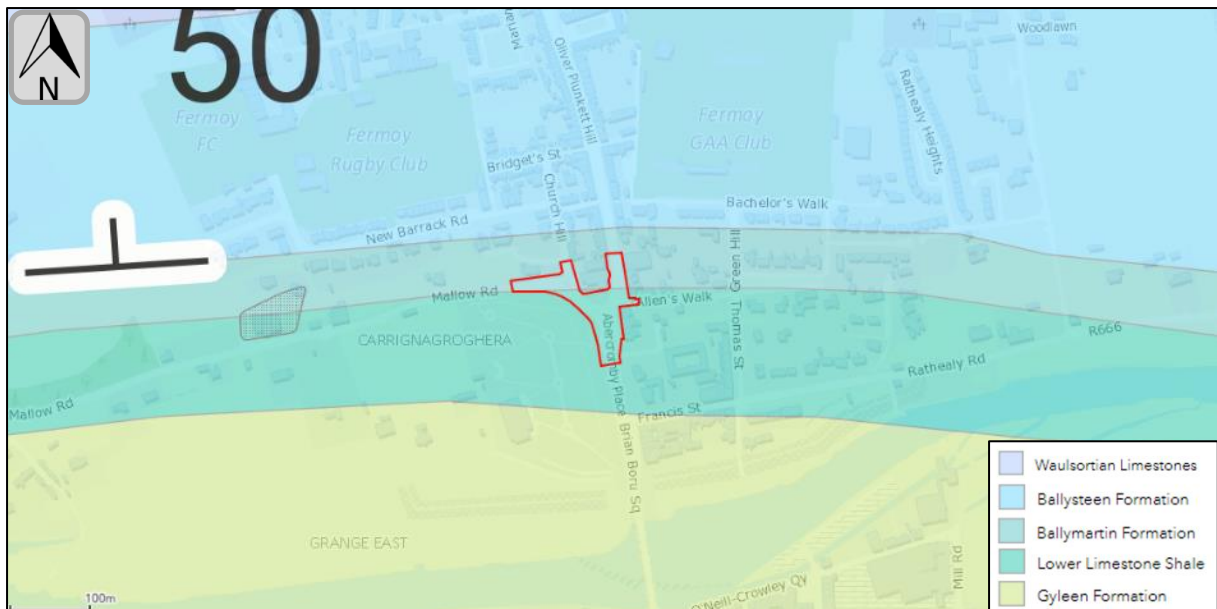


Figure 5.3: Bedrock Geology 100k (GIS Maps)

The site is underlain by interbedded limestones and shale of the *Ballysteen* and *Ballymartin* formations, as per **Figure 5.3**.

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The majority of proposed works would occur at the surface of the project site, within the “made ground” horizon. Some limited deeper excavations would be required in order to connect the surface water system with the existing network. If suitable, excavated soil and bedrock material would be used to refill excavations following installation of services.

Where excess soil or stone is generated, this would be disposed of to an appropriately licenced waste facility.

Construction works pose a risk of contamination of underlying soil and bedrock from fuels and oils contained in construction equipment. However this risk is considered minor due to the small quantities of such materials, the temporary exposure of the underlying soils and stones and standard construction practices that would be in place during construction.

The completed development would be primarily composed of impermeable made ground. Small areas of exposed soils would be included in the completed development for provision of SUDS elements and planting. It is not considered that these exposed areas would pose a risk to soils or bedrock resources.

Therefore, it is considered that there is no significant risk to soils and bedrock as a result of the proposed project and further assessment in an EIAR would not be required.

5.2.2 Groundwater Environment

The northern section of the site is situated in a Locally Important Aquifer (Lm) – *Bedrock which is Generally Moderately Productive* and the southern section is located in a Poor Aquifer (Pl), as per **Figure 5.4**.

Small quantities of water may be used during the construction phase of the development. Where required, this would be supplied by the mains water supply. There would be no water usage during the operational phase of the completed development.

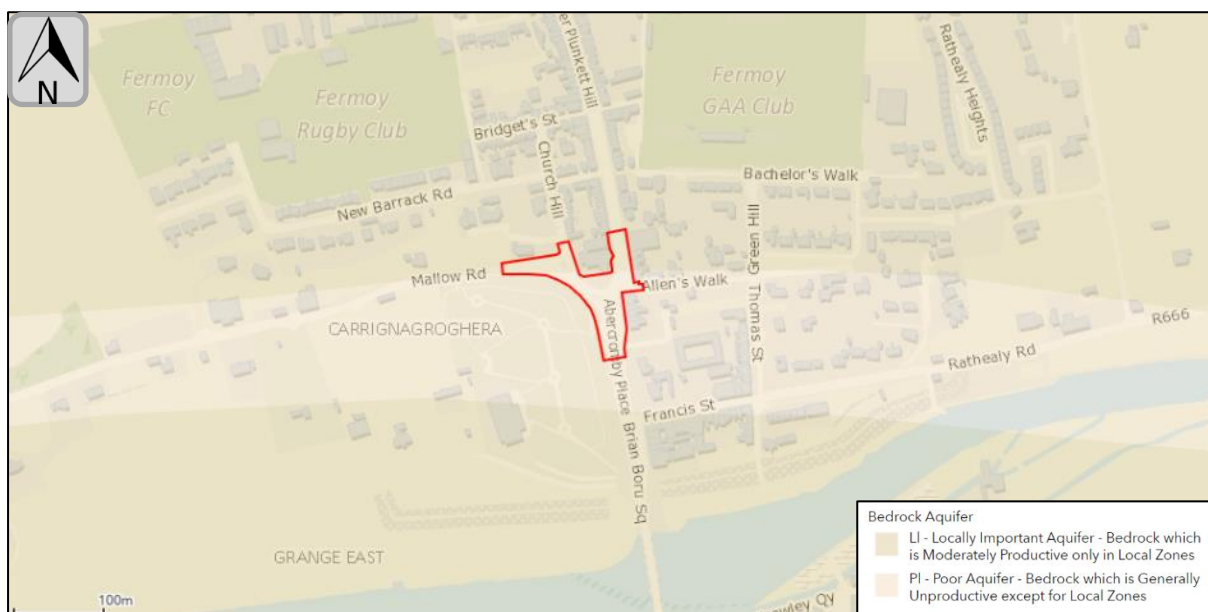


Figure 5.4: Bedrock Aquifer & Gravel Aquifer (GIS & EPA Maps)

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Groundwater vulnerability is classified as follows: Rock near surface or karst (X) Extreme (E) High (H) Moderate (M) Low (L). The site is located on an area which has a vulnerability classification of High (H), as per **Figure 5.5**. The topography of the site falls from a height of c.40m AOD north to c.20m south along the River Blackwater. Groundwater flow would be expected to generally flow south and contribute to the River Blackwater.

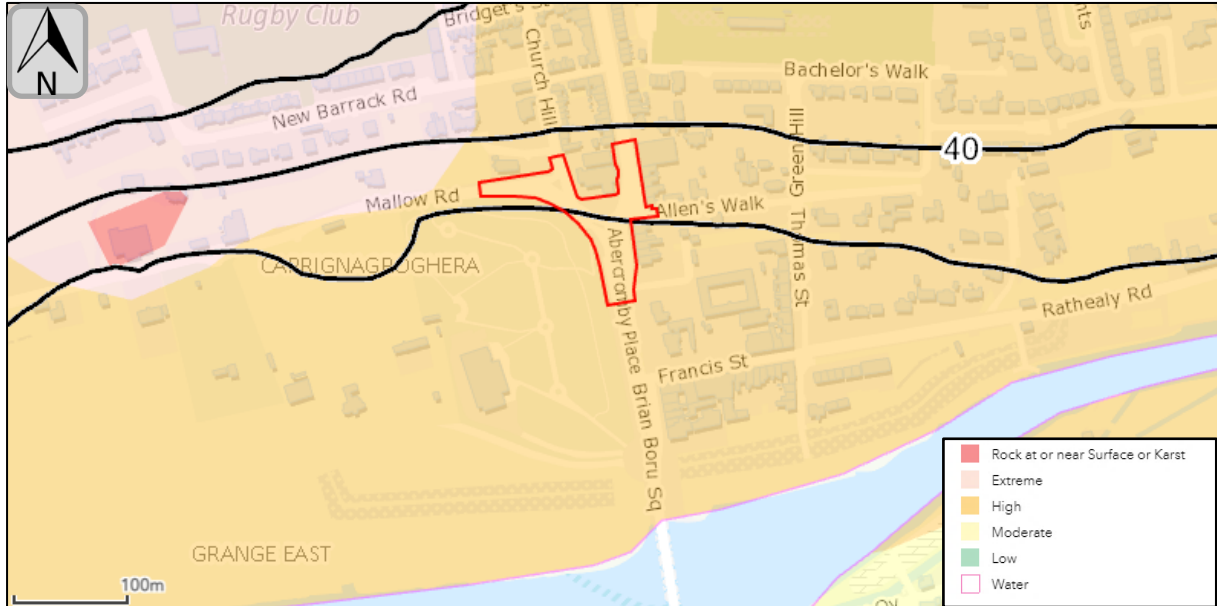


Figure 5.5: Groundwater Vulnerability (EPA Maps)

The development site is situated on the Mitchelstown (IE_SW_G_082) groundwater body, which is described a *karstified limestone bedrock aquifer*.

This GWB is designated to have good overall Ground Waterbody WFD Status 2016-2021 water quality status of “Good”, while the Ground Waterbodies Risk status is categorised as “At Risk”.

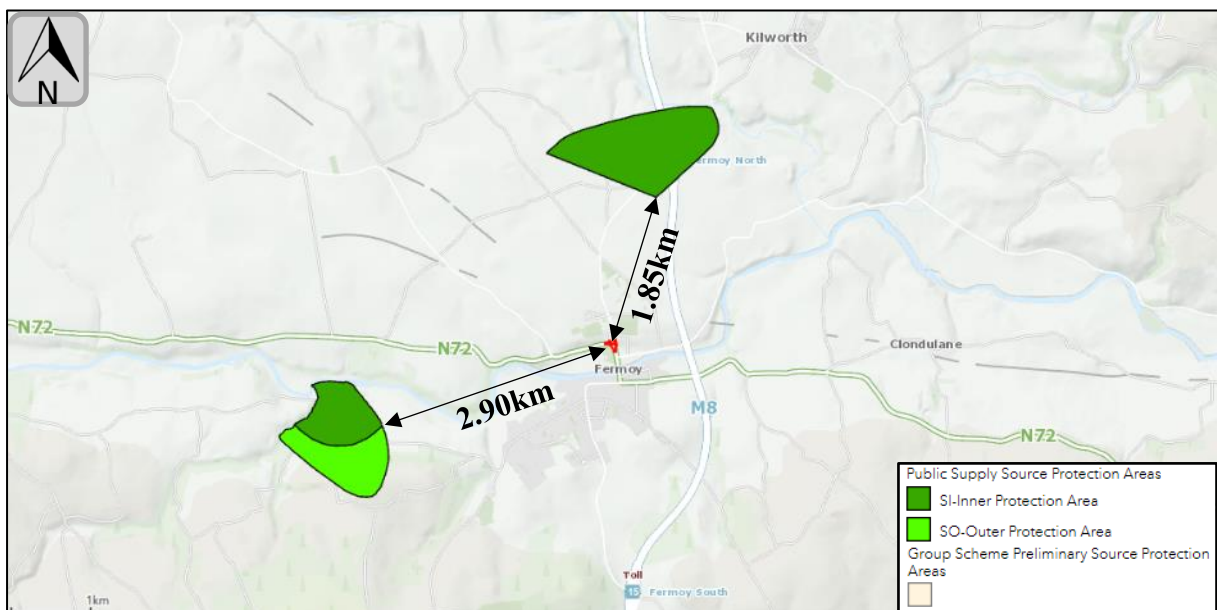


Figure 5.6: Groundwater Source Protection Areas (GSI Maps)

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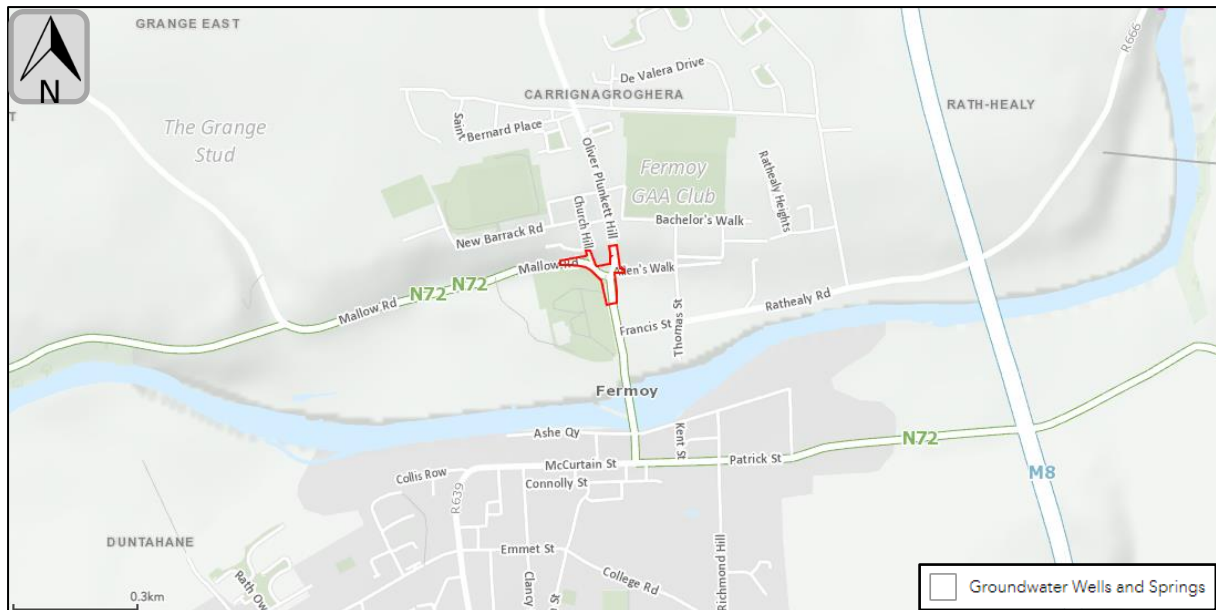


Figure 5.7: Groundwater Wells, Springs and Karst Data (GSI Maps)

The Kilworth PWS (0500PUB1206) is located c.1.85km north and the Fermoy-Coolroe PWS (0500PUB1222) is located c. 2.9km south-west of the site boundary, as per **Figure 5.6**. No recorded groundwater wells, springs and karst features are recorded for the site, as per **Figure 5.7**. There is no direct hydraulic connectivity to groundwater source protection zones or recorded wells from the site.

There would be no significant volumes of fuels, oils or other chemicals in use or stored on-site during the construction phase. Exposure of the underlying groundwater would be short term. It is not anticipated that there would be a significant risk to groundwater during this phase.

The completed development would be primarily composed of impermeable made ground. Stormwater would be directed to the installed surface-water network, which would be connected to the existing municipal storm drain network. Small areas of exposed soils would be included in the completed development for provision of SUDS elements and planting. It is not considered that these exposed areas would pose a risk to groundwater resources.

It is not considered that the proposed development would require further assessment within an EIAR in terms of groundwater resource vulnerability.

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5.2.3 Surface Water Environment

The proposed development is located within Blackwater (Munster) catchment (ID: 18) and within the Blackwater[Munster]_SC_120 sub-catchment (ID: 18_28). The closest mapped watercourse to the proposed development site is the River Blackwater (EPA Code: 18B02 – Order 5) located approximately 200m south of the proposed development, as per **Figure 5.8**.

The project area is serviced by the municipal stormwater network, discharging to the River Blackwater.

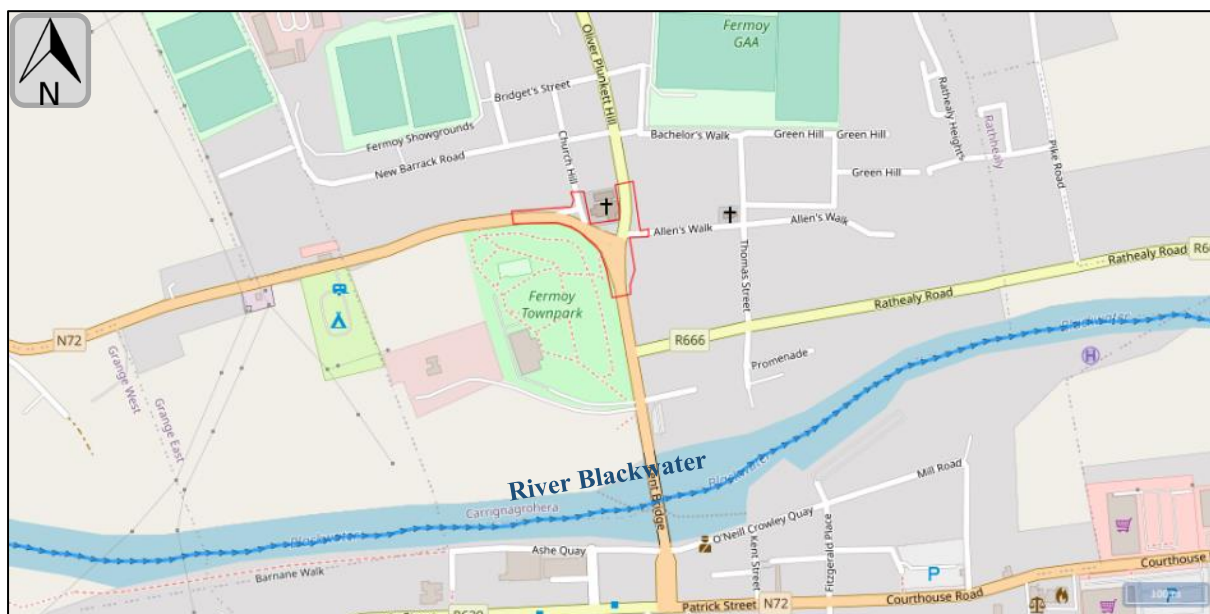


Figure 5.8: Watercourses near the Proposed Development (EPA Maps)

The Environmental Protection Agency (EPA) undertakes regular surface water monitoring along the River Blackwater. The results for the nearest monitoring stations (as per **Table 5.1**) with available monitoring results for the period 1999 – 2020 are summarised in **Figure 5.9** below for indicative purposes.

Table 5.1: Active Monitoring Stations of the River Barnakyle

Station No.	Station Location	Easting	Northing	Approx. Location Relative to Proposed Site
RS18B022000	Ballyhooley Br	172921	098738	c.9.50 km Upstream
RS18B022210	Fermoy Br (RHS)	181275	098571	c.0.20 km South
RS18B022450	W of Kilmurry Ho	187524	099509	c.8.00 km Downstream

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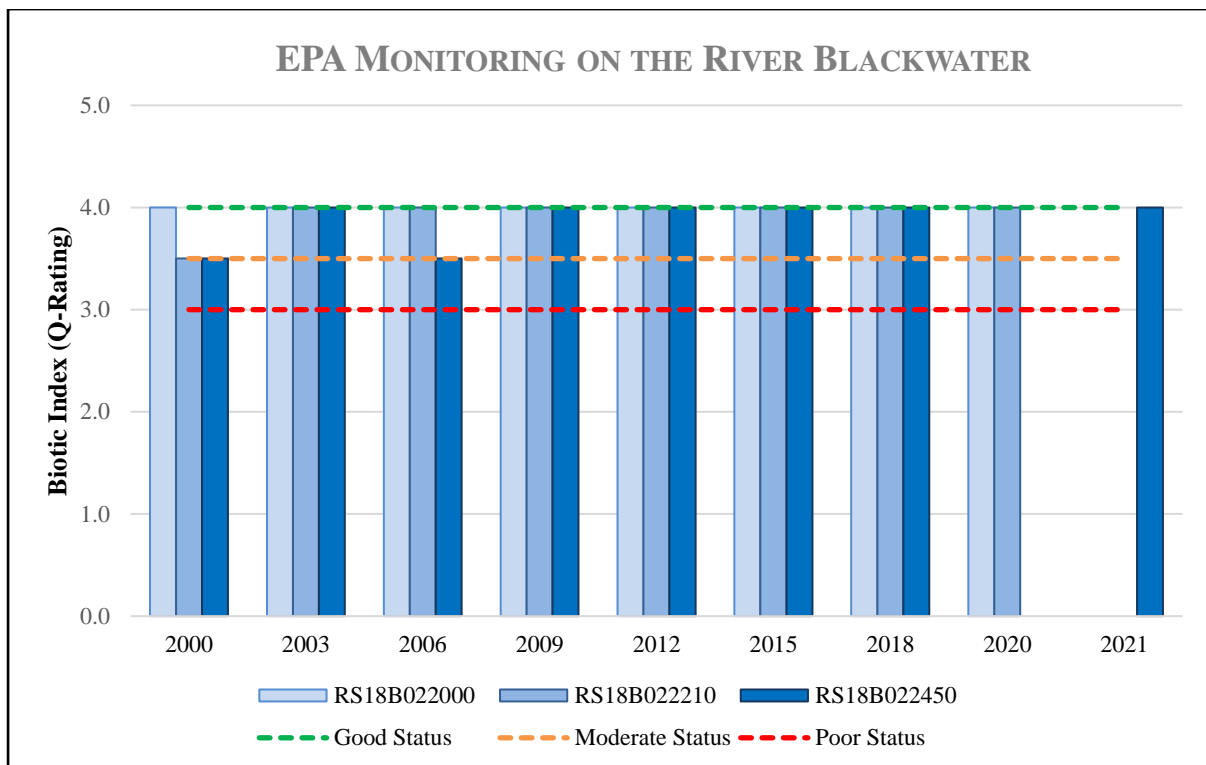


Figure 5.9: EPA Ecological Monitoring of the River Blackwater 2000 – 2021

As can be seen in **Figure 5.9** above, the River Barnakyle is mainly achieving a water quality status of between Q3-4 (Moderate) and Q4 (Good) at the monitoring locations.

EPA comments on the most recent monitoring results for the Barnakyle Stream are as follows;

‘The entire length of the Munster Blackwater was assessed in August 2018 and found to be in satisfactory condition with most sites at Good Ecological quality, apart from the uppermost station at Doctor’s Hill Bridge (0050) which was at moderate ecological quality. In August 2019, three formerly high quality sites along a stretch between Millstreet and Mallow were resampled and found to have returned to High quality. In July 2020, nine sites on the upper reaches of the river were sampled, from Doctor’s Hill bridge (0050) to the bridge in Fermoy (2210). All sites assessed were found to be at Good ecological quality, with the uppermost site improving from Moderate quality, and the remaining sites all maintaining Good quality.

In 2021 seven sites between Shamrock bridge and the Railway bridge in Mallow were sampled. Three (0600, 0750 & 1200) were found to have declined from High ecological status to Good ecological status. Station 1510 has declined from Good ecological status to Moderate. Stations 0900, 1300 and 1500 remain satisfactory with Good ecological quality and Station 1400 remains at High ecological status.

In 2021, five of the lower sites between Killavullen village to below Lismore village were also assessed with all five found to be maintaining Good ecological quality. A combination of the previous three years sampling finds all sites on the Munster Blackwater to be satisfactory except for Station 1510 at the Railway bridge RHS.’

Construction practice would follow Transport Infrastructure Ireland (TII) publications. TII (June 2015) Road Drainage and the Water Environment recommends following practice

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outlined within NRA (2008) *Guidelines for the Crossing of Watercourses during Construction of National Road Schemes* and CIRIA 648 *Control of Water Pollution from Linear Construction Projects*.

There would be no significant volumes of fuels, oils or other chemicals stored on-site during the construction phase of the development. The construction working area active at any one time would be limited as the project progresses in phases, limiting the potential for the generation of suspended solids or the entrainment of concrete into surface-water. Best practice construction measures such as silt and sediment controls will be installed prior to the commencement of any construction works. There would not be anticipated to be a significant risk to water quality during such works within the site boundary.

The scheme will not involve any substantial changes to the roadside drainage network, reconnecting to the existing network, so there will be no change from the baseline scenario during the operational phase of the project.

It is considered that there is no significant risk to surface water environment as a result of the proposed project and further assessment in an EIAR would not be required.

5.2.4 Bio-Diversity and Designated Sites

An Appropriate Assessment Screening Report has been completed by Moore Group Environmental Service (Report Ref: 23008 N72 Christchurch Jn AAS1 Rev0), and is included with the planning submission. The report identifies two Natura 2000 sites within the potential zone of influence of the project site, as shown in **Figure 5.10** below.

The Blackwater River (Cork/Waterford) SAC is located approximately 0.12km south while the Blackwater Callows SPA is situated approximately 1.25km to the east of the site boundary.

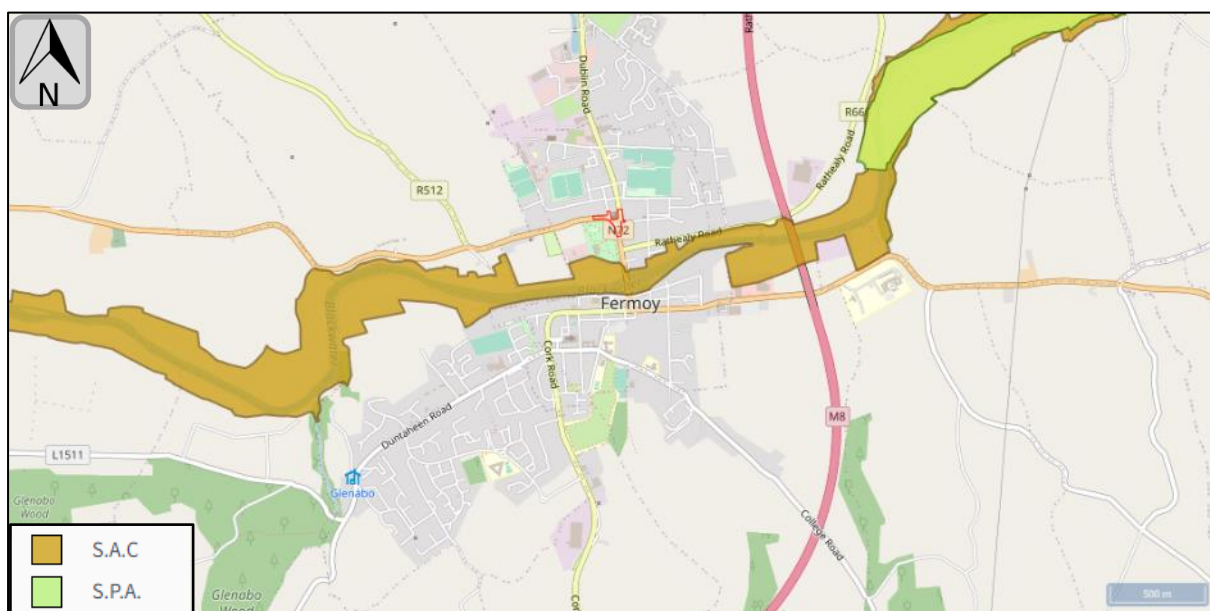


Figure 5.10: Special Area of Conservations and Special Protected Area

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Table 5.2: Special Areas of Conservation and Special Protection Area within 15km

Site Name	Designation	Site Code	Distance from Proposed Site
Blackwater River (Cork/Waterford)	SAC	002170	c.0.13 km North
Blackwater Callows	SPA	004094	c.1.25 km North

The Appropriate Assessment Screening Report concludes the following:

“There is no connectivity to any European sites within or outside the potential Zone of Influence.

There are no predicted effects on any European sites given:

- *The lack of direct connectivity between the Proposed Development and any hydrological pathways;*
- *there are no watercourses within the Proposed Development boundary and there is no connectivity*
- *between the Proposed Development site and any watercourses that lead to the River Blackwater;*
- *The Proposed Development is to be connected to the existing public sewer network for the treatment of wastewater.*
- *There are no predicted emissions to air, water or the environment during the construction or operational phases that would result in significant effects.*

It has been objectively concluded by Moore Group Environmental Services that:

- 1. The Proposed Development is not directly connected with, or necessary to the conservation*
- 2. management of the European sites considered in this assessment.*
- 3. The Proposed Development is not likely to either directly or indirectly significantly affect the Qualifying interests or Conservation Objectives of the European sites considered in this assessment.*
- 4. The Proposed Development, either alone or in combination with other plans or projects, is not likely to have significant effects on a European site.*
- 5. It is possible to conclude that significant effects can be excluded at the screening stage.*

It can be excluded, on the basis of objective information, that the Proposed Development, individually or in combination with other plans or projects, will have a significant effect on a European site.

An appropriate assessment is not, therefore, required.”

The proposed development area is comprised entirely of made ground, *buildings and artificial surfaces* (BL3) habitat, as per Fossitt (2000) *A Guide to Habitats in Ireland* classification. Therefore the site has no significant biodiversity value for habitats or species.

It is not considered that the proposed development would require further assessment within an EIAR in terms of bio-diversity and designated sites.

5.2.5 Landscapes & Visual Impact

The importance of landscape and visual amenity in the role of planning is recognised in the Planning and Development Act 2000 (as amended). The Act requires that Development Plans include objectives for the preservation of the landscape, views and prospects. It requires objectives for Landscape Conservation Areas, Areas of Special Amenity and also for the assessment of landscape character. This approach towards landscape issues (based on the Draft Landscape Character Assessment stresses the distinctiveness of differing kinds of landscape and how differing kinds of development can best be integrated within them.

A landscape character assessment was undertaken as part of the Cork County Draft Landscape Strategy (2007) which has been incorporated within the Cork County Development Plan 2022-2028.

The proposed development site is located in the Landscape Character Type (LCT) 5 – Fertile Plain with Moorland Ridge, as shown in **Figure 5.11**.

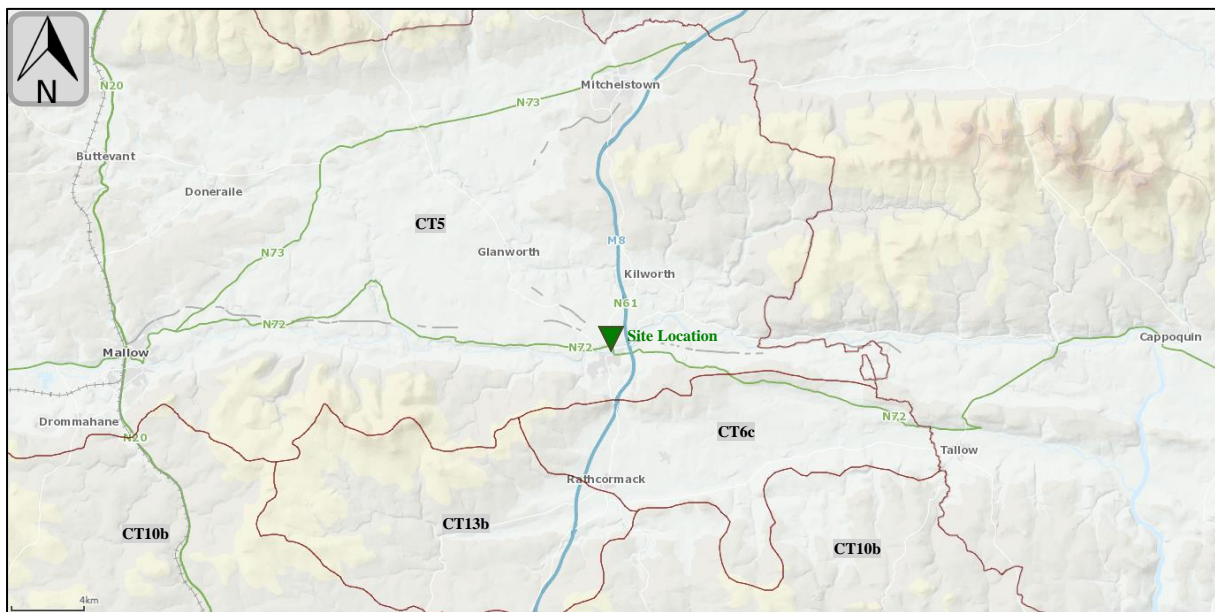


Figure 5.11: Location of Site within Landscape Character Type

The landscape description of LCT5 from the Cork County Draft Landscape Strategy, 2007, includes the following:

“This landscape is generally referred to as the “Golden Vale” and occupies a substantial proportion of northeast Cork. This is a low lying landscape, which comprises an extensive area of predominantly flat or gently undulating topography along the River Blackwater, and which is contained in its periphery by low ridges. The latter include the southern slopes of the Ballyhoura and Galtee Mountains to the north, the northern slopes of the Nagles to the south and the western ridges of the Knockmealdown Mountains. The bedrock of the plain comprises mostly of limestone while sandstone typically forms the underlying geology of the peripheral ridges. Lower ground comprises brown earths and the occasional gley while brown podzols are located at slightly higher levels.”

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These physical conditions create a fertile and verdant landscape well suited to intensive farming. It is this activity and the planar landform, which give the landscape its characteristic rectilinear mosaic of large sized fields. This mosaic is articulated by the field boundaries comprising mostly mature broadleaf hedgerows but also scrub species such as gorse. Articulation also results from the variation in colour arising from alternative use, whether dairying or arable. Occasional small blocks of coniferous plantations introduce a patchy landcover pattern to hills and ridge tops.

The landscape is also characterised by many old demesnes comprising, for example, high stone walls, broadleaf avenues and open parkland. Several large settlements are found within the area, including Mallow, Charleville, Mitchelstown and Fermoy, all of which developed on the basis of the high agricultural productivity of the surrounding countryside.”

Landscape Character Type 5 – Fertile Plain with Moorland Ridge, is classed as being of “Very High” Landscape Value and of “County” Landscape Importance. This area is further classed as being of a “Very High” Landscape Sensitivity, i.e. “*Extra vulnerable landscapes which are likely to be fragile and susceptible to change.*”

The following are listed as key characteristics of the “Build Environment” within this LCT:

- *High quality vernacular built environment and this is portrayed by the high concentration of Protected Structures that are evident throughout the landscape.*
- *Strong vernacular quality in terms of range and quality of estate homes and farmsteads.*
- *Numerous attractive villages and towns in terms of setting and built environment e.g. Castletownroche and Mitchelstown.*
- *The town centres in many of the main towns have maintained their architectural heritage.*

The following general recommendations from the Landscape Strategy are relevant to the project:

- *Continue to promote and protect Mallow Racecourse and the River Blackwater as the primary visitor attractions in this Landscape Type.*
- *Have regard to the rich heritage in this area and the concentration of buildings that are protected under the list of protected structures*
- *Preserve the Blackwater Valley as a unique landscape setting for the main settlements of Mallow and Fermoy and improve public access by enhancing it as a key recreation and amenity source. Control development that will adversely affect distinctive linear sections of the Blackwater River Valley, especially its open flood plains, when viewed from relevant scenic routes and settlements*
- *Reflect existing vegetation species and patterns in new planting schemes in this LCT.*
- *Minimise disturbance of hedgerows in rural areas. Encourage appropriate landscaping and screen planting of proposed developments by using predominately indigenous/local species and groupings.*
- *Ensure that the approach roads to the towns and villages in this LCT are protected from inappropriate development which would detract from the setting of these settlements.*

The project site is not located in the vicinity of a protected view. Scenic view Reference S9 (Castlehyde to Fermoy Bridge) begins approximately 400m west along the N72 from the project site.

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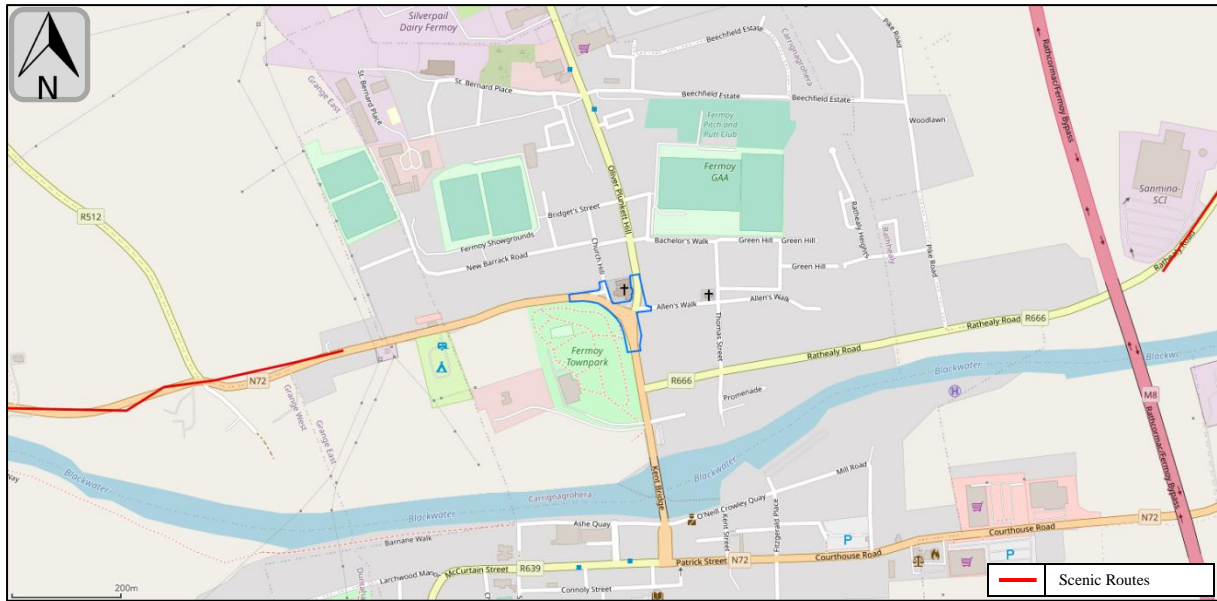


Figure 5.12: 2022 CDP designated Scenic Routes

During construction there will be some temporary disruption to the existing landscape during excavation or digging. However, as these works will be localised and of short duration, significant impacts to the existing landscape are not anticipated.

The proposed development comprises of alterations to the existing pavements and roads surrounding Christchurch Junction. As such, the development would be anticipated to have a similar visual character as the existing site condition and the character of surrounding area.

It is noted that, as part of the development shown in **Figure 1.3**, significant areas of soft landscaping are planned to replace existing hard surfaces. The planting of native species would align with planning policy and improve the biodiversity value of the project site.

Overall, the proposed development would be anticipated to improve the visual amenity of the project site and align with the landscape character of Fermoy town centre.

It is considered that additional investigation within an EIAR for visual and landscape impacts from the development would not be required.

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5.2.6 Archaeological and Cultural Heritage

There are several national monument sites and architecturally protected buildings located within the area of the proposal site (see **Figure 5.13** & **Figure 5.14**).

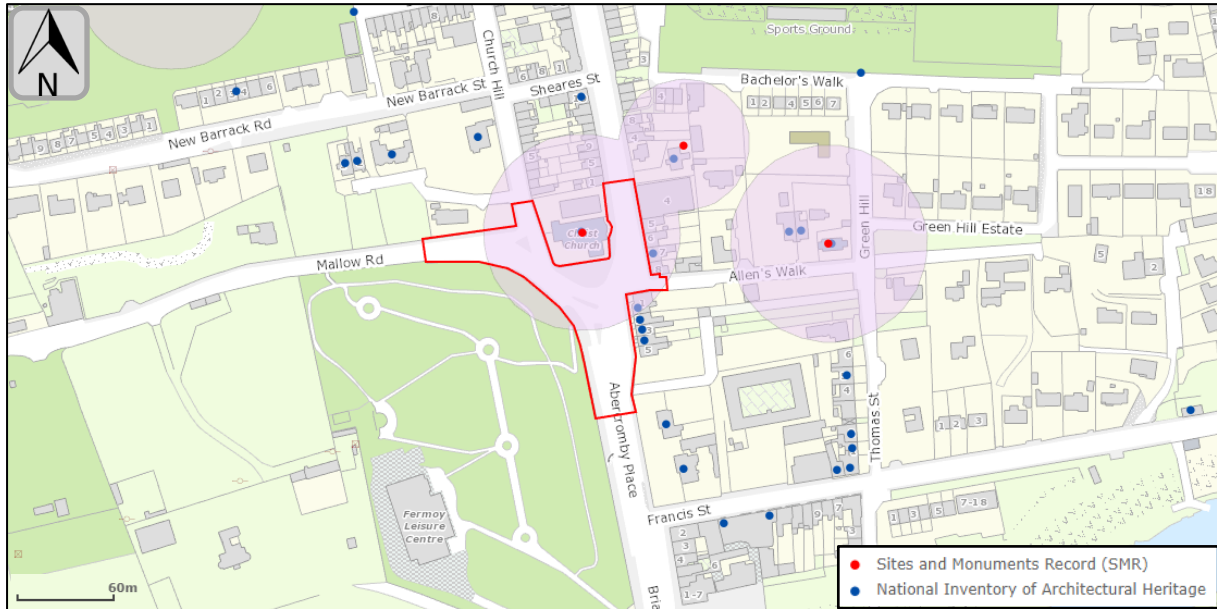


Figure 5.13: National Monument and Architectural Heritage Sites

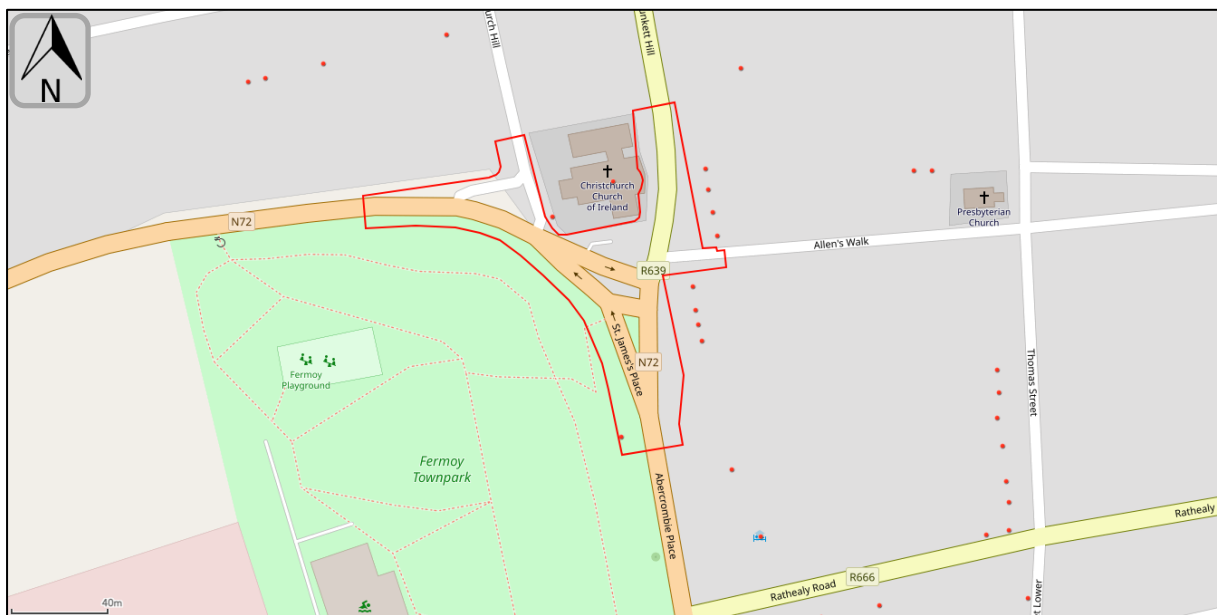


Figure 5.14: CDP 2022 Record of Protected Structures (RPS)

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The following tables summarise the recorded archaeological sites and protected buildings within the area of the site as per the National Inventory of Architectural Heritage database and the 2022 Cork County Development Plan:

Table 5.3: Archaeological Heritage Sites

RMP No.	Description	Townland	Distance
CO035-021	Church	Carrignagroghera	300m NE

Table 5.4: Record of Protected Structures (RPS)

RPS ID	NIAH Reg	Name	Original Use	Rating	Proximity
2262	20821053	Fermoy House Walls & Gates	Boundary Walls & Gates	Regional	Adj, western boundary
2253	20821044	Tudor Revival-Style House. Ambercromby Place	House	Regional	c. 10m eastern boundary
2241		1 St James's Place	House		Adj, eastern boundary
2242		2 St James's Place	House		Adj, eastern boundary
2243		3 St James's Place	House		Adj, eastern boundary
2244		4 St James's Place	House		Adj, eastern boundary
2233		1 Church Place	House		Adj, eastern boundary
2234		2 Church Place	House		Adj, eastern boundary
2235	20821026	3 Church Place	House	Regional	Adj, eastern boundary
2236		4 Church Place	House		Adj, eastern boundary
2231	20821022	Christ Church (Fermoy)	Church	Regional	Adj, northern boundary
2246		Limestone Kerbing. Church Hill.			Adj, northern boundary

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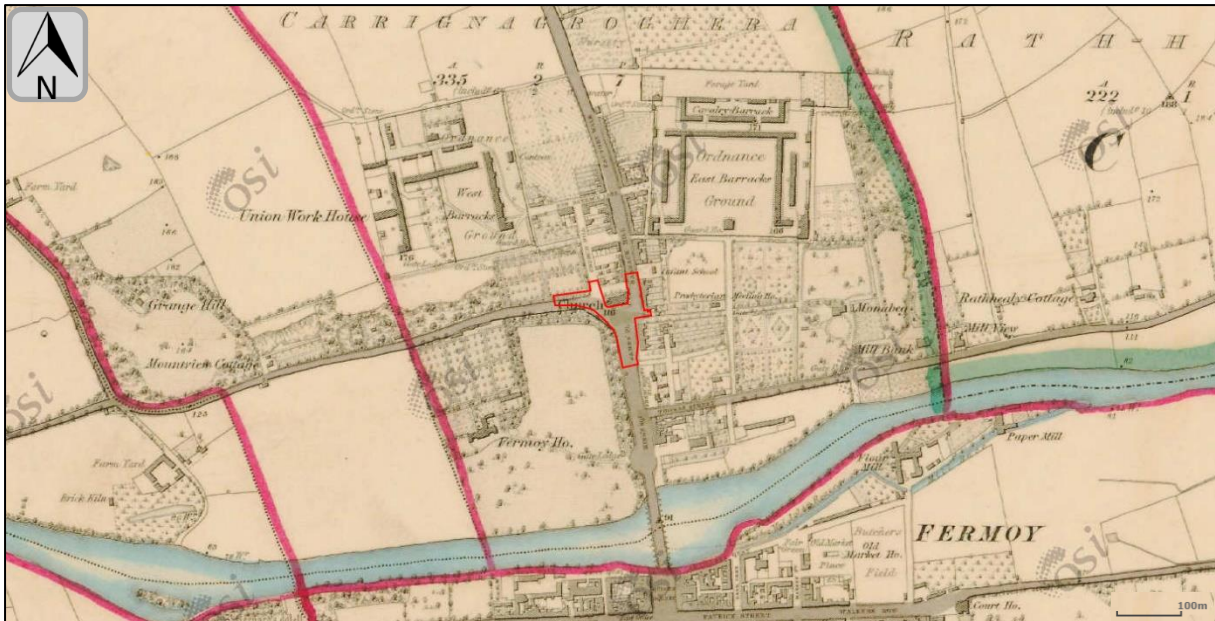


Figure 5.15: 6 Inch Colour (1829-41)

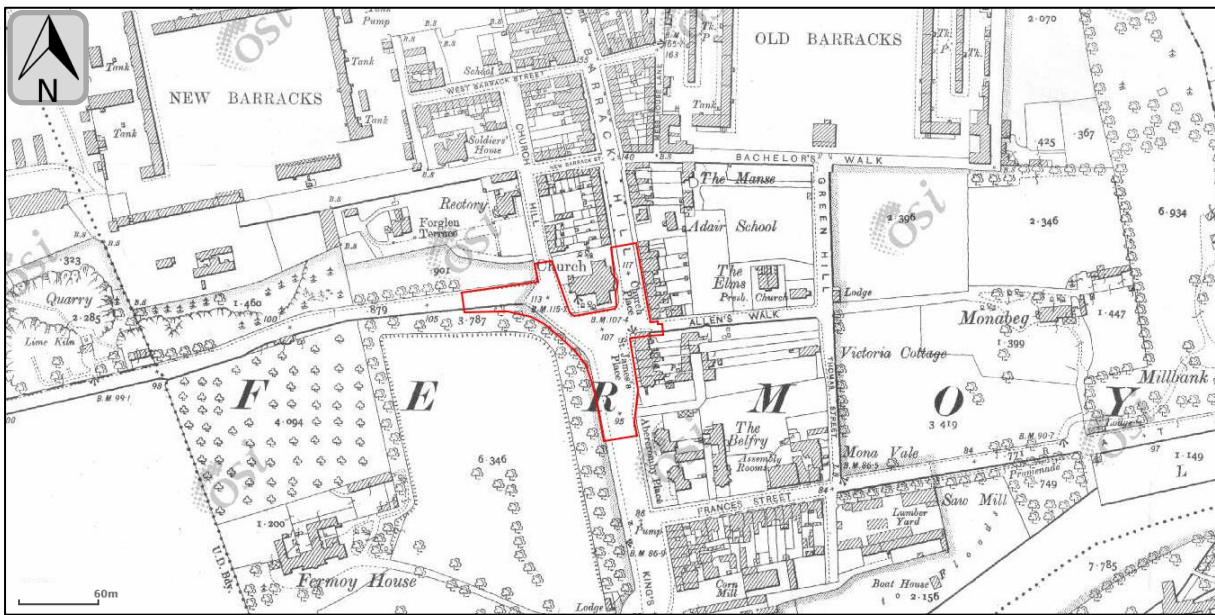


Figure 5.16: 25 Inch B&W (1897-1913)

The historical maps provided in **Figure 5.15** & **Figure 5.16**, ranging from 1829 - 1913 indicate that the immediate area of the project site has retained similar buildings and street layout.

The project area would be considered an area of significant archaeological potential. The majority of the development site is located within the “zone of notification” of Monument No CO035-021, Christ Church, and would require notification to the minister under section 12 (3) of the National Monuments (Amendment) Act, 1994. The long term habitation of the area would also indicate an increased likelihood of archaeological finds.

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There is a high density of protected structures within the vicinity of the site, however, these would be generally outside of works areas. The proposed development would also have potential to impact upon the protected structure RPS No 2246, Limestone Kerbing, Church Hill. However, it is likely that mitigation against potential impacts would be feasible through appropriate project design.

There would be a potential to impact upon unrecorded or unknown sub-surface archaeological features during excavation.

It is recommended that a detailed Archaeological and Cultural Heritage Assessment be carried out for the proposed project. It is considered that the potential impacts and mitigation of the proposed project are discrete and would be appropriately addressed within a specialised report completed by a qualified expert. Additional investigation within an EIAR for archaeological and cultural heritage impacts from the development would not be required.

6.0 PART III – CHARACTERISATION OF THE POTENTIAL IMPACTS

6.1.1 Magnitude and Spatial Extent of the Impact (for example geographical area and size of the population likely to be affected)

The project area is approximately 6,330 m² or 0.63ha. The length of roads within the project area is approximately 385m. This would be considered a small scale project.

The proposed development site is located within Fermoy Town Centre. Environmental effects from the development would generally be localised to the area of activities within the urban area. While potentially impacted population numbers would be moderate, the potential for significant impacts during the construction phase would be unlikely. The operational phase of the development would be similar to the pre-existing condition in terms of environmental impacts from traffic, which would extend to regional effects. There would be local benefits to traffic and pedestrian safety, biodiversity and visual amenity.

6.1.2 Nature of the Impact

During the construction phase, potential environmental impacts would be common for construction projects and include:

- Potential noise impacts to sensitive receptors,
- Potential nuisance airborne dust,
- Potential contamination of surface waters with soil, concrete etc.

While such environmental risk can occur from all construction activities, it is considered that these risks would be appropriately controlled by standard construction practices. The phased construction allowing smaller active working areas would also reduce the potential for significant impacts.

The project area would be considered an area of significant archaeological potential. There would be a potential to impact upon unrecorded or unknown sub-surface archaeological features during excavation. The proposed development would also have potential to impact upon the protected structure RPS No 2246, Limestone Kerbing, Church Hill.

Potential environmental impacts as a result of the operational phase would be typical of road projects and include:

- Nuisances (noise),
- Air Quality,
- Water management and flood risk,

While such environmental impacts occur from all such developments, there would be no significant alteration from the pre-existing condition of the site.

6.1.3 Transboundary Nature of the Impact

The proposed development is located a significant distance from international boundaries, and it is unlikely that emissions would have any significant transboundary impacts.

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6.1.4 Intensity and Complexity of the Impact

The site as a whole would be considered small in terms of area. Therefore, the potential intensity of impacts would be minor.

Potential impacts from the development would not be complex and would be amenable to control and mitigation. Standard design principals with regards to road construction are proposed and appropriate environmental controls during construction and operation would be in place.

Due to the nature of the development (i.e. pavement and road), it is not anticipated that activities related to this site during the operational phase, would have significant potential to cause complex interactions with the environment.

6.1.5 Probability of the Impact

During the construction phase, impacts in relation to noise, airborne dust and water quality are considered to be unlikely. The implementation of standard construction control practices, as detailed within this report, would ensure effective construction management.

Potential impacts to archaeological heritage and protected structures during construction would be considered likely in the absence of detailed further assessment.

Operational phase impacts would be of a similar scale and extent as occurs from the existing use of the pavement and roads.

6.1.6 Expected Onset, Duration, Frequency and Reversibility of the Impact

Potential impacts during the construction of the development are likely to be temporary. The implementation of standard construction control practices, as detailed within this report, would ensure effective construction management.

Potential impacts to archaeological heritage and protected structures are likely to be preventable during the detailed design and construction planning stages.

Impacts during the operational phase of the development would be a continuation of the existing environment, as influenced by current levels of pedestrians and traffic. As such, impacts would be long term and largely unaltered by the proposed development.

The project would result in long term local benefits to traffic and pedestrian safety, biodiversity and visual amenity.

6.1.7 Cumulation of the Impact with the Impact of other Existing and / or Approved Projects

There are no other known planned road improvement projects within the vicinity of the project.

As detailed in **section 4.2.2**, there are several approved planning developments in the area which would have the potential to commence during the construction phase of the project.

While it is not known at this time if the above approved developments will commence construction during the project construction phase, there is a potential for in combination construction effects. However, the construction phase of each project would be temporary and the adoption of standard construction management practices would prevent significant environmental impacts or nuisance.

6.1.8 Possibility of Effectively Reducing the Impact

There is a high likelihood of reducing potential impacts from construction activities through the implementation of standard construction practices for the prevention of nuisances and the protection of surface waters.

Potential impacts to archaeological heritage and protected structures are likely to be preventable during the detailed design and construction planning stages.

Potential impacts which may occur as part of the operational phase of the development are not anticipated to require ongoing mitigation, beyond proposed built infrastructural controls.

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7.0 CONCLUSION

The proposed development is well situated and appropriate to the area.

An EIA Screening exercise was carried out to assess the proposed project in terms of environmental risks and location sensitivity. This exercise has been informed by a site visit and desk studies based on the best available information.

The completed development would result in the improvement of the existing road junctions traffic and pedestrian safety, biodiversity and visual amenity.

The development would not fall under any of the classes of development listed in Part 1 of Schedule 5 of the Planning and Development Regulations and a mandatory EIA is not applicable. The project would also not fall under the classes of development outlined in S. 50(1)(a) of the Roads Act, 1993, as amended, or Article 8 of the Roads Regulations, 1994 (Road development prescribed for the purposes of S. 50(1)(a) of the Roads Act, 1993).

This sub-threshold EIA screening assessment has been carried out in accordance with the criteria listed in Schedule 7 and Schedule 7A of the Planning Regulations, in consideration of the sensitivities of the area.

The project area would be considered an area of significant archaeological potential. There would be a potential to impact upon unrecorded or unknown sub-surface archaeological features during excavation. The proposed development would also have potential to impact upon the protected structure RPS No 2246, Limestone Kerbing, Church Hill.

It has been recommended that a detailed Archaeological and Cultural Heritage Assessment be carried out for the proposed project. It is considered that potential risks are discrete and may be assessed individually should further information be required to clarify potential environmental impacts.

The potential for the proposed development to cause significant adverse environmental impacts by itself, or in combination with other developments, during the construction and operational phases of the project are anticipated to be minimal.

The proposed design of the development is considered to be in line with applicable standards and would pose no significant risk to the environment. It is considered that the development, as proposed, would not significantly impact upon the sensitivities of the existing environment.

Therefore, it is considered that an Environmental Impact Assessment Report would not be required to be completed for this project.