

N69 MUNGRET & BOLAND'S CROSS ROAD SAFETY IMPROVEMENT SCHEME

Environmental Impact Assessment Screening Report

N69MBX-CCC-EN-XX-RP-EN-0001



Client: Limerick City and County
Council
Date: 30/03/2023

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1. Introduction

Limerick City and County Council (LCCC) have appointed Clandillon Civil Consulting (CCC) to carry out an environmental impact assessment (EIA) screening report to inform a planning application for the proposed N69 Mungret and Boland's Cross Road Safety Improvement Scheme in County Limerick.

The N69 Mungret & Boland's Cross scheme is approximately 1.2km long and is located on the western side of Mungret village from the junction with the L1403 local road (Boland's Cross) along the N69 for approximately 500m to Mungret Cross and then a further 500m approximately to the eastern edge of Castlemungret Soccer Pitch at Moore's Road junction. The scheme also encompasses 149m along the R859 from Mungret Cross to the roundabout as well as the L1437 from the northern arm of the roundabout to the N69 (approximately 45m). Overall scheme length is approximately 1.2km.

The scheme is approximately 6km southwest of Limerick City centre and 2km southwest of the N69 / N18 Interchange.

The scheme location is shown in Figure 1 below (extents indicated by red line).

Figure 1: Scheme Location



The purpose of the Screening for Environmental Impact Assessment is to determine whether an EIA Report (EIAR) is required as part of the EIA Directive (2014/52/EU), the Planning and Development Acts (2000 to 2022) and the Roads Act (1993 to 2015) for the proposed development.

The screening process comprises two phases. The first phase considers the requirement for a mandatory EIA with regard to Annex I and Annex II of the EIA Directive (as amended), Section 5 of the Planning and Development Regulations (2001 to 2022) and Section 50 of the Roads Act (1993 to 2015). The second phase of the work considers the requirement for a sub-threshold EIA.

Section 103 of the Planning and Development Regulations (2001 to 2022), Article 120 of the Planning and Development Regulations (2001 to 2022) and Section 50(1)(b) and 50(1)(c) of the Roads Act (1993 to 2015) sets out the requirements for screening a sub-threshold development for EIA. Finally, the information to be provided by the applicant or developer for the purposes of

screening sub-threshold development for EIA is set out in Schedules 7 and 7A of the Planning and Development Regulations (2001 to 2022).

This report therefore considers the types and characteristics of potential impacts on population and human health, material assets, land and soils, cultural heritage, biodiversity, air quality and climate, landscape and visual and the water environment. An ecological assessment was undertaken as part of the Appropriate Assessment Screening Report (**N69MX-FF-EN-XX-RP-EN-0001**). A cultural and archaeological heritage assessment was also undertaken (**Appendix B of this Document**).

2. EIA Screening Requirements and Guidance

Environmental Impact Assessment (EIA) is the process of examining the anticipated environmental effects of a proposed project. EIA usually commences at the project design stage, where it is decided whether EIA is required, via the production of an EIA screening assessment. The projects which require the production of an EIAR are listed in Annex I and Annex II of the EIA Directive as amended, Section 5 of the Planning and Development Regulations (2001 to 2022) and Section 50 of the Roads Act (1993 to 2015)..

2.1 Screening for Mandatory EIA

Projects listed in Annex I of the EIA Directive have mandatory EIAR requirements. Each Member State decides on a case-by-case basis whether Annex II projects require an EIAR. Thresholds have been set for Annex II projects in Irish legislation (Schedule 1 Part 2 of the Planning and Development Regulations (2001-2022)). A mandatory EIAR is not required in respect of this Project as it does not fall under the projects listed in Annex I of the EIA Directive.

Schedule 5, Part 2 of Planning & Development Regulations 2001 – 2022 also contains additional project descriptions where an EIA might be necessary. Item 10 (dd) in this section states 'All private roads which exceed 2000m in length' may require EIA. The N69 Mungret & Boland's Cross Road Improvement Scheme is approximately 1.2km and is not a private road, therefore an EIA is not deemed necessary.

Section 50 of the Roads Act (1993 to 2015) sets out the types of roads projects for which mandatory EIA is required.

Table 1 below, presents the findings of the screening assessment in respect of the Roads Act 1993 to 2015 and Roads Regulations 1994.

Table 1: Screening Matrix for Mandatory EIA for Roads Projects

Screening Matrix for Mandatory EIA for Road Projects		
Mandatory Threshold	Regulatory Reference	Assessment
Construction of a Motorway	S. 50(1)(a) of the Roads Act, 1993, as amended by S. 9(1)(d)(i) of the Roads Act, 2007 (as amended)	The proposed development is not a Motorway. Mandatory threshold not reached.
Construction of a Busway	S. 50(1)(a) of the Roads Act, 1993, as amended by S. 9(1)(d)(i) of the Roads Act, 2007 (as amended)	The proposed development is not a Busway. Mandatory threshold not reached.
Construction of a Service Area	S. 50(1)(a) of the Roads Act, 1993, as amended by S. 9(1)(d)(i) of the Roads Act, 2007 (as amended)	The proposed development is not a Service Area and does not incorporate a Service Area. Mandatory threshold not reached.
Any prescribed type of proposed road development consisting of the construction of a proposed public road or the improvement of an existing public road, namely: <ul style="list-style-type: none"> 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 The construction of a new bridge or tunnel which would be 100 metres or more in length. 	Article 8 of the Roads Regulations, 1994 (prescribed type of road development for the purposes of S. 50(1)(a)(iii) of Section 50 of the Act	<p>Neither the existing road nor the proposed realigned road include four or more lanes. Mandatory threshold not reached.</p> <p>The proposed development does not involve the construction of a bridge or a tunnel of more than 100m in length. Mandatory threshold not reached.</p>

In conclusion, it has been determined that the proposed development is not of a class which exceeds a threshold specified in the EIA Directive Annex I and Annex II, Planning and Development Regulations (2001 to 2022), the Roads Act (1993 to 2015) or the Roads Regulations 1994, and therefore does not trigger a mandatory EIA. It follows that the proposed development is a sub-threshold development.

2.2 Sub-Threshold Development

Where a project is of a specified type but does not meet, or exceed, the applicable threshold, then the likelihood of the project having significant effects on the environment needs to be considered as part of the EIA screening.

2.2.1 Roads Act (1993 to 2015)

Section 50(1)(b) and 50(1)(c) of the Roads Act 1993 to 2015 sets out the requirements for screening a sub-threshold development for EIA.

Section 50(1)(b) of the Roads Act (1993 to 2015) states:

'If An Bord Pleanála considers that any road development proposed (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment, it shall direct the development be subject to an environmental impact assessment'.

Section 50(1)(c) of the Roads Act 1993 to 2015 states:

"Where a road authority or, as the case may be, the Authority considers that a road development that it proposes (other than development to which paragraph (a) applies [paragraph (a) relates to development mandatorily requiring EIA]) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment, it shall inform An Bord Pleanála in writing prior to making any application to the Bord for an approval referred to in section 51(1) in respect of the development."

2.2.2 EIA Directive

EIA Directive 2014/52/EU provides criteria that are applied in the screening phase to determine if a development is likely to have a significant effect on the environment. The criteria are as follows:

- the **Characteristics of the Projects**, which must be considered having regard, in particular, to the size and design of the whole Project, the cumulation with other existing and/or approved Projects, the use of natural resources, the production of waste, pollution and nuisances, and the risk of major accidents and/or disasters and the risks posed to human health.
- the **Location of the Projects**, so that the environmental sensitivity of geographic areas likely to be affected by Projects must be considered, having regards to the existing and approved land use, the relative abundance, availability, quality and regenerative capacity of natural resources and the absorption capacity of the natural environment in particular.
- **Type and Characteristics of the potential impact** with regards to the impact of the Project on the environmental factors specified in Article 3(1).

The characteristics of the project, its location and potential impact are described and assessed in Chapters 3 - 8 of this report.

2.2.3 Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment

The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) have transposed Directive 2014/52/EU and are incorporated into the Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (the Guidelines). Chapter 3 of these Guidelines deals with the EIA Screening process.

As referred to in Section 3.5 of the Guidelines, the EIA Screening process is based on professional expertise and experience, having due regard to the 'Source – Pathway – Target' (SPT) model, which identifies the source of likely significant impacts, if any, the environmental factors (target) which will potentially be affected, and the route (pathway) along which those impacts may be transferred from the source to the receiving environment.

As per Section 3.1 of the Guidelines, the screening determination *"is a matter of professional judgement, based on objective information relating to the proposed project and its receiving environment. Environmental effects can, in principle, be either positive or negative"*.

The EIA Screening process must also have regard to the European Court ruling that the EIA Directive has a “wide scope and a broad purpose” when determining if an EIAR is required.

The Chapter 3 Guidelines have been considered in developing the assessments and conclusions outlined in Chapters 5 - 8 of this report.

2.2.4 Planning and Development Regulations (2001 to 2022)

Article 120 of the Planning and Development Regulations (2001 to 2022) Regulations states the following:

‘Where a local authority proposes to carry out a subthreshold development, the authority shall carry out a preliminary examination of, at the least, the nature, size or location of the development’

Schedule 7A of the Planning and Development Regulations 2001 ‘Information to be provided by the Applicant or Developer for the purposes of Screening Sub-Threshold Development for the Environmental Impact Assessment’. The requirements include:

- 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.

The nature, size and location of the development is described in Chapter 3 of this report, while a description of potential environmental impacts is outlined in Chapter 6 - 8.

The County Development Plan is addressed in Chapter 4.

An Appropriate Assessment screening report has also been completed and is addressed in Chapter 5.

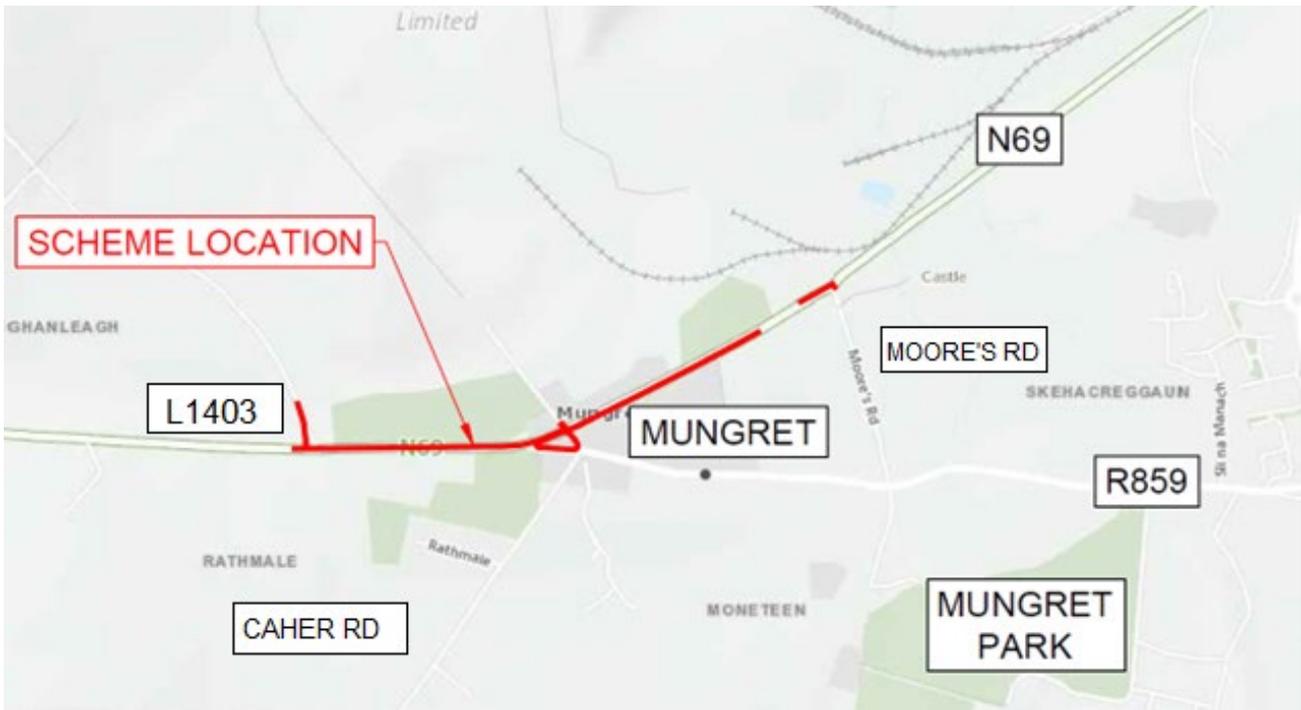
The information required from Schedules 7 and 7A of the Planning and Development Regulations 2001 (as amended) and responses which address the information to be provided are included in **Appendix A** of this report.

The findings of the EIA screening assessment prepared for the project has informed our professional opinion as to whether an EIAR is warranted for the proposed project, with due regard to all relevant statutory requirements and technical guidance. However ultimately it is the responsibility of the competent authority to make a determination as to whether an EIAR is required for a particular project.

3. Description of the Proposed Development

The proposed scheme is shown on drawings N69MBX-CCC-PD-ZZ-DR-C-0101, 0102 and 0201 in **Appendix A** of the Particulars and described in the sections below. Figure 2 below shows the extents of the scheme.

Figure 2: N69 Mungret and Boland's Cross Scheme Extents



The design standard being used for the design is the Design Manual for Urban Roads and Streets (DMURS). Designs have been undertaken in Autodesk Civil 3D (C3D) software using the topographical survey provided by Limerick City and County Council.

Land acquisition will be required for the widened areas on the N69 and realignment of L1403 for the installation of the 4.0m shared use path. These include the following areas:

- Northern boundary of the N69 for the installation of kerbing and verges
- At the L-1403 junction for the provision of junction realignment, sightline, and footpaths provision.
- South of N69 between CH 0+135 and 0+240.
- South of N69 between CH 0+295 and 0+435, including front of GAA pitch.

Additional land will be required south of N69 for the footpath extension linking the existing Mungret footpath to Moores Road junction and where boundaries are to be set back. It is assumed that accommodation works within properties will be undertaken by agreement.

3.1 Horizontal & Vertical Alignment

N69

The existing horizontal alignment of the N69 shall be utilised. It is comprised of a series of tangents and horizontal curves and a compound curve of 510m and 210m at the vicinity of the Mungret Cross junction. The 210m radius is a relaxation based on DN-GEO-03031 but is otherwise compliant to DMURS Section 4.4.6.

The vertical alignment follows the existing road geometry of the N69. An assessment has been carried out to verify suitability of gradients and vertical curves for the design speed. All vertical gradients are within or above desirable minimum of $\pm 0.50\%$. Vertical curvature k values are greater than set out in DMURS Section 4.4.6 and DN-GEO-03031.

L1403

The local road L1403 is proposed to be realigned 30m to the west at a 90° angle with the N69. The realignment will enhance the visibility on the junction with the crest approximately 110m east of the Boland's Cross junction.

R859

The R859 is proposed to be realigned to connect to N69 at a perpendicular angle to provide deflection for road users entering the N69 from the R859. This will eliminate the skew and provide better visibility at the Mungret Cross junction.

L1437

The local access road from the junction of the N69 and Westward Ho Bar and Restaurant to the roundabout shall follow the horizontal alignment of the existing road.

The realigned L1403, R859 and L1437 will also tie into N69 following the general topography of the existing roads.

3.2 Cross Section, Crossfall & Superelevation

3.2.1 Cross Section

On the N69, it is proposed to provide DMURS standard lane widths of 3.25m for Arterial and Link Streets. A 4.0m wide raised shared use active travel facility shall be provided on the westbound carriageway, where space allows. From the R859/N69 to the N69/L1437 Junction, where space is restricted, a 3.0m wide raised shared use active travel shall be provided.

The side road L1403 shall have 3.0m wide lane widths and minimum verge of 0.5m. The R859 shall be converted into a one way out road from the roundabout onto the N69 – there will be a short section of two-way road approaching the existing roundabout from the west to facilitate access to property (reference LK49127F, drawing **N69MBX-DR-LA-0002, Appendix A**). This shall have a 4.0m wide carriageway width with 3.0m raised shared use active travel on the northern side of the road. The local access road L1437 from N69 to the roundabout shall also become one-way southbound towards the roundabout. This shall have a 3.5m carriageway width with 3.0m raised shared use active travel on the west side of the road.

3.2.2 Crossfall & Superelevation

A normal camber of 2.5% will be provided at the straight section and as the default crossfall.

Following DMURS requirements for horizontal curves on 60km/h road, there is no requirement for superelevation at the 210m radius curve.

3.3 Facilities for Vulnerable Road Users

A 4m raised shared use active travel facility will be provided on the westbound side of the N69 from Boland's Cross to the Mungret Cross junction. A 4m raised shared use active travel facility will be provided on the eastbound side of the N69 from Boland's Cross to a signal-controlled crossing at the crest of the road alignment.

A 3m raised shared use facility also be provided around the existing Marian Shrine statue and adjacent the N69, R859 and L1437. These facilities will provide segregated spaces for pedestrians and cyclists from motor vehicles. Cyclists will re-join the existing road network on the R859 and L1437 as they approach the existing 4-arm roundabout.

A 3.0m wide combined footway / cycleway will be provided at the north side of the N69 from a newly-installed signal-controlled crossing at the Moore's Road Junction to connect and provide access to Castlemungret Soccer Pitch.

A section of 2m wide footway will be installed east of Mungret Cross to connect the existing footpaths east of Mungret with the footway at Moore's Road junction.

Crossing points are included as follows;

- Boland's Cross (N69/L1403) junction: Signal-controlled pedestrian crossing east of the junction to connect the north and south footways.
- Mungret Cross (N69/R859) junction: Standard shared surface at-grade crossing and signal-controlled crossing at the Westward Ho premises.
- L1437: Two number standard shared surface at-grade crossings.
- Moore's Road (N69/L1438) junction: Signal-controlled pedestrian crossing east of the junction to connect to Castlemungret soccer pitches.

3.4 Junctions

The Mungret Cross (N69/R859) and Boland's Cross (N69/L1403) junctions have been designed to provide safer and improved junction visibility. Both junctions have been realigned to connect to the N69 at a more suitable angle.

The Boland's Cross (N69/L1403) junction now connects at a ninety degree angle with improved sightlines, and includes a signal-controlled pedestrian crossing to the east.

The Mungret Cross (N69/R859) junction now connects at a ninety degree angle and is a one-way out junction with no access from the N69. Junction radii have been tightened up to reduce the current ability of vehicles to "direct taper" merge at speed.

The N69/L1437 junction has now become one-way and junction radii have been tightened up.

All junctions have been reviewed via vehicle tracking with agreed design vehicles using Autodesk Civil 3D (C3D) and Autotrack software.

The realignment of the L1403 and R859 provide improved stopping sight distances (SSD) of 127m and 141m. The required SSD from DN-GEO-03031 and DMURS are 90m and 59m respectively. Sightlines at each direct access and field gate shall remain as per existing.

4. Local and County Development Plans

The Limerick Development Plan 2022-2028 was adopted by the Elected Members of Limerick City and County Council and came into effect on 29th July 2022. The Plan sets out the blueprint for the development of Limerick from an economic, social, physical and environmental perspective.

Table 2: Relevant Policies and Objectives from the Limerick Development Plan 2022-2028

Relevant Policies and Objectives taken from the Limerick Development Plan 2022-2028		
Policy/Objective No.	Title	Policy/Objective
TR P1	National Investment Framework for Transport Investment	It is a policy of the Council to support the implementation of the Department of Transport's National Investment Framework for Transport Investment.
TR P2	Five Cities Demand Management Study	It is a policy of the Council to support the recommendations of the Department of Transport's Five Cities Demand Management Study
TRP3	Integration of Land Use and Transport Policies	It is a policy of the Council to support and facilitate the integration of land use and transportation policies, to ensure the delivery of sustainable compact settlements, which are served by sustainable modes of transport.
TR P4	Promotion of Sustainable Patterns of Transport Use	It is a policy of the Council to seek to implement in a positive manner, in cooperation with other relevant authorities and agencies, the policies of the NPF, RSES and the Department of Transport's Smarter Travel, A Sustainable Transport Future 2009 – 2020 (and any subsequent updates), to encourage more sustainable patterns of travel and greater use of sustainable forms of transport, including public transport, cycling and walking.
TR P5	Sustainable Mobility and Regional Accessibility	It is a policy of the Council to support sustainable mobility, enhanced regional accessibility and connectivity within Limerick, in accordance with the National Strategic Outcomes of the National Planning Framework and the Regional Spatial and Economic Strategy for the Southern Region/
TR P6	Delivery of Transport Infrastructure in line with National Policy	It is a policy of the Council to support the delivery of transport infrastructure identified within the National Planning Framework, National Development Plan 2021-2030 (and any update) and the Regional Spatial and Economic Strategy for the Southern Region and to support enhanced connectivity within Limerick and inter-urban connectivity within the regions.
TR P7	Sustainable Travel and Transport	It is a policy of the Council to support, facilitate and co-operate with relevant agencies to secure sustainable travel within Limerick and seek to implement the 10-minute city/town concept, promote compact growth and reduce the need for long distance travel, as a means to reduce the impact of climate change.
TR O2	Design Manual for Urban Roads and Streets	It is an objective of the Council to support the appropriate road design standards of all roads and streets within the urban areas, including suburbs, towns and villages within the 60km/h zone as per the Design Manual for Urban Roads and Streets and TII Publication Standards DN-GEO-03084 The Treatment of Transition Zones to Towns and Villages on National Roads

Relevant Policies and Objectives taken from the Limerick Development Plan 2022-2028

TR O4	Universal Design	It is an objective of the Council to ensure that all transport schemes incorporate high-quality urban realm design that is attractive, safe, comfortable and accessible for all individuals.
TR O5	Limerick – Shannon Metropolitan Area Transport Strategy	It is an objective of the Council to facilitate the implementation and delivery of the proposals that will be contained in the final Limerick Shannon Metropolitan Area Transport Strategy, in conjunction with the National Transport Authority, Transport Infrastructure Ireland and Clare County Council and other relevant stakeholders. This partnership will achieve successful integration between land use and transport planning, and targeted growth along high quality public transport corridors and sustainable higher densities.
TR P8	Local Transport Plans	It is a policy of the Council to prepare a Local Transport Plan (LTP), Mobility and Public Realm Plan for the Key Town of Newcastle West, in consultation with the National Transport Authority, Transport Infrastructure Ireland and other relevant stakeholders, as part of the Local Area Plan process and for other settlements as deemed necessary.
TR O6	Delivering Modal Split	It is an objective of the Council to: <ul style="list-style-type: none"> a) Promote a modal shift away from the private car towards more sustainable modes of transport including walking, cycling, carpool and public transport in conjunction with the relevant transport authorities. b) Support investment in sustainable transport infrastructure that will make walking, cycling, carpool and public transport more attractive, appealing and accessible for all.
TR O7	Behavioural Change Measures	It is an objective of the Council to: <ul style="list-style-type: none"> a) Continue to implement behavioural change initiatives and 'softer measures' aimed at enabling and promoting sustainable travel across Limerick's workplaces, campuses, schools and communities as identified in LSMATS; b) Facilitate and implement school streets and school zones, including slow zones around schools, park and stride facilities and promote and facilitate active travel options for school children, to reduce the health and safety risks associated with traffic congestion, pollution and inactive lifestyles
TR O8	Walking and Cycling Infrastructure	It is an objective of the Council to: <ul style="list-style-type: none"> a) Improve and provide clear, safe and direct pedestrian linkages, cycle networks, including the greenways and primary segregated cycle routes, between the employment zones, shopping areas and residential areas throughout Limerick; b) Maintain and expand the pedestrian route network, infrastructure and where possible, retrofit cycle and pedestrian routes into the existing urban road network, to provide for accessible safe pedestrian routes within Limerick

Relevant Policies and Objectives taken from the Limerick Development Plan 2022-2028

TR O9	Limerick Cycle Network	It is an objective of the Council to implement in full, the Cycle Network, which will be set out in the final LSMATS, with priority given in the short term to delivering the primary cycle network and cycle routes serving schools.
TR O12	Limerick BusConnects Programme	<p>It is an objective of the Council to support the implementation of the Limerick BusConnects programme including the following:</p> <p>(a) An improved Metropolitan Bus Service Network which will deliver a step change in the quality of bus service across the City and suburbs;</p> <p>b) A programme of Core Bus Corridors, which seeks to provide end-to-end full bus priority on key bus routes via measures such as new bus lanes, bus gates and bus priority signals, in order to ensure that bus services are no longer subject to traffic congestion impacts in Limerick. The following corridors are a priority:</p> <ul style="list-style-type: none"> • from the M7/Dublin Road junction to the City Centre; • from Mungret, Raheen and Dooradoyle to the City Centre; • on the Ennis Road to the City Centre; • on the Ballysimon Road from the proposed Park and Ride site to the City Centre and on Childers Road between Parkway Roundabout and Ballinacurra Road <p>c) To provide for further bus priority measures on radial routes into the City Centre, as identified by the NTA and Limerick City and County Council as part of BusConnects Limerick;</p> <p>d) To provide for bus priority measures through the development site to the rear of Colbert Station, as part of an emerging masterplan to be agreed between the NTA, Limerick City and County Council, the landowner and other stakeholders;</p> <p>e) To provide for bus priority through Limerick City Centre linking the Dublin Road Bus Corridor to the Raheen/Dooradoyle corridor, with a preference for O’Connell Street as the most direct route into the centre, delivering passengers as close as possible to their destinations;</p> <p>f) To increase the capacity of Sarsfield Bridge by reallocating the carriageway to the movement of buses, cyclists, pedestrians and taxis;</p> <p>g) To carry out any minor works required to facilitate additional and altered service patterns arising out of a review of the service network under BusConnects Limerick.</p>
TR O22	Micro-Mobility	It is an objective of the Council to facilitate and support the use of scooters, e-scooters and emerging personal mobility modes of travel in line with relevant legislation.
TR P11	Road Safety and Carrying Capacity of the Road Network	It is a policy of the Council to seek improvements to road safety and enhance carrying capacity of the road network throughout Limerick, through minimising existing traffic hazards, including access onto roads, which are substandard in terms of width and alignment and preventing the creation of

Relevant Policies and Objectives taken from the Limerick Development Plan 2022-2028

		additional or new traffic hazards in the road network, maintaining the carrying capacity and securing appropriate signage.
TR O37	Land Uses and Access Standards onto All Roads	It is an objective of the Council to ensure that any development involving a new access to a public road, or the intensification of use of an existing access onto a public road, that would compromise the safety and capacity of the road network, will not be permitted unless the new or existing access meets the appropriate design standards.
TR O38	Improvements to Regional and Local Roads	It is an objective of the Council to provide for and carry out sustainable improvements to sections of regional roads and local roads, that are deficient in respect of alignment, structural condition, or capacity, where resources permit and to maintain that standard thereafter.
TR P12	Safeguard the Capacity of National Roads	It is a policy of the Council to: a) Protect the capacity of the national road network, having regard to all relevant Government guidance and associated junctions, including DoECLG Spatial Planning and National Roads Guidelines (DoECLG, 2012) in the carrying out of Local Authority functions and; b) Ensure development does not prejudice the future development, or impair the capacity of, the planned national roads, which includes the N/M20 Cork to Limerick Scheme and Foynes to Limerick Road (including Adare Bypass) projects and other schemes referenced in Section 7.4; c) Continue to engage, at an early stage, with relevant transport bodies, authorities and agencies in respect of any plans or projects that are located in proximity to national road infrastructure.
TR O39	National Roads	It is an objective of Council to: (a) Prevent, except in exceptional circumstances and subject to a plan-led evidence-based approach, in consultation with Transport Infrastructure Ireland, in accordance with the Section 28 Ministerial Guidelines Spatial Planning and National Roads Guidelines for Planning Authorities (DoECLG, 2012), development on lands adjacent to the existing national road network, which would adversely affect the safety, current and future capacity and function of national roads and having regard to reservation corridors, to cater for possible future upgrades of the national roads and junctions b) Avoid the creation of any new direct access points from development, or the generation of increased traffic from existing direct access/egress points to the national road network, to which speed limits greater than 60km/h apply; c) Facilitate a limited level of new accesses, or the intensified use of existing accesses, to the national road network on the approaches to, or exit from, urban centres that are subject to a speed limit of between 50km/h and 60km/h. Such accesses will be considered where they facilitate orderly urban development and would not result in a proliferation of such entrances;

Relevant Policies and Objectives taken from the Limerick Development Plan 2022-2028

TR O40	National Road Network Drainage Regimes	It is an objective of the Council to ensure all developments protect and safeguard the capacity and efficiency of the drainage regimes of the national road network.
TR O42	Roads and Streets	It is an objective of the Council to secure improvements to the road network in Limerick, including improved pedestrian and cycle facilities, in conjunction and co-operation with relevant stakeholders, subject to resources becoming available.
TR O43	Upgrade works / New Road Schemes	<p>It is an objective of the Council to provide for and carry out sustainable improvements to sections of the national, regional and local road network, to address deficiencies in respect of safety, alignment, structural condition or capacity where resources permit. The following schemes shall be included:</p> <ul style="list-style-type: none"> • Southside Link connecting Southill to Rosbrien Road; • Rear of the Crescent Shopping Centre to Rosbrien Road; • School House Road to Kilbane Roundabout, Groody Link Road; • N20 O'Rourke's Cross Improvements; • N69 Hegarty's Cross to Askeaton – Phase 1 and Phase 2; • N21 Adare Western Approach Improvements Scheme; • N69 Court Cross; • N69 Mungret and Boland's Cross Road Improvements; • N21 Devon Cross; • N21 Ward's Cross.
TR O51	Roadside Signage	It is an objective of the Council to regulate, control and improve signage throughout Limerick and avoid a proliferation of roadside signage, in accordance with the Spatial Planning and National Roads – Guidelines for Planning Authorities (DoECLG, 2012) and the National Roads Authority's policy statement on the Provision of Tourist and Leisure Signage on National Roads (March 2011) and any updated versions of these documents.
TR O52	Directional Signage	It is an objective of the Council to facilitate the provision of directional signage for amenities, tourist attractions and local attractions and along cycle and pedestrian routes, at appropriate locations throughout Limerick, in accordance with planning and traffic regulations.
TR O53	Noise and Transportation	It is an objective of the Council to identify appropriate mitigation measures to reduce noise levels from traffic where they are potentially harmful, in accordance with Limerick's Noise Action Plan

5. Appropriate Assessment (AA)

A Stage I Screening for Appropriate Assessment was carried out as part of the environmental evaluation of the proposed scheme. This screening assessment concluded, in view of the best scientific knowledge and in view of the conservation objectives of the Natura 2000 sites reviewed in the screening exercise, the proposed development individually/in combination with other plans and projects (either directly or indirectly) is not likely to have any significant effects on any of the European sites.

Therefore, a Stage II Appropriate Assessment is not required.

6. Receiving Environment

This Chapter of this report considers the receiving environment and the potential impact of the scheme in respect of:

- Population and Human Health;
- Biodiversity;
- Land and Soils;
- Material Assets;
- Landscape and Visual;
- Air Quality and Climate;
- Water; and
- Cultural Heritage.

6.1 Population and Human Health

The proposed development will have a positive effect on the Mungret community and the wider Limerick Area. The development will provide safe pedestrian access along this section of the N69 to the R859 and will also reduce traffic speeds through this area. A number of sports grounds are located off Mungret Cross and the N69 and the footpath and cycle developments will provide safer access and connectivity for users. In addition, the development of a large school complex along the R859 will benefit from these works.

During the construction stage, there is the potential for some disruption being experienced by nearby residents and road users from the construction traffic and noise and dust emissions associated with construction activities, however these will be temporary and will not cause significant negative impacts. Traffic associated with the construction stage of the proposed works will be managed appropriately using a Construction Traffic Management Plan (CTMP), in order to minimise effects on residents and the operation of the local road network. The CTMP, which will be prepared by the construction contractor for the proposed scheme, will be implemented for the duration of the works with the aim of minimising disruption to traffic flow on the road network. It is not predicted that significant negative effects will arise.

Sensitive receptors are located near the proposed works and include a number of residential dwellings along the southern side of the N69, dwellings on the R859, dwellings on the road behind the Marian Shrine joining the N69 and R859, a pub and restaurant at Mungret Cross, residential dwellings and industrial/commercial premises along the N69 east of Mungret Cross, an ESB substation and a residential dwelling at the junction of the N69 and L1403. Additional dwellings along the east of the L1403 may also be affected.

The location of the proposed shared use path along the southern side of the N69 from Boland's Cross to Mungret Cross has been designed to minimise impact on adjacent residences, however, there will be a need for minor landtake along the field boundary between the two clusters of houses as well as minor landtake along the front of 2 residential properties and the sports ground immediately west of Mungret Cross. This is further referenced in the Part 8 drawings and Particulars.

Careful and considered local consultation will be carried out with nearby residents to ensure that the minimum amount of disturbance will be caused. Access to existing residential areas and proposed residential units will be maintained for the duration of the works.

The landtake required to provide the shared pathway along the southern edge of the N69 will have a permanent negative impact on the residents of the affected properties. In addition, the landtake will necessitate the removal of some hedgerow, grassed areas, boundary walls and fencing and may necessitate the relocation of some electricity poles.

The location of the proposed footpath along the southern side of the N69 in an easterly direction from Mungret Cross towards Limerick will necessitate landtake from a number of residential properties along this route. During construction there will be a negative impact on members of the public living and working in the area who would use the existing pathways along this location as well as those accessing the N69 from their properties.

However, the installation of a modern, shared use path will mitigate these impacts by providing a well-defined continuous footpath/cycleway shared space thereby separating pedestrians from vehicular traffic. The provision of a footpath/cycleway will improve the connectivity between residents in the environs of Boland's Cross and Mungret village. The footpath and other measures proposed will provide traffic calming to the immediate environs and provide a safer environment for local residents and the community.

The provision of a footpath/cycleway will provide a health benefit to the community through an increased level of physical exercise as a result of having safe space to walk and cycle to Mungret Village and onwards to Limerick City. There are pedestrian and cycle facilities in place connecting Mungret Village and the Limerick City suburb of Raheen.

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

6.2 Biodiversity

The ecological assessment undertaken for the development, concluded the site is not within or adjacent to any area designated for nature conservation. An initial site visit and walkover survey was carried out on 4th of February 2022. Baseline ecological conditions were assessed. Habitats were classified according to Fossitt (2000). Where applicable, the habitat types and species usage were recorded (Smith et al. 2011; Scannell and Synnott, 1987; Wyse Jackson et al. 2016). Habitats were classified and dominant plant species noted according to the guidelines given by the Joint Nature Conservation Committee (JNCC 2010) with reference to Smith et al. (2011).

Habitat types present within and in close proximity to the project area are dominated by buildings and artificial surfaces (BL3) as the proposed route will take place along an existing road network with houses, commercial enterprises and farms situated either side of the road. Amenity grassland (GA2) improved agricultural grassland (GA1), hedges (WL1), treeline (WL2), stone walls and other stonework (BL1) and scrub (WS1) are present adjacent to the road network. Realignment and path works will largely take place along pre-existing road (BL3) with the exception of Boland's Cross where some treelines will require removal.

There were no signs of protected mammal species recorded during the field survey. However, there were multiple European Rabbit (*Oryctolagus cuniculus*) burrows within the hedgerow adjacent to the

N69. In addition, a rabbit was noted within the hedgerow/improved grassland during the survey. No protected mammal species will be affected by any works to existing roadside boundary areas.

During the field survey, bird species that were identifiable were noted. No Special Conservation Interest species of the nearest SPA were recorded. Vegetation clearance will be required along the section where realignment works are required at the T junction (L1403) and alongside the N69 where the paths are to be constructed. This habitat is of no value to Qualifying Interests of the nearest Natura 2000 sites. It should be noted that it is illegal to disrupt or interfere with birds nesting in Ireland between the 1st of March and 31st of August. Therefore, if works require hedge cutting or removal then a dedicated bird survey would be required to ascertain if any birds are nesting within the hedgerow which requires management.

Amphibians were not recorded during the field surveys. The lack of drains or wet patches within the surrounding area make it unsuitable for breeding amphibians. The wet grassland adjacent to the road would provide suitable foraging habitat for the Common Frog (*Rana temporaria*).

No third schedule invasive plant species were recorded within the works area. However, there were three non-native invasive plant species recorded, these are Fuchsia (*Fuchsia magellanica*), Montbretia and Snowberry. Two of these plants have been classed as an invasive species by the National Biodiversity data centre. While there is no legal requirement to eradicate or control these species, care should be taken to halt the further spread or movement of these within or off the site.

In conclusion, it is recommended that works may proceed as planned without any significant negative ecological effects arising.

An Appropriate Assessment Screening was completed and concluded that in view of the best scientific knowledge and in view of the conservation objectives of the Natura 2000 sites reviewed in the screening exercise, the proposed development individually/in combination with other plans and projects (either directly or indirectly) is not likely to have any significant effects on any of the European sites and that Appropriate Assessment is not required.

6.3 Land and Soils

The soils and subsoils underlying and surrounding the site are described as being moderate permeability subsoils overlain by well drained soils. The recharge coefficient is estimated at 60%. Overburden depths above bedrock are relatively shallow based on information collated from geotechnical boreholes and wells logs accessed on www.gsi.ie and <https://dcenr.maps.arcgis.com> in the environs ranging from 3m to 6m. The soils are classified as Tills derived chiefly from Visean Limestones of the Carboniferous period.

The GSI (1:100,000 scale) bedrock mapping indicates that the site is underlain by Undifferentiated Visean Limestone. The nearest mapped karst feature is approximately 1.5km southeast of the site (a turlough).

The main aquifer type beneath the site is classified as a "Locally Important Aquifer – Bedrock which is Generally Moderately Productive" (Lm). The GSI well database was consulted to see if any records exist for wells in the area. One borehole (ref: 1415SWW073) is recorded as being located near the western half of the site (accuracy to within 1km). Bedrock is recorded as being encountered 6.1mbgl and the yield is recorded at 98m³/d. One further borehole (ref:1415SWW105) is mapped north of Castlemungret Soccer Pitch (accuracy to within 1km). Bedrock is recorded as being encountered 5.2mbgl with a recorded yield of 76m³/d.

Aquifer or groundwater vulnerability is the ease with which the groundwater may be contaminated by human activity and depends upon the aquifer's intrinsic geological and hydrogeological characteristics. The vulnerability is determined by the permeability and the attenuation capacity of any overlying deposits. The vulnerability of the aquifer directly beneath the Site is classified by the GSI as having a "high" vulnerability. Lands east of Mungret Cross along the N69 at the easternmost

end of the proposed scheme are classed having 'extreme vulnerability' indicating depth to bedrock of between 0 to 3m.

Much of the ground immediately underlying the site has been modified/disturbed through construction/utilities works along the existing roadway, footpaths, junctions and residential properties and can be considered to be 'made ground'.

Any proposed soakaway systems should not be located within areas of extreme groundwater vulnerability unless necessary and only after appropriate site-specific assessments and design are undertaken by competent professionals in hydrogeological risk assessment.

Given the nature of the proposed development which will take place predominantly along the existing road/local pathway footprint, it is likely that the ground immediately affected will be made ground and it can therefore be concluded that the proposed works will have no negative impact on land and soil characteristics in the area.

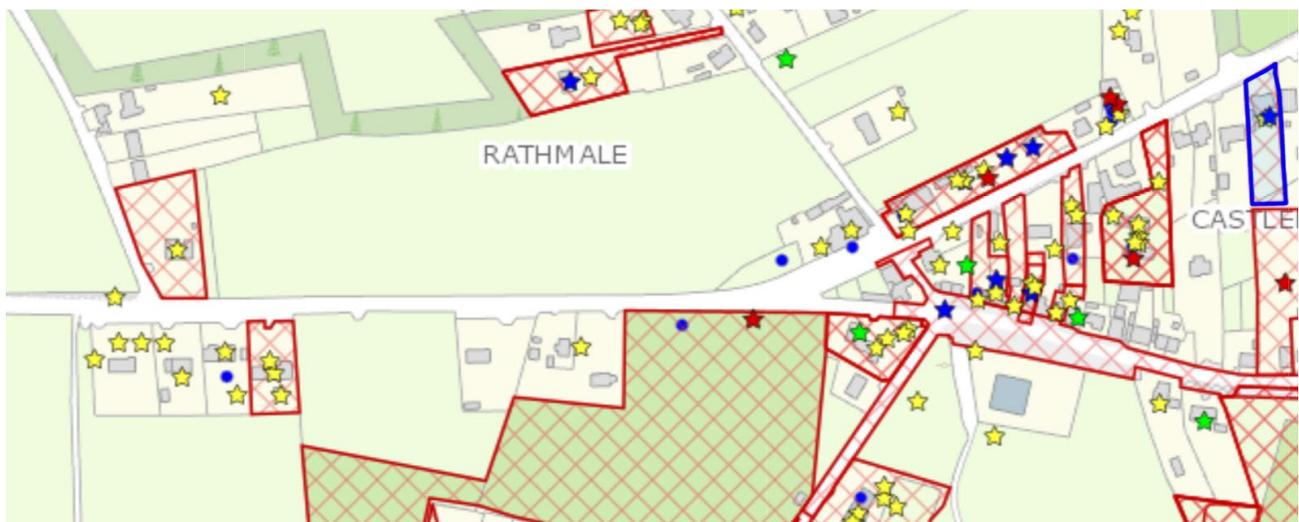
6.4 Material Assets

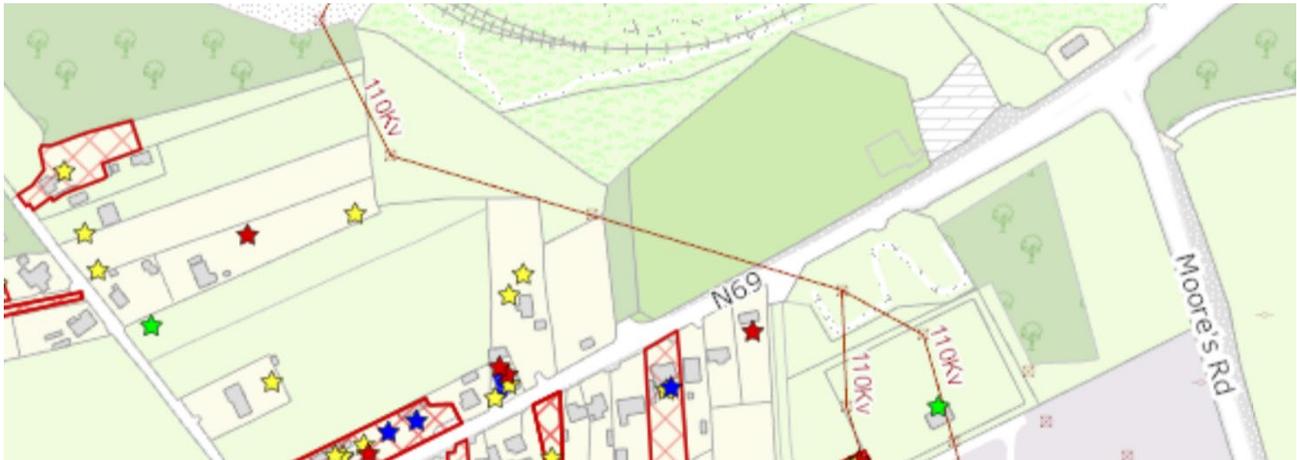
A number of landowners have been identified along the proposed route. Landholdings comprise residential dwellings, agricultural fields, potential development lands and sports fields. Some industrial and commercial properties are located around Mungret Cross along the N69 and R859. The various landholdings were identified by reference to www.landdirect.ie

The Limerick City and County Council online Planning Application System was consulted to determine whether there were any recent planning applications granted which could impact on or be impacted by the proposed development.

It is considered that no recently granted or conditional planning applications will be impacted by the proposed works. One residence on the R859 was granted planning permission in 2020 to amend their boundary wall and entrance piers. Works may impact this development depending on the final design.

Figure 3: Screenshots from Limerick City and County Council Planning Portal





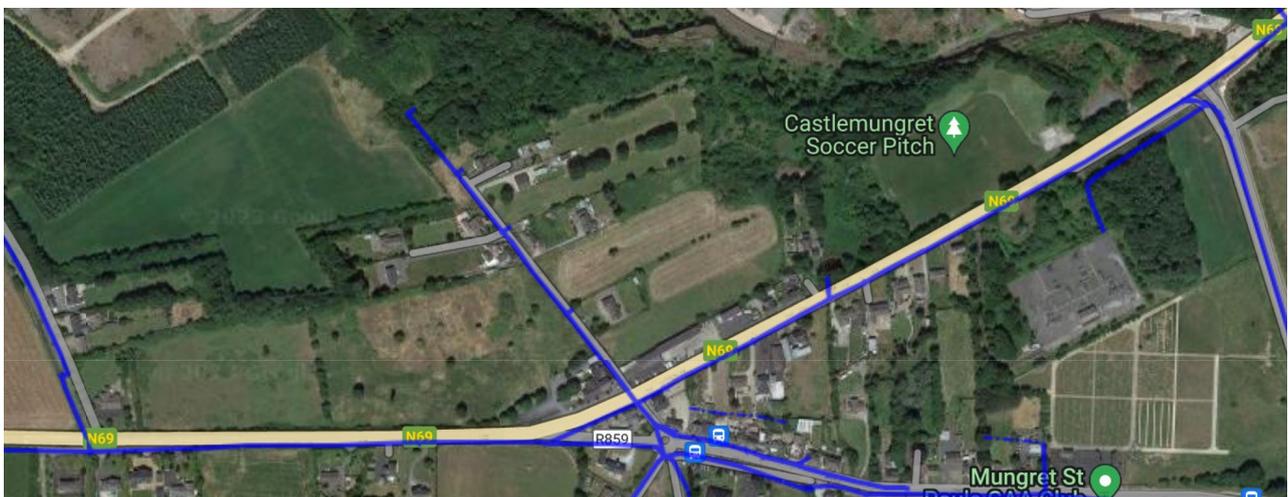
Locations where planning has been granted, refused, no decision or are conditional are indicated by a star. Planning sites are indicated by a red hatched area.

Land zoning as determined by Limerick City and County Council was assessed. Existing residences and their landholdings are zoned as Existing Residential (To ensure that new development is compatible with adjoining uses and to promote the amenity of existing residential areas). The field lying between the dwelling clusters along the southern boundary of the N69 is also zoned as Existing Residential. Lands and properties along the northern boundary of the N69 from Boland's Cross to Mungret Cross with the exception of the dwelling at the L1403 junction has been zoned as New Residential. At Mungret Cross lands lying at the intersection of the N69 and R859 are zoned as Local Centre. Lands along the northern side of the N69 east of Mungret Cross are zoned as Enterprise and Employment, Existing Residential and Industrial. Lands along the southern boundary of the N69 east of Mungret Cross are zoned as Existing Residential, Local Centre, Utilities and Industrial. The zoning map can be viewed on Page 22 of Volume 2a of the Limerick Development Plan 2022-2028

<https://www.limerick.ie/sites/default/files/media/documents/2022-09/Volume-2a-Limerick-City-and-Suburbs.pdf>

EIR emaps open eir Civil Engineering Infrastructure service [open eir CEI Login](#) was consulted to determine the location of relevant EIR services. Eir services run along the southern boundary of the N69 and are mapped as being located within a 100mm polypropylene duct. The ducts continue along the N69 and R859 at Mungret Cross. Manholes and chambers are mapped east of Mungret Cross along the N69 in the existing pathway. Some underground crossing points are mapped along the N69 and at the roundabout on the R859.

Figure 4: Screenshot from OpenEir Online Mapping indicating Eir Infrastructure



ESB mapping indicates low voltage overhead lines along the R859 at Mungret Cross. A medium voltage overhead line is mapped running behind properties to the right of L1403 before crossing the N69 to residences along the southern boundary of the N69. A 100kV overhead power line crosses the N69 from the ESB station towards Irish Cement north of Castlemungret Soccer Pitch. Medium voltage overhead lines cross the N69 at the edge of the Castlemungret Soccer Pitch shown at the top right of Figure 4 above. Local overhead power lines join the various residences and premises along this route.

There are no gas pipelines mapped along the N69 within the proposed development length. However, a medium pressure distribution pipe is mapped as coming from Caher Road towards the roundabout on the R859 and then in a easterly direction.

Water Services mapping indicate a water main of 150mm uPVC running along the northern boundary of the N69 from Boland's Cross to Mungret Cross. This continues to the R859 where the main increases to a 300mm uPVC main. From Mungret Cross eastwards along the N69, a 100mm uPVC watermain is mapped. Meter boxes along the existing footpath indicate where the main connects to various premises and residences. A 75mm uPVC water main crosses the N69 from the roundabout on the R859 north to the N69 and onwards.

It does not appear that residences along the N69 between Boland's and Mungret Cross are served by a piped wastewater system and that rather, they are served by individual on site wastewater treatment systems. Mungret Village was connected to Limerick Wastewater Treatment Plant agglomeration in recent years.

The proposed development will have an impact on landowners along the route where land is required to develop the scheme. However, the provision of safe cycling and access routes for affected residents and the associated reduction in traffic speeds along the busy N69 national road will be beneficial.

The Contractor will be responsible for putting measures in place to ensure that there are no interruptions to existing services and that all services and utilities are maintained unless this has been agreed in advance with the relevant service provider. All works near existing services and utilities will be carried out in ongoing consultation with the relevant utility company and will follow any requirements or guidelines they may have.

Further methods to be implemented by the Contractor to minimise the risk of damage to existing services will be as follows

- Undertake surveys to establish full extent of underground services prior to the commencement of construction;
- The use of Ground Penetration Radar (GPR) and CAT (cable avoidance tool), to provide greater confirmation of the locations of existing assets;
- The use of trial holes, where required, again to provide greater knowledge on the exact location of existing assets.

Overall, it is considered that there will be no significant negative impacts on land use and material assets as a result of the proposed development.

6.5 Landscape and Visual

The landscape character areas within County Limerick have incorporated the scenic views and prospects of earlier County Development Plans, which will ensure continuity between, and further development of, landscape policies for the County. There are 10 differing landscape areas (Landscape Character Areas, LCA) in County Limerick. The proposed works are located within the Shannon Integrated Coastal Management Zone. This area is described below:

This zone comprises a large area of northern County Limerick and is bounded on one side by the Shannon Estuary while its southern boundary is defined by the gradually rising ground, which leads onto the agricultural zone and the western hills to the southwest. The presence of the estuary is the defining characteristic of the region. The landscape itself is generally that of an enclosed farm type, essentially that of a hedgerow dominant landscape. This differs from the other agricultural landscapes of the County in that the field patterns, particularly close to the estuary, tend to be less regular than those elsewhere in the County.

Proposed works will take place on the outskirts and within a village settlement along a busy stretch of national road and therefore the landscape is not typical of the Landscape Character Area and is less sensitive to proposed land uses.

A number of residential dwellings and commercial establishments are located along the N69 where works are proposed. These sites will be the most impacted by the changes arising from the proposed development. The proposed shared use path will have an impact on these dwellings with an increase in pedestrian/cycle traffic. Some dwellings will have permanent alterations to their boundaries with some land take possible. Sections of hedgerow will require removal. It is not anticipated that the scheme will increase the number of users of the N69 but rather that the development will encourage alternative modes of transport such as walking or cycling by providing a safe means of travel and a reduction in speeds along this route.

Works along the L1403 will necessitate landtake from an adjacent field to the west of the existing roadway.

There is no potential for the proposed project to impact directly or indirectly on listed or scenic views or protected landscapes.

Localised impacts on adjacent residences will be mitigated by appropriate landscape planting mitigation and consultation with affected landowners.

The nature of the proposed development being principally adjacent to the N69 is unlikely to have any significant impact on the landscape of the area.

6.6 Air Quality and Climate

In terms of Air Quality, it is noted that the proposed works are located in an area defined by the EPA as 'Region 3: Large Towns (EPA mapping). The Air Quality Index is (1) **Good** (last update 8/3/2023).

The website www.airquality.ie gives information on the air quality for locations throughout the country and also any associated health advice. The ambient air quality network is managed by the EPA. In addition, Limerick City and County Council have installed 3 no. air quality monitors which can provide live indicative air quality data to the public. The locations are Limerick City, Mungret and Castletroy. These monitors measure particulate matter (PM) which is commonly used as an indicator of dust particles in air, including total suspended particulates, PM₁₀, and PM_{2.5}.

Mungret Monitor (TNO3841) rating was recorded as Good (1) on 8/3/2023 with latest values PM_{2.5} average of 3.02µg/m³ and latest PM₁₀ average of 6.14 µg/m³.

Air quality results and reports for Limerick City and County Council can be accessed at the following website: Air Quality | Limerick.ie

It is considered that the route of the proposed works is not particularly sensitive to additional emissions and that the surrounding environments are mainly influenced by existing emissions from road transport on the N69, adjacent roads and nearby industries including Irish Cement.

An objective of the proposed works is to deliver a shared cycle and pedestrian path and associated traffic calming measures from Boland's Cross to Mungret Cross and further along the N69 to Castlemungret Soccer Pitch. This will ensure that there will be no operational impacts on air quality and climate.

Indeed, the proposals will provide an alternative and sustainable mode of transport for cyclists and pedestrians and as such will make a positive contribution to air quality and also to the climate as it will help to reduce car borne trips.

For the construction phase, this stage of the project 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.

It is assumed that a Site Waste Management Plan will be developed and there will be contractual requirements for the principal contractor to demonstrate best practice principles and procedures to minimise the consumption of resources such as fuels and raw materials.

There is potential for dust from site construction works such as excavations, earthworks and the movement of site traffic. Dust can be spread by vehicles entering and exiting the site. It is anticipated that the appointed contractor will be required to implement dust measures to reduce/avoid any potential dust impacts.

Noting the above and the nature, size and location of the development, significant adverse effects on the environment are considered to be unlikely with respect to climate change, GHG emissions and air quality.

6.7 Water

The proposed scheme is located within the Shannon Estuary South Catchment, within the Ballynaclogh_SC_010 Subcatchment. The proposed works are located within 2 no. river subbasins, namely Barnakyle_020 subbasin and Ballynaclogh_010 subbasin. The Barnakyle River is located approximately 1.5km south/southwest of the site and the River Shannon is located approximately 1.65km north of the site with the Irish Cement Works and Quarry lying between the site and the Shannon.

The proposed scheme does not cross any designated watercourses. The GSI has classified the groundwater vulnerability along the route as High and classifies the underlying aquifer as Locally Important. The soils are classed as being of moderate permeability overlain by well drained soils. Lands east of Mungret Cross along the N69 at the easternmost end of the proposed scheme are classed as having 'extreme vulnerability' indicating depth to bedrock of between 0 to 3m.

The site is not classified by the GSI as being within a drinking water protection area. The OS 6" historical mapping indicates no rises or drainage ditches/minor streams within the site.

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

Existing drainage along the N69 for most of the route is 'over the edge'. It is proposed to retain this where possible but the installation of kerbs to provide separation between the road and pedestrian/cycle areas will require that additional runoff be discharged to soakaways. The design and location of soakways and any necessary pre-treatment will be considered at detailed design stage following completion of a risk assessment (selection of appropriate measures commensurate with site specific groundwater protection response) by competent hydrogeologists.

The N69 and R859 east of Mungret Cross is served by a surface water drainage system consisting of kerbs and gullies. This will be retained, modified and extended where possible to cater for runoff from the proposed works.

Desktop study of borehole/well data from GSI and EPA records indicate bedrock between 3m and 5m below ground level. Soakaway tests will be undertaken to determine appropriate soakaway design and location to cater for any surface water runoff requiring management.

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

6.8 Cultural Heritage

Appendix B of this report contains a cultural heritage assessment of the scheme. The proposed development is located in close proximity to four recorded archaeological sites, three protected structures and three further sites of potential cultural heritage significance.

The Zone of Notification for one of the archaeological sites, the enclosure at Rathmale (LI013-002), is located directly to the south of the current alignment of the N69. However, the monument itself is separated from the N69 by two 20th century houses with associated gardens, making it unlikely that the proposed development will have a direct impact on the site or associated features. The Zones of Notification for the castle to the east of the village and the site of the standing stone are at a distance of 200m and 140m respectively from the proposed development. Based on the available information, it is anticipated that the proposed scheme will have no direct impacts on the castle, the site of the standing stone and the moated site.

Architectural heritage sites identified within the study area are all structures currently located along existing roads. Boundary walls, entrance gates and other features associated with the protected structures of Shanahan's Pub, the village pump and the church need to be taken into consideration during the design phase of the proposed scheme and direct impact with such features should be avoided where possible. Other sites of cultural heritage significance, such as the mid-20th century Marian Shrine, the stone walls along the northern side of the R859 and buildings associated with the 19th century streetscape of Mungret village, such as Westward Ho Public House, form an integral part of the local heritage. Where possible direct impact with additional features of potential cultural heritage significance identified in the report should also be avoided.

7. Cumulative Impacts

A review of nearby projects which have the potential for cumulative impacts on the environment when considered together with the proposed development was completed.

These are:

- Mungret Street Links Project
- Mungret Gate Residential Development
- Post-Primary School at Caheranardish
- Irish Cement Alternative Fuels Project
- Proposed development at Dromdarrig, Mungret, Co. Limerick

7.1 Mungret Link Streets Project

Located southeast of the proposed development is the Mungret Link Streets Project. This approved project consists of the construction of approximately 1.7km of new public road within the Mungret/Loughmore Common area.

The project also includes the provision of cycleways and footpaths. The Mungret Link Streets Project was approved by Limerick City and County Council under a Part 8 planning process, which included the consideration of the potential for effects on Natura 2000 sites, the potential for the requirement for EIA, the potential for ecological impacts, and an assessment of the risk of flooding.

Given that the overall transport and movement strategy for the wider area is set on providing access to the area by all modes of travel, and the fact that the Mungret Link Streets Project itself is not a generator of traffic, cumulative effects in relation to air and noise will not be significant.

7.2 Mungret Gate Residential Development

Planning permission has been granted to Homeland MLS Ltd for the construction of 201 homes at Mungret Gate, Baunacloka, Mungret. This residential development will also include the construction of the eastern end of the Mungret Link Streets Project. Although this proposed development is not close to the subject scheme, the potential for in-combination environmental effects could arise for construction-phase traffic, but with the implementation of appropriate construction-phase traffic management plans and controls, the potential cumulative effects will not be significant.

7.3 Post Primary School at Caheranardish

Two new primary schools have been constructed within the area accessed off the R859 to the west of Mungret College, and Mungret Neighbourhood Park (north of Mungret College). In addition, an application for the construction of a secondary school in Caheranardish, has been granted permission. Because of the distance between this site and the proposed development, potential cumulative effects are considered unlikely. Should there be a significant overlap in the construction phases for this project and the subject scheme the potential for in-combination environmental effects would arise for construction-phase traffic. No significant adverse in-combination effects on the environment have been identified.

7.4 Irish Cement Development

The Irish Cement manufacturing facility and quarry is located approximately 130m to the north east of the easternmost end of the site. Irish Cement are regulated by the EPA through an Industrial

Emissions licence (P0029-05). The Industrial Emissions licence addresses the water discharging from the site into Bunlicky Pond as two emissions: SW1 which comprises of cooling water, storm water and quarry water and SW2 which comprises of the discharge from a pump sump in the limestone quarry. All surface water from the site passes through settling tanks and oil interceptors prior to discharge into Bunlicky Clayfield Pond. Discharge emission points are monitored quarterly and the outflow from Bunlicky Pond is monitored annually. Bunlicky Clayfield Ponds' discharge to the River Shannon is controlled via adjustable weir and flap valves.

Irish Cement has been granted permission for the following development: *“Application for 10 year permission for development to allow for the replacement of fossil fuels through the introduction of lower carbon alternative fuels and to allow for the use of alternative raw materials in their Limerick Cement Factory”*.

This site is sufficiently distant from the subject development to rule out the potential for significant adverse construction or operational in-combination effects on the environment.

7.5 Development at Dromdarrig, Mungret, Co. Limerick

The proposed development, which is located adjacent to Mungret College, is comprised of 253 residential units, associated roads, carparking, open spaces, local services and ancillary utilities infrastructure. The development includes two distinct elements; a standard housing development, which comprises of 186 housing units and an Independent Living for Older Persons development, which includes 55 apartments for Independent Living and a further 12 apartments which will be standard units open to any occupancy. In addition to the Creche, Community Facility and local shops a number of Public Open Spaces will be included in the proposed development, including a public square.

This site is sufficiently distant from the subject development to rule out the potential for significant adverse construction or operational in-combination effects on the environment.

8. Preliminary Examination Conclusion

The proposed development does not fall into a category or exceed thresholds under the EIA Directive (2014/52/EU), the Planning and Development Acts (2000 to 2022) and the Roads Act (1993 to 2015) that trigger the mandatory requirement for an EIA, and therefore a statutory EIA is not required.

Having carried out the EIA screening assessment of the proposed scheme and considering the type and relatively small scale of the proposed development and the nature of the receiving environment in addition to the nature, size and location of the proposed development, significant impacts on aspects such as population and human health, biodiversity, land and soil, material assets, water, landscape and visual and cultural heritage are not expected and can be ruled out.

This report has discussed possible positive and negative impacts of the proposed development, however, it is not anticipated that any of these are likely to have a significant impact on the environment. It is also noted that the potential for impacts on nearby Natura sites have been assessed by means of an Appropriate Assessment Screening Report can be excluded and the proposed development is therefore not subject to Appropriate Assessment and the preparation of a Natura Impact Statement.

Accordingly, based on the aforesaid EIA screening set out in this report, it is concluded that there is not a real likelihood of significant effects on the environment arising from the N69 Mungret and Boland's Cross Road Safety Improvement Scheme and therefore the preparation of an Environmental Impact Assessment Report (EIAR) is not required.

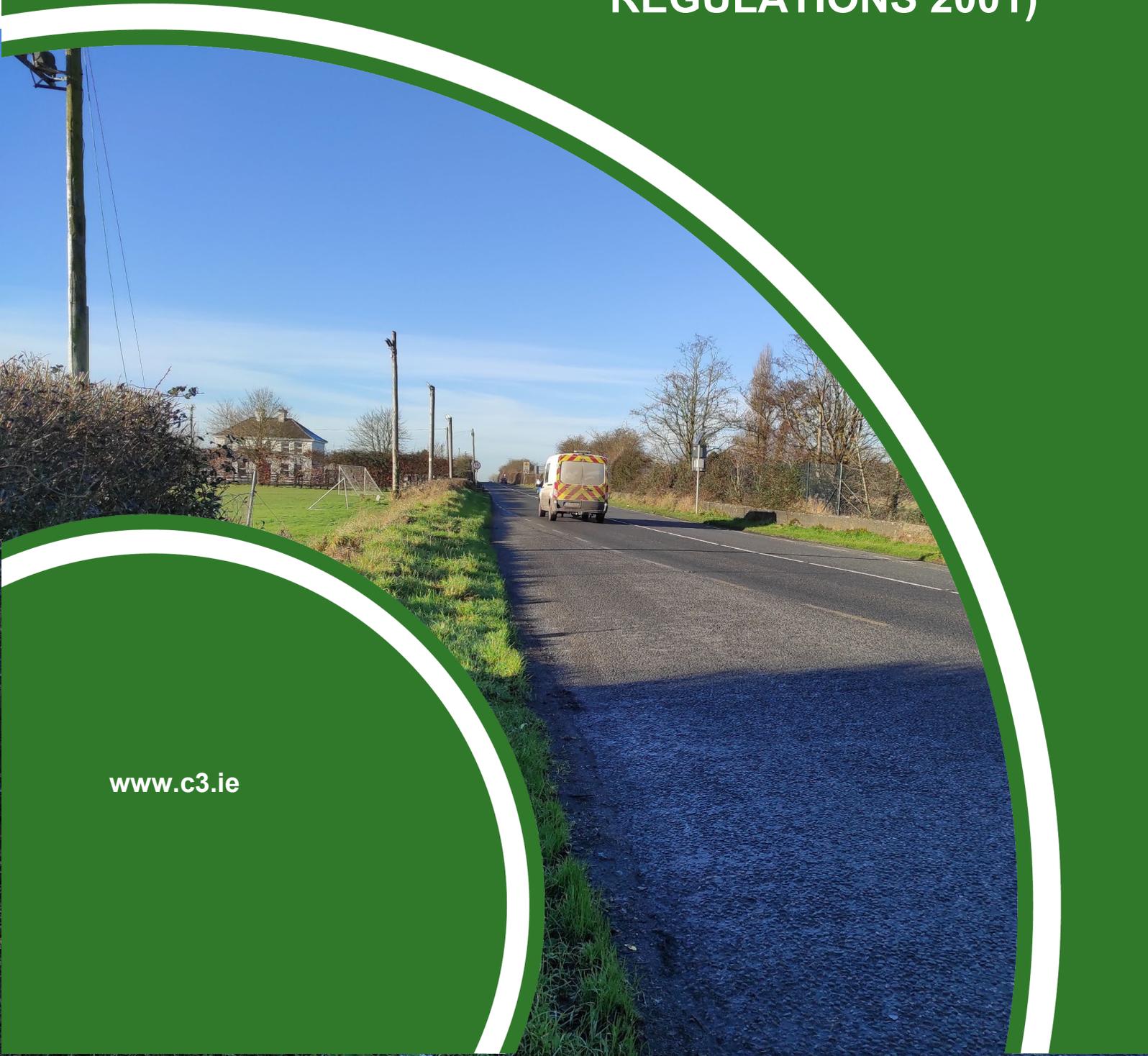
9. References

- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, Department of Department of Housing, Planning and Local Government, August 2018.
- EIA Directive (Directive 2011/92/EU as amended by 2014/52/EU).
- Environmental Impact Assessment of Projects: Guidance on Screening, European Commission, 2017.
- Guidelines on the Information to be contained in Environmental Impact Assessment Reports, Draft, Environmental Protection Agency, August 2017.
- Planning and Development Acts (2000 to 2022).
- Planning and Development Regulations (2001 to 2022).
- Roads Act (1993 to 2015).
- Environmental Impact Assessment of Projects: Guidance on Screening, European Commission 2017
- An Bord Pleanála Website Planning Searches. [Online]. Available at: <http://www.pleanala.ie/>.
- Environmental Sensitivity Mapping (ESM) Webtool (online) Accessed at: <https://www.enviromap.ie/>
- Environmental Protection Agency (EPA) Catchments website (online) Accessed at: <https://www.catchments.ie/>
- Southern Environs Local Area Plan: <https://www.limerick.ie/council/services/planning-and-property/development-plans/local-area-plan-southern-environs>
- Limerick Development Plan 2022-2028: <https://www.limerick.ie/council/services/planning-and-property/limerick-development-plan/limerick-development-plan-2022-2028>
- Extended Limerick County Development Plan 2010-2016 (as extended): <https://www.limerick.ie/council/services/planning-and-property/development-plans/county-development-plan-2010-2016>
- Limerick City and County Council Planning System: <https://maps.limerick.ie/planningenquiry>
- EPA Online Mapping: Water Maps: <https://gis.epa.ie/EPAMaps/Water>



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APPENDIX A - SCHEDULE 7 AND 7A (PLANNING & DEVELOPMENT REGULATIONS 2001)



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Table 3: Characteristics of the Proposed Development

Characteristics of the Proposed Development	
Section 7 Requirement	Response
The size and design of the whole of the proposed development,	The project site is approximately 1.2km in length extending from the priority T-junction of the N69 and the L1403 (Boland's Cross) to a priority Y-junction between the N69 and the R859 regional road (Mungret Cross) on the southern side of the N69 at the western end of Mungret Village. The scheme extends east of Mungret Cross along the N69 ending at Castlemungret Soccer Pitch and continues along the R859 to the recently constructed roundabout. The scheme includes local road L1437.
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,	<p>A review of nearby projects which have the potential for cumulative impacts on the environment when considered together with the proposed development was completed.</p> <p>These are:</p> <ul style="list-style-type: none"> • Mungret Street Links Project • Mungret Gate Residential Development • Post-Primary School at Caheranardish • Irish Cement Alternative Fuels Project • Proposed development at Dromdarrig, Mungret, Co. Limerick <p>For each of the developments considered, the potential for significant adverse construction or operational in-combination effects on the environment was ruled out. A review of planning applications was completed, and it was determined that no negative significant impacts anticipated.</p>
The nature of any associated demolition works,	Limited demolition works are required to facilitate the proposed development. There will be a need to excavate some existing road verge and access driveways for residences and farm accesses along the southern side of the N69 and at Boland's Cross. Some demolition works may be required along the southern side of the N69 and a portion of the R859 east of Mungret Cross to facilitate construction of the shared use surface including removal of boundary walls and service alteration as necessary.
The use of natural resources, in particular land, soil, water and biodiversity,	<p>While construction materials will be required in carrying out the proposed works, it is not considered that there will be a significant use of natural resources as part of the proposed works.</p> <p>Services such as water and power (mobile generators) may be required during the construction phase, however, it is not expected that there will be a significant use of these resources due to the nature of the works proposed.</p>
The production of waste,	Surplus construction materials which are not required for use on site will be reused, recovered or disposed

Characteristics of the Proposed Development	
	<p>off-site. An appropriate waste collection permit holder will be used for removal of wastes from site. All by products and wastes removed from site will be reused, recovered or disposed of in accordance with the Waste Management Act, 1996, as amended.</p>
<p>Pollution and nuisances,</p>	<p>Construction activities will be restricted to within the defined works boundaries.</p> <p>The employment of standard best practice measures and construction techniques as described in the CEMP will serve to minimise the risk of pollution of soil, storm water run-off or groundwater.</p>
<p>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</p>	<p>There is a low possibility that accidents will occur as the construction works are standard in nature and well understood. Standard construction practices will ensure that the risk of accidents will be low.</p> <p>It is envisaged that the risk of accidents, having regard to substances or technologies used is very low and therefore will not result in significant environmental effects.</p>
<p>The risks to human health (for example, due to water contamination or air pollution).</p>	<p>Throughout all project phases, standard construction materials will be used and will not be harmful to human health or the environment. The contractor will ensure that the proposed works are carried out in accordance with the Safety, Health and Welfare at Work (Construction) Regulations 2013 (S.I. No. 219 of 2013).</p>

Table 4: Location of the Proposed Development

Location of the Proposed Development	
Section 7 Requirement	Response
<p>Question: The environmental sensitivity of geographical areas likely to be affected by the proposed development, with particular regard to—</p>	
<p>the existing and approved land use,</p>	<p>Much of the ground immediately underlying the site has been modified through construction/utilities works along the existing roadway, footpaths, junctions and residential properties and can be considered to be 'made ground'.</p> <p>Given the nature of the proposed development which will take place predominantly along the existing road footprint and the adjacent footpath on the N69 east of Mungret Cross, it is likely that the ground immediately affected will be made ground and it can therefore be concluded that the proposed works will have no negative impact on land and soil characteristics in the area.</p> <p>A number of residential dwellings are located along the N69 where works are proposed between Boland's Cross and Mungret Cross. These residences will be the most impacted by the changes arising from the proposed development. Dwellings along the southern side of the N69 east of Mungret Cross will also be impacted. The proposed shared use path will have an impact on these dwellings with an increase in pedestrian/cycle traffic. Some dwellings will have permanent alterations to their boundaries with some land take possible. Sections of hedgerow will require removal. It is not anticipated that the scheme will increase the number of users of the N69 but rather that the development will encourage alternative modes of transport such as walking or cycling by providing a safe means of travel and a reduction in speeds along this route.</p> <p>Works along the L1403 will necessitate landtake from an adjacent field to the west of the existing roadway.</p>
<p>the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground,</p>	<p>The main natural resource in the area is agricultural land, one-off residential housing, sports fields and a village environment. There may be temporary impacts on the environment during construction due to noise or dust emissions depending on the activity involved and the ambient conditions at the time. However, the construction works are standard in nature and well understood. Implementation of standard best practice measures and construction techniques will be set out by the Contractor in their CEMP and this will ensure no significant impact on the abundance, quality and regenerative capacity of natural resources in the area. Careful and considered local consultation will be</p>

Location of the Proposed Development	
	<p>carried out with nearby residences to ensure that the minimum amount of disturbance will be caused.</p> <p>The necessary removal of some areas of grass and hedgerow will be mitigated by a sympathetic replanting and boundary reinstatement strategy.</p>
<p>the absorption capacity of the natural environment, paying particular attention to the following areas:</p>	
<ul style="list-style-type: none"> wetlands, riparian areas, river mouths; 	Not Applicable
<ul style="list-style-type: none"> coastal zones and the marine environment, 	Not Applicable
<ul style="list-style-type: none"> mountain and forest areas; 	Not Applicable
<ul style="list-style-type: none"> nature reserves and parks; 	Not Applicable
<ul style="list-style-type: none"> areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive and; 	Not Applicable (See Appropriate Assessment Screening Report)
<ul style="list-style-type: none"> 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; 	Not Applicable
<ul style="list-style-type: none"> densely populated areas; 	<p>The works are not located within a densely populated area. One-off residences are located on the right-hand side of the L1403, the southern side of the N69 and at Mungret Cross, a section of the R859 between the roundabout and Mungret Cross and the interconnecting road (local village environment).</p>
<ul style="list-style-type: none"> landscapes and sites of historical, cultural or archaeological significance. 	<p>The proposed development is located in close proximity to four recorded archaeological sites, three protected structures and three further sites of potential cultural heritage significance.</p> <p>Architectural heritage sites identified within the study area are all structures currently located along existing roads. Boundary walls, entrance gates and other features associated with the protected structures of Shanahan's Pub, the village pump and the church need to be taken into consideration during the design phase of the proposed scheme and direct impact with such features should be avoided where possible. Other sites of cultural heritage significance, such as the mid-20th century Marian Shrine, the stone walls along the northern side of the R859 and buildings associated with the 19th century streetscape of Mungret village, such as Westward Ho Public House, form an integral part of the local heritage. Where possible direct impact with additional features of potential cultural heritage significance identified in the report should also be avoided.</p>

Table 5: Types and Characteristics of Potential Impacts

Types and Characteristics of Potential Impacts	
Section 7 Requirement	Response
<p>Question: 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—</p>	
<p>the magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected)</p>	<p>The works will take place along the N69, a Local Road L1403 and a Regional Road R859. The length of the scheme is approximately 1.2km. Potential environmental impacts are mainly related to land take and construction. The impacts are anticipated to be localised and minor along the road length. A relatively small number of residences will be affected as set out in the EIAR Screening main report.</p>
<p>The nature of the impact, the intensity and complexity of the impact, the probability of the impact, the expected onset, duration, frequency and reversibility of the impact, the possibility of effectively reducing the impact.</p>	<p>Population and Human Health</p> <ul style="list-style-type: none"> • The development will provide safe pedestrian access along this section of the N69 and will also reduce traffic speeds through this area. • A number of sports grounds are located off Mungret Cross and the footpath and cycle developments will provide safer access and connectivity for users. • During the construction stage, there is the potential for some disruption being experienced by nearby residents and road users from the construction traffic and noise and dust emissions associated with construction activities, however these will be temporary and will not cause significant negative impacts. • Traffic associated with the construction stage of the proposed works will be managed appropriately using a Construction Traffic Management Plan (CTMP), in order to minimise effects on residents and the operation of the local road network. The CTMP, which will be prepared by the construction contractor for the proposed development, will be implemented for the duration of the works with the aim of minimising disruption to traffic flow on the road network. It is not predicted that significant negative effects will arise. • Sensitive receptors are located near the proposed works and include a number of residential dwellings along the southern side of the N69, dwellings on the R859, a pub and restaurant at Mungret Cross, some industrial units along the N69 and a residential dwelling at the junction of the N69 and L1403. Additional dwellings along the east of the L1403 may also be affected.

Types and Characteristics of Potential Impacts

- The location of the proposed shared use path along the southern side of the N69 has been designed to minimise impact on adjacent residences, however, there will be a need for minor landtake along the field boundary between the two clusters of houses as well as minor landtake along the front of 2 residential properties and the sports ground immediately west of Mungret Cross. East of Mungret Cross along the N69, there will be a need for landtake from a number of residential dwellings. This is further referenced in the Part 8 drawings and Particulars. There will be a need for minor landtake along the northern side of the N69 between the L1403 and approximately 150m east of the junction with the N69.
- Careful and considered local consultation will be carried out with nearby residents to ensure that the minimum amount of disturbance will be caused. Access to existing residential areas and proposed residential units will be maintained for the duration of the works.
- The landtake required to provide the shared pathway along the southern edge of the N69 will have a permanent negative impact on the residents of the affected properties. In addition, the landtake will necessitate the removal of some hedgerow, grassed areas, possible relocation of some electricity poles and impact/removal of some boundary walls and fencing.
- Where public lighting is required for safety, there may be an impact on residents. Installation of light ducting and infrastructure may also necessitate some landtake.
- However, the installation of a shared use path will mitigate these impacts by providing a footpath/cycleway shared space thereby separating pedestrians from vehicular traffic. The provision of a footpath/cycleway will improve the connectivity between residents in the environs of Boland's Cross and Mungret village. The extension of the Scheme along the N69 east of Mungret Cross will provide connectivity to an existing pedestrian/cycleway towards Raheen at Moore's Road. The footpath and other measures proposed will provide traffic calming to the immediate environs and provide a safer environment for local residents and the community.
- The provision of a footpath/cycleway will provide a health benefit to the community through an increased level of physical exercise as a result of having safe space to walk and cycle to Mungret Village and onwards to Limerick City. There are pedestrian and cycle facilities in place connecting Mungret Village and the Limerick City suburb of Raheen.
- It is considered that the proposed works will not create any significant adverse effects with respect to population or human health.

Types and Characteristics of Potential Impacts

Biodiversity

- The ecological assessment concluded the site is not within or adjacent to any area designated for nature conservation. Baseline ecological conditions were assessed. Habitats were classified.
- Habitat types present within and in close proximity to the project area are dominated by buildings and artificial surfaces (BL3) as the proposed route will take place along an existing road network with houses and farms situated either side of the road. Amenity grassland (GA2) improved agricultural grassland (GA1), hedges (WL1), treeline (WL2), stone walls and other stonework (BL1) and scrub (WS1) are present adjacent to the road network. Realignment and path works will largely take place along pre-existing road (BL3) with the exception of Boland's Cross where some treelines will require removal.
- There were no signs of protected mammal species recorded during the field survey. No protected mammal species will be affected by any works to existing roadside boundary areas.
- During the field survey, bird species that were identifiable were noted. No Special Conservation Interest species of the nearest SPA were recorded. Vegetation clearance will be required along the section where realignment works are required at the T junction (L1403) and alongside the N69 where the paths are to be constructed. This habitat is of no value to Qualifying Interests of the nearest Natura 2000 sites. If works require hedge cutting or removal then a dedicated bird survey would be required to ascertain if any birds are nesting within the hedgerow which requires management.
- Amphibians were not recorded during the field surveys.
- No third schedule invasive plant species were recorded within the works area. However, there were three non-native invasive plant species recorded, these are Fuchsia (*Fuchsia magellanica*), Montbretia and Snowberry. While there is no legal requirement to eradicate or control these species, care should be taken to halt the further spread or movement of these within or off the site.
- In conclusion, it is recommended that works may proceed as planned without any significant negative ecological effects arising.
- An Stage I Appropriate Assessment Screening was completed and concluded that in view of the best scientific knowledge and in view of the conservation objectives of the Natura 2000 sites reviewed in the screening exercise, the proposed development individually/in combination with other plans and projects (either directly or indirectly) is not likely to have any significant effects on any of the European sites and that Stage II Appropriate Assessment is not required.

Types and Characteristics of Potential Impacts

Land and Soils

- The soils and subsoils underlying and surrounding the site are described as being moderate permeability subsoils overlain by well drained soils. The recharge coefficient is estimated at 60%. Overburden depths above bedrock are relatively shallow based on information collated from geotechnical boreholes and wells in the environs ranging from 3m to 6m. The soils are classified as Tills derived chiefly from Visean Limestones of the Carboniferous period.
- The GSI (1:100,000 scale) bedrock mapping indicates that the site is underlain by Undifferentiated Visean Limestone. The nearest mapped karst feature is approximately 1.5km southeast of the site (a turlough).
- The main aquifer type beneath the site is classified as a “Locally Important Aquifer – Bedrock which is Generally Moderately Productive” (Lm). The GSI well database was consulted to see if any records exist for wells in the area. One borehole (ref: 1415SWW073) is recorded as being located near the western half of the site (accuracy to within 1km). Bedrock is recorded as being encountered 6.1mbgl and the yield is recorded at 98m3/d.
- The vulnerability of the aquifer directly beneath the Site is classified by the GSI as having a “high” vulnerability. Near the easternmost section of the N69 south of Castlemungret Soccer Club, the underlying aquifer vulnerability is mapped as extremely vulnerable with bedrock ranging from 0m to 3mbgl.
- Much of the ground immediately underlying the site has been modified through construction/utilities works along the existing roadway, footpaths, junctions and residential properties and can be considered to be ‘made or disturbed ground’.
- Given the nature of the proposed development which will take place predominantly along the existing road footprint, it is likely that the ground immediately affected will be made ground and it can therefore be concluded that the proposed works will have no negative impact on land and soil characteristics in the area.

Material Assets

- A number of landowners have been identified along the proposed route. Landholdings comprise residential dwellings, agricultural fields, potential development lands and sports fields. Some industrial and commercial properties are located around Mungret Cross along the N69 and R859.
- The Limerick City and County Council Planning Application System was consulted to determine whether there were any recent planning applications granted which could impact on or be impacted by the proposed development. It is considered that no recently granted

Types and Characteristics of Potential Impacts

or conditional planning applications will be impacted by the proposed works.

- Land zoning as determined by Limerick City and County Council was assessed. Existing residences and their landholdings are zoned as Existing Residential (To ensure that new development is compatible with adjoining uses and to promote the amenity of existing residential areas). The field lying between the dwelling clusters along the southern boundary of the N69 is also zoned as Existing Residential. Lands and properties along the northern boundary of the N69 from Boland's Cross to Mungret Cross with the exception of the dwelling at the L1403 junction has been zoned as New Residential. At Mungret Cross lands lying at the intersection of the N69 and R859 are zoned as Local Centre. Lands along the northern side of the N69 east of Mungret Cross are zoned as Enterprise and Employment, Existing Residential and Industrial. Lands along the southern boundary of the N69 east of Mungret Cross are zoned as Existing Residential, Local Centre, Utilities and Industrial.
- EIR emaps open air Civil Engineering Infrastructure service was consulted to determine location of relevant EIR services. Air services run along the southern boundary of the N69 and are mapped as being located within a 100mm polypropylene duct. The ducts continue along the N69 and R859 at Mungret Cross. Manholes and chambers are mapped east of Mungret Cross along the N69 in the existing pathway. Some underground crossing points are mapped along the N69 and at the roundabout on the R859.
- ESB mapping indicates low voltage overhead lines along the R859 at Mungret Cross. A medium voltage overhead line is mapped running behind properties to the right of L1403 before crossing the N69 to residences along the southern boundary of the N69. A 100kV overhead power line crosses the N69 from the ESB station towards Irish Cement north of Castlemungret Soccer Pitch. Medium voltage overhead lines cross the N69 at the edge of the soccer pitch. Local overhead power lines join the various residences and premises along this route.
- Water Services mapping indicate a water main of 150mm uPVC running along the northern boundary of the N69 from Boland's Cross to Mungret Cross. This continues to the R859 where the main increases to a 300mm uPVC main. From Mungret Cross eastwards along the N69, a 100mm uPVC watermain is mapped. Meter boxes along the existing footpath indicate where the main connects to various premises and residences. A 75mm uPVC water main crosses the N69 from the roundabout on the R859 north to the N69 and onwards.
- There are no gas pipelines mapped along the N69 within the proposed development length. However, a medium pressure distribution pipe is mapped as coming

Types and Characteristics of Potential Impacts

from Caher Road towards the roundabout on the R859 and then in a easterly direction.

- It does not appear that residences along the N69 between Boland's and Mungret Cross are served by a piped wastewater system and that rather, they are served by individual on site wastewater treatment systems. Mungret Village is served by a piped wastewater treatment system although some sites may retain legacy on site wastewater treatment.
- Existing drainage along the N69 for most of the route is 'over the edge'. It is proposed to retain this where possible but the installation of kerbs to provide separation between the road and pedestrian/cycle areas will require that additional runoff be discharged to soakaways. The design and location of soakways and any necessary pre-treatment will be considered at detailed design stage following completion of a risk assessment (selection of appropriate measures commensurate with site specific groundwater protection response) by competent hydrogeologists.
- The N69 and R859 east of Mungret Cross is served by a surface water drainage system consisting of kerbs and gullies. This will be retained, modified and extended where possible to cater for runoff from the proposed works.
- The proposed development will have an impact on landowners along the route where land is required to develop the scheme. However, the provision of safe cycling and access routes for affected residents and the associated reduction in traffic speeds along the busy N69 national road will be beneficial.
- The Contractor will be responsible for putting measures in place to ensure that there are no interruptions to existing services and that all services and utilities are maintained unless this has been agreed in advance with the relevant service provider. All works near existing services and utilities will be carried out in ongoing consultation with the relevant utility company and will follow any requirements or guidelines they may have.
- Further methods to be implemented by the Contractor to minimise the risk of damage to existing services will be as follows
 - Undertake surveys to establish full extent of underground services prior to the commencement of construction;
 - The use of Ground Penetration Radar (GPR) and CAT (cable avoidance tool), to provide greater confirmation of the locations of existing assets;
 - The use of trial holes, where required, again to provide greater knowledge on the exact location of existing assets.
- Overall, it is considered that there will be no significant negative impacts on land use and material assets as a result of the proposed development.

Types and Characteristics of Potential Impacts

Landscape and Visual;

- The proposed works are located within the Shannon Integrated Coastal Management Zone. This area is described below:
- A large area of northern County Limerick bounded on one side by the Shannon Estuary while its southern boundary is defined by the gradually rising ground, which leads onto the agricultural zone and the western hills to the southwest. The presence of the estuary is the defining characteristic of the region. The landscape itself is generally that of an enclosed farm type, essentially that of a hedgerow dominant landscape. This differs from the other agricultural landscapes of the County in that the field patterns, particularly close to the estuary, tend to be less regular than those elsewhere in the County.
- Proposed works will take place on the outskirts and adjacent to a village settlement and along a busy stretch of national road and therefore the landscape is not typical of the Landscape Character Area and less sensitive to proposed land uses.
- A number of residential dwellings and commercial establishments are located along the N69 where works are proposed. These sites will be the most impacted by the changes arising from the proposed development.
- The proposed shared use path will have an impact on these dwellings with an increase in pedestrian/cycle traffic. Some dwellings will have permanent alterations to their boundaries with some land take possible. Sections of hedgerow will require removal.
- It is not anticipated that the scheme will increase the number of users of the N69 but rather that the development will encourage alternative modes of transport such as walking or cycling by providing a safe means of travel and a reduction in speeds along this route.
- Works along the L1403 will necessitate landtake from an adjacent field to the west of the existing roadway.
- There is no potential for the proposed project to impact directly or indirectly on listed or scenic views or protected landscapes.
- Localised impacts on adjacent residences will be mitigated by appropriate landscape planting mitigation and consultation with affected landowners.
- The nature of the proposed development being principally adjacent to the N69 is unlikely to have any significant impact on the landscape of the area.

Air Quality and Climate;

- The proposed works are located in an area defined by the EPA as 'Region 3: Large Towns (EPA mapping).

Types and Characteristics of Potential Impacts

The Air Quality Index is (1) **Good** (last update 08/03/2023).

- The website www.airquality.ie gives information on the air quality for locations throughout the country and also any associated health advice. The ambient air quality network is managed by the EPA. In addition, Limerick City and County Council have installed 3 no. air quality monitors which can provide live indicative air quality data to the public.
- Air quality results and reports for Limerick City and County Council can be accessed at the following website: Air Quality | Limerick.ie
- It is considered that the route of the proposed works is not particularly sensitive to additional emissions and that the surrounding environments are mainly influenced by existing emissions from road transport on the N69, adjacent roads and nearby industries including Irish Cement.
- An objective of the proposed works is to deliver a shared cycle and pedestrian path and associated traffic calming measures from Boland's Cross to Mungret Cross. This will ensure that there will be no operational impacts on air quality and climate.
- Indeed, the proposals will provide an alternative and sustainable mode of transport for cyclists and pedestrians and as such will make a positive contribution to air quality and also to the climate as it will help to reduce car borne trips.
- For the construction phase, this stage of the project 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.
- It is assumed that a Site Waste Management Plan will be developed and there will be contractual requirements for the principal contractor to demonstrate best practice principles and procedures to minimise the consumption of resources such as fuels and raw materials.
- There is potential for dust from site construction works such as excavations, earthworks and the movement of site traffic. Dust can be spread by vehicles entering and exiting the site. It is anticipated that the appointed contractor will be required to implement dust measures to reduce/avoid any potential dust impacts.
- Noting the above and the nature, size and location of the development, significant adverse effects on the environment are considered to be unlikely with respect to climate change, GHG emissions and air quality.

Water

- The proposed scheme is located within the Shannon Estuary South Catchment, within the

Types and Characteristics of Potential Impacts

Ballynaclogh_SC_010 Subcatchment. The proposed works are located within 2 no. river subbasins, namely Barnakyle_020 subbasin and Ballynaclogh_010 subbasin. The Barnakyle River is located approximately 1.5km south/southwest of the site and the River Shannon is located approximately 1.7km north of the site with the Irish Cement Works and Quarry lying between the site and the Shannon.

- The proposed scheme does not cross any designated watercourses. The GSI has classified the groundwater vulnerability along the route as High and classifies the underlying aquifer and Locally Important. The soils are classed as being of moderate permeability overlain by well drained soils. Lands east of Mungret Cross along the N69 at the easternmost end of the proposed scheme are classed as having 'extreme vulnerability' indicating depth to bedrock of between 0 to 3m. The site is not classified by the GSI as being within a drinking water protection area. The OS 6" historical mapping indicates no rises or drainage ditches/minor streams within the site.
- Current Pollution Prevention Guidelines (PPGs) shall be adhered to as standard practice for all work around watercourses to prevent pollution (including muddy runoff) for both construction of the and future maintenance work.
- Existing drainage along the N69 for most of the route is 'over the edge'. It is proposed to retain this where possible but the installation of kerbs to provide separation between the road and pedestrian/cycle areas will require that additional runoff be discharged to soakaways. The design and location of soakways and any necessary pre-treatment will be considered at detailed design stage following completion of a risk assessment by competent hydrogeologists.
- Boreholes indicate bedrock between 3m and 5m below ground level. Soakaway tests will be undertaken to determine appropriate soakaway design and location to cater for any surface water runoff requiring management.
- Noting the scale, nature and characteristics of the proposed works, there will be no requirement for significant site works or excavation. In light of this, it is not anticipated there will be any significant adverse environmental impacts on the existing groundwater or surface water conditions.

Cultural Heritage.

- The proposed development is located in close proximity to four recorded archaeological sites, three protected structures and three further sites of potential cultural heritage significance.
- The Zone of Notification for one of the archaeological sites, the enclosure at Rathmale (LI013-002), is located

Types and Characteristics of Potential Impacts	
	<p>directly to the south of the current alignment of the N69. However, the monument itself is separated from the N69 by two 20th century houses with associated gardens, making it unlikely that the proposed development will have a direct impact on the site or associated features. The Zones of Notification for the castle to the east of the village and the site of the standing stone are at a distance of 200m and 140m respectively from the proposed development. Based on the available information, it is anticipated that the proposed scheme will have no direct impacts on the castle, the site of the standing stone and the moated site.</p> <ul style="list-style-type: none"> • Architectural heritage sites identified within the study area are all structures currently located along existing roads. Boundary walls, entrance gates and other features associated with the protected structures of Shanahan's Pub, the village pump and the church need to be taken into consideration during the design phase of the proposed scheme and direct impact with such features should be avoided where possible. • Other sites of cultural heritage significance, such as the mid-20th century Marian Shrine, the stone walls along the northern side of the R859 and buildings associated with the 19th century streetscape of Mungret village, such as Westward Ho Public House, form an integral part of the local heritage. Where possible direct impact with additional features of potential cultural heritage significance identified in the report should also be avoided.
the transboundary nature of the impact,	Not applicable
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	<p>There is limited planned development within the development area. There are currently no known existing or permitted projects (including under other legislation that is subject to EIA) that could give rise to significant adverse cumulative effects.</p> <p>Standard traffic management procedures will effectively reduce any such impacts arising from works on the local population/human health who utilise the N69 and the affected roads. There will be habitat loss within the footprint of the works which is unable to be reduced as earthworks will be required for the shared use path. Dust and noise suppression and management via CEMP during the construction phase will effectively reduce any such impacts on the local population/human health. Overall, the proposed development will have a positive impact on the population in the area by increasing safety for vehicular and pedestrian users/cyclists.</p> <p>Adverse cumulative effects are anticipated in relation to nuisance and disturbance impacts. Implementation of CEMP, Traffic Management Plans and mitigation measures will minimise the risk of adverse cumulative impacts.</p>



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APPENDIX B - N69 MUNGRET & BOLAND'S CROSS RSIS: EIA SCREENING – CULTURAL HERITAGE



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INTRODUCTION

An assessment of cultural heritage and archaeology was carried out as part of the Preliminary Design Report for the N69 Mungret & Boland’s Cross Road Safety Improvement Scheme, outside Mungret village, which lies just southwest of Limerick city. The proposed project involves the realignment and construction of new pedestrian and cycling facilities from the T junction between the L1403 and the N69 (Boland’s Cross) along the N69 National Road to the crossroads at Westward Ho and Eddie Shanahan’s Pubs in Mungret village, located at a distance of 500m from the L1403 junction. An options assessment for an additional 400m extension of pedestrian/ cycleway facilities along the N69 to Castlemungret Soccer Pitch is also included in the scope of the scheme. The surrounding landscape is a mixture of agricultural land and residential housing.

THE RECEIVING ENVIRONMENT

Mungret village lies approximately 5km to the Southwest of Limerick city centre, 3km west of Limerick University Hospital at Dooradoyle and 2 km south of the River Shannon. The study area comprises the townlands of Castlemungret, Moneteen, Rathmale, Conigar and Loughanlea. An extensive Irish Cement plant and quarry now occupies the area to the North of the N69 and the village.

A number of ringforts and enclosures in the wider study area indicate that farming communities had settled in this fertile stretch of land to the south of the Shannon by the Iron Age.

In the Early Medieval Period, the original nucleus of Mungret village was established approximately 1.3km to the East, in the townlands of Dromdarrig and Baunacloka. The 1st edition 6” Ordnance Survey Map (surveyed 1839) shows a small cluster of houses at ‘Mungret Cross Roads’, while Mungret village is centre on the site of an Early Medieval monastic settlement and Mungret Abbey. The monastic settlement was founded by Neasán of Mungret. A pre-Norman church (LI013-009001) associated with the monastic site is a National Monument in State Ownership. A further church and graveyard (LI003-009002/03) are located slightly to the west, beside the remains of Mungret Abbey (LI003-009005). A Holy Well (LI013-009006) is located on the northern side of the R859, in the townland of Skehacreggaun, where a pilgrim path ran between Mungret Abbey and Templemungret

Figure 5: Mungret Crossroads and Mungret Monastic Site on 1st Edition 6” OS Background (1839)



A later medieval castle, which is depicted on the 1st ed 6” OS (1839) and the 1899 25” OS maps as an L-shaped structure in ruins, is located 700m northeast of Mungret crossroads, just south of the current N69 (LI013-006). This was the administrative centre of the medieval episcopal manor. Only

the lower walls of the castle structure now remain. The moated site at Monateen (LI013-003) near Mungret Cross Roads is also associated with the post-Norman settlement period. A standing stone (LI013-147) recorded in a field to the South-West of the castle can no longer be located.

In the second half of the 18th century, Tervoe House and Demesne were established to the northwest of the study area. A large country house was constructed in 1776 on the site of an earlier house. The L1403 functioned as one of access roads to the property, with a gate lodge positioned at the entrance to its grounds. The house was demolished in the 1950s. The entrance gate and gate lodge are still extant and are located 750m to the northwest of the proposed development.

The layout of Mungret Crossroads changed between 1840 and 1899, during which time a new road to Limerick was established, now the N69. This led to the construction of further buildings in the area, including Shanahan's Pub. Some of the village houses along the northern side of the R589 (Foynes Road) were also rebuilt at this time, with an example of an earlier cottage still remaining a short distance from the church. St. Oliver Plunkett Roman Catholic Church was constructed in 1981 to cater for the expanding community in the area.

ASSESSMENT METHODOLOGY

For the Preliminary Design Report, a desktop survey of archaeological, historical and cartographic sources was carried out. Monuments and sites located within 200m of the proposed development were included in this assessment.

The following documents were examined to establish the archaeological, architectural and cultural heritage potential of the proposed scheme:

- Record of Monuments and Places for County Limerick;
- Limerick County Development Plan 2010-2016, Limerick Development Plan 2022-2028;
- Record of Protected Structure, Limerick Development Plan 2022-2028, Vol. 3a Limerick Metropolitan District
- National Inventory of Architectural Heritage
- Cartographic sources
- Aerial photography
- Excavation bulletins

ARCHAEOLOGY

Sites/National Monuments in the Ownership of the State: No National Monuments in State Ownership or Guardianship were identified within the study area.

RMP Sites: Four recorded archaeological sites were identified within the study area. An enclosure of unknown date is located directly to the south of the N69, located to the rear of two houses, while a moated site located to the South-East of Mungret Crossroads is of possible 13th or 14th century date. At the eastern end of the scheme lie the remains of Mungret Castle, with the site of a standing stone in a field to the west of Moore's Road.

Table 6: List of Recorded Archaeological Sites within the Study Area

Abbreviations: ZoN = Zone of Notification, OS = Ordnance Survey, RMP = Record of Monuments and Places.

List of Recorded Archaeological Sites within the Study Area				
RMP No.	Townland	Monument Description	Location	Distance
LI013-002-	Rathmale	Enclosure (on 6" OS map)	552,776/ 653,998	30m enclosure to N69, 0m ZoN
LI013-003	Monateen	Moated Site	553,207/ 653,908	200m moated site, 150m ZoN
LI013-006	Castlemungret	Castle – Unclassified	553,730 / 654,393	250m castle, 200m ZoN
LI013-147	Castlemungret	Standing Stone (Site of)	553,602 / 654,339	140m ZoN

Figure 6: Location of recorded archaeological sites in proximity to the study area, with RMP sites in red and a site from the excavation database in light blue (no archaeological significance). Sites in the Record of Protected Structures are identified as yellow squares. The castle site (LI013-006) in top right hand corner.



Excavations Database (excavations.ie): No sites of archaeological significance have been identified from the examination of the excavations database. An archaeological investigation carried out under excavation licence 12E0038 at Monateen was of no archaeological significance.

ARCHITECTURAL HERITAGE

Three Protected Structures were identified within 200 m of the proposed development. These are included in the Limerick Development Plan 2022-2028, Volume 3a Proposed Record of Protected

Structure - Metropolitan District of Limerick. Under the Planning and Development Act, 2000, it is an offence to damage or demolish any site or structure included in the Record of Protected Structures (“RPS”). Unusually, the sites were not assessed by the National Inventory of Architectural Heritage (NIAH), established in 1990 to fulfil Ireland's obligations under the Granada Convention to document and evaluate the architectural heritage of Ireland. See the table below for details:

Table 7: List of Architectural Heritage Sites within the Study Area

List of Architectural Heritage Sites within the Study Area						
RPS No.	Townland	Description	Rating	Date	Location	Distance
RPS 1664	Rathmale	Eddie Shanahan's Pub	N/A	2 nd half 19 th c	553,025/ 654,085	10m
RPS 1665	Rathmale	Village pump	N/A	2 nd half 19 th c	553,039/ 654,054	20m
RPS 1667	Moneteen	St. Oliver Plunkett's Church	N/A	1981	553,097/ 654,014	50m to boundary



Figure 7: RPS1664 Shanahan's Pub



Figure 8: RPS1665 Village Pump

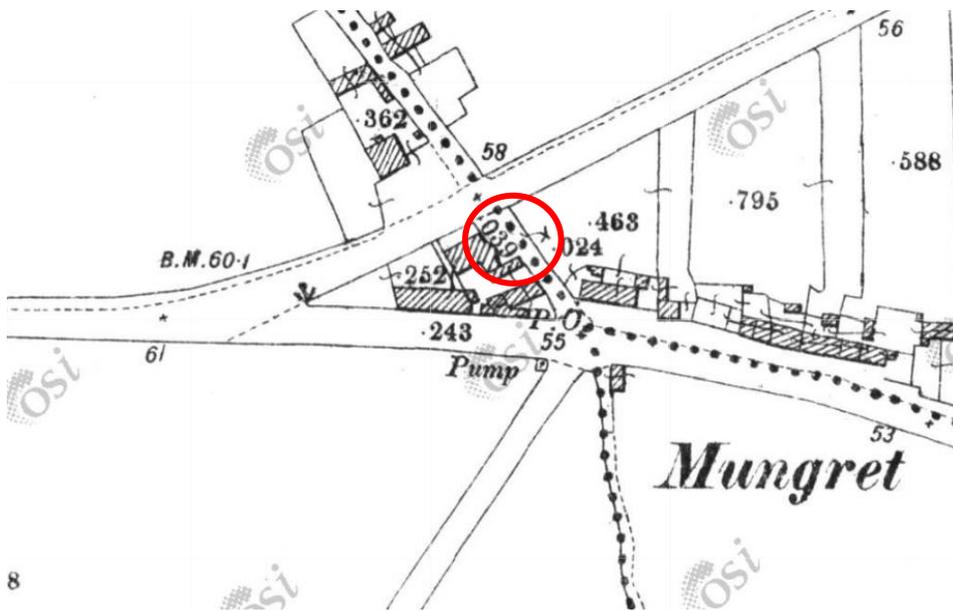


Figure 9: Rear of RPS1664 Shanahan's Pub and village pump RPS1665. In the background, to the left of Shanahan's Pub, a separate storage building and stone wall along the R859 can be seen.

Figure 7 shows the location of Shanahan's Pub in close proximity to the current alignment of the N69, with only a narrow hard shoulder separating the boundary wall from the carriageway. Figure 9

also shows the stone wall at the rear of the building, with the village pump located to the left of the small roundabout. Figure 10 below shows the layout of Mungret crossroads in 1899, following the construction of the new road to Limerick in the time period between 1840 and 1899. The location of Eddie Shanahan's Pub is circled in red. The structures to the rear of the pub have now been removed, with only the boundary wall remaining. The structure to the left was originally located on a separate plot and is now a stable building seemingly associated with the pub. Stone walls also surround the triangular plot closer to Mungret crossroads. The village pump is depicted to the South of Shanahan's Pub.

Figure 10: Mungret Crossroads on 25" OS map, 1899



OTHER SITES OF POTENTIAL CULTURAL HERITAGE SIGNIFICANCE

Three other structures of potential cultural heritage significance were also identified from cartographic sources and aerial photography. The Marian Shrine is located directly at the junction between the N69 and R859.

Table 8: Additional Sites of Potential Cultural Heritage Potential

Additional Sites of Potential Cultural Heritage Potential					
Townland	Description	Comment	Date	Location	Distance
Rathmale	Marian Roadside Shrine	Date on stone at foot of statue	1954	552,993/ 654,075	0m
Rathmale	Westward Ho Public House	Incorporating building depicted on 25" OS map	late 19 th c	552,994/ 654,109	0m car park, 10m structure
Rathmale	Stone wall along northern side of R859	Associated with structures / outbuildings depicted on 25"	19 th century	553,026/ 654,070	0m

Figure 10, detail from the 25" Ordnance Survey map, shows that the two-storey element of the Westward Ho Public House had been constructed by 1899. The two-storey house to the East of Shanahan's Pub (see Fig. 12 and 13) was probably constructed shortly after 1900, as it is not shown on the 1899 map. The building shown to the east of Shanahan's Pub, northeast of the pump, appears to have been rebuilt in recent years and is now two semi-detached cottages, while some of buildings further east along the R859 (Foynes Road) retain their 19th century character.

Figure 11: Mungret Crossroads looking northeast, with Marian Shrine and Westward Ho Public House and Eddie Shanahan's Pub in the background.



Figure 12: Crossroads in Mungret village looking west; Shanahan's Pub and Westward Ho Public House in the background.



Figure 13: N69 crossroads at Shanahan's Pub, looking southeast towards St. Oliver Plunkett's Church, showing the close proximity of the road to the boundary wall of Shanahan's Pub.



CONCLUSION

The proposed development is located in close proximity to four recorded archaeological sites, three protected structures and three further sites of potential cultural heritage significance.

The Zone of Notification for one of the archaeological sites, the enclosure at Rathmale (LI013-002), is located directly to the south of the current alignment of the N69. However, the monument itself is separated from the N69 by two 20th century houses with associated gardens, making it unlikely that the proposed development will have a direct impact on the site or associated features. The Zones of Notification for the castle to the east of the village and the site of the standing stone are at a distance of 200m and 140m respectively from the proposed development. Based on the available information, it is anticipated that the proposed scheme will have no direct impacts on the castle, the site of the standing stone and the moated site.

Architectural heritage sites identified within the study area are all structures currently located along existing roads. Boundary walls, entrance gates and other features associated with the protected structures of Shanahan's Pub, the village pump and the church need to be taken into consideration during the design phase of the proposed scheme and direct impact with such features should be avoided where possible. Other sites of cultural heritage significance, such as the mid-20th century Marian Shrine, the stone walls along the northern side of the R859 and buildings associated with the 19th century streetscape of Mungret village, such as Westward Ho Public House, form an integral part of the local heritage. Where possible direct impact with additional features of potential cultural heritage significance identified in the report should also be avoided.