Golf Links Road Upgrade

Castletroy, Co. Limerick

Screening for Environmental Impact Assessment

Doherty Environmental Consultants Ltd.

December 2019

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Document Stage	Document Version	Prepared by
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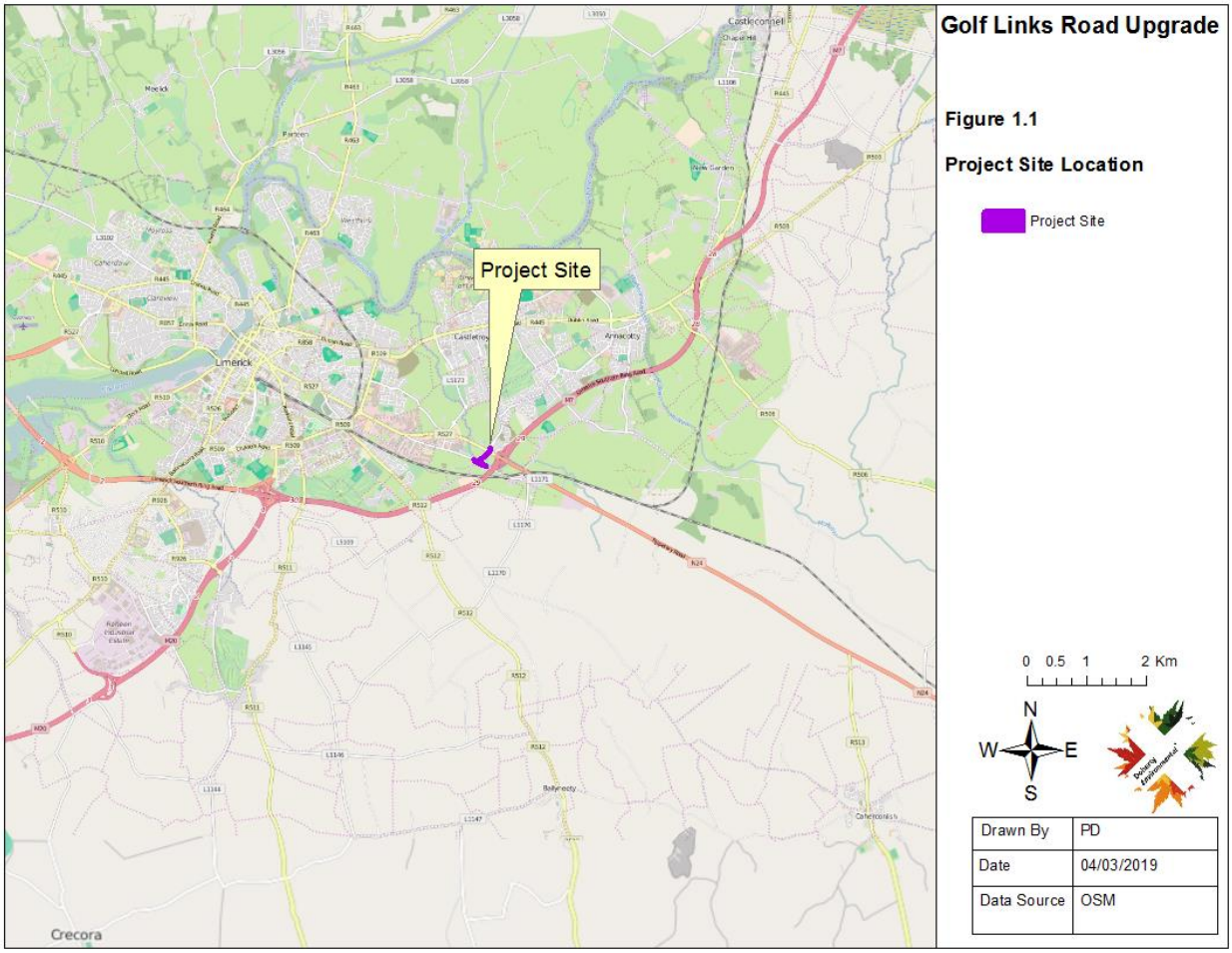
1.0 INTRODUCTION

Doherty Environmental Consultants (DEC) Ltd. have been commissioned by Limerick City and County Council to undertake an Environmental Impact Assessment Screening Report for proposed upgrade works to the Golf Links Road, Limerick (see Figure 1.1 for project location). The findings of the EIA Screening assessment for the proposed upgrade works (i.e. the project) are presented in this report.



1.1 PURPOSE OF THIS REPORT

This EIA screening report contains necessary information to enable the competent authority, in this case Limerick City & County Council, to undertake an EIA screening determination as to whether an EIA is required for the proposed upgrade works. The findings of the EIA screening assessment are presented in this report and will inform the determination by Limerick City &

County Council for the proposed works for the upgrade of the Golf Links Road at Castletroy, (to be referred to throughout this report as "the project").

The purpose of this Report is to provide information to the competent authority to assist them in their determination as to whether or not the project is likely to have significant effects on the environment and, as such, requires an EIA to be carried out and an EIAR to be prepared. This Report provides an overview of the project (section 3), the existing baseline environment (section 4) and then examines the potential environmental impacts (Section 5) posed by the proposed project.

2.0 LEGISLATIVE CONTEXT

Directive 2011/92/EU as amended by Directive 2014/52/EU (the EIA Directive) sets out the requirements for environmental impact assessment ("**EIA**"), including screening for EIA. Projects listed in Annex I of the EIA Directive require a mandatory EIA while projects listed in Annex II require screening to determine whether an EIA is required. The proposed development does not require a mandatory EIA under the provisions of the EIA Directive as it is not a project listed in Annex I.

The prescribed classes of development and thresholds or criteria that trigger the need for an EIA are set out in Schedule 5 of the Planning and Development Regulations, 2001, as amended. A review of the classes of development was carried out to determine whether the proposed development falls into any of the development classes which require an EIA. The proposed development does not fall into any of the classes described in Schedule 5 of the Planning and Development Regulations, 2001. The need for an EIA has therefore not been triggered under the requirements of the Planning and Development Regulations, 2001, as amended.

The proposed development also falls under the EIA requirements of the Roads Act 1993 as amended by the Planning and Development Acts (2000-2011) and the Roads Act (2007) as well as regulations made under the Roads Acts, the European Communities (Environmental Impact Assessment) (Amendment) Regulations 1989-2001, and EC Directives 85/337/EC and 97/11/EC referenced above. A road within the 1993 act is defined to include:

(a) any street, lane, footpath, square, court, alley or passage,

(b) any bridge, viaduct, underpass, subway, tunnel, overpass, overbridge flyover, carriageway whether single or multiple, pavement or footway,

(c) any weighbridge or other facility for the weighting or inspection of vehicles, toll plaza or other facility for the collection of tolls, services area, emergency, telephone, first aid post, culvert, arch, gulley, railing, fence, wall, barrier, guardrail, margin, kerb, lay-by, hard shoulder, island, pedestrian refuge, median, central reserve.

Section 50 of the Roads Act 1993 (as amended) outlines the requirements for EIA for "proposed road developments". An overview of the legislative requirements of section 50 of the Roads Act

1993 (as amended), and its applicability to the proposed upgrade works are outlined in Table 2.1 below.

Table 2.1: Screening for Mandatory EIA

Screening Question	Regulatory Reference	Response
Does the project comprise the construction of a motorway, busway or service area?	S.50(1)(a) of the Roads Act, 1993, as amended.	The project is not a motorway, busway or service area. This requirement for mandatory EIA is not triggered.
Is the project representative of a prescribed type of proposed road development consisting of the construction of a proposed public road or the improvement of an existing public road, where the prescribed types of road development comprise: • 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	Article 8 of the Roads Regulations, 1994 (Road development prescribed for the purposes of S. 50(1)(a) of the Roads Act, 1993	The project does not involve the provision of a road of four or more lanes for a distance of 8km or more in a rural area or 500m or more in an urban area. The project does not involve the construction of a bridge or tunnel measuring more than 100m in length. These requirements for mandatory EIA are not triggered.

more in length.		
Has a direction been issued by An Bord Pleanála (ABP) to the Road Authority to prepare an Environmental Impact Assessment Report (EIAR)?	S.50(1)(b) of the Roads Act, 1993	ABP has not directed the Road Authority (Limerick City & County Council) to prepare an EIAR for the proposed upgrade works.
Where the road authority consider that the proposed road development would be likely to have significant effects on the environment it shall inform ABP in writing and where ABP concurs, it shall direct the road authority to prepare an EIAR?	S.50(1)(c) of the Roads Act, 1993	Where Limerick City & County Council considers the proposed upgrade works would be likely to have significant effects on the environment, Limerick City & County council is to inform ABP in writing of this and await direction from the Board.
Is the proposed road development located on 'certain environmental sites' and has the road authority determined whether any significant effects are likely on the environment as a result?	S. 50(1)(d) of the Roads Act, 1993, as amended by reg. 56(7) of the European Communities (Birds and Natural Habitats) Regulations 2011)	No. An Appropriate Assessment Screening Report has been undertaken for the project and this Report concluded that the proposed upgrade works will not have any likely significant effects, whether on its own or in combination with other plans or projects, on any European sites based on the best scientific evidence and taking into account the conservation objectives of the European sites. The project will not have the potential to interact with or negatively affect the

		conservation status of any Natural Heritage Areas in the wider area surrounding the project site. No geological heritage sites are located in close proximity to the project site.

Pursuant to section 50(1)(c) of the Roads Act 1993 (as amended), Limerick City & County Council are required to turn their attention to whether the proposed upgrade works are likely to have significant effects on the environment, such that an EIAR is required.

Section 50(1)(e) of the Roads Act, 1993 (as amended) states "Where a decision is being made pursuant to this subsection on whether a proposed road development would or would not be likely to have significant effects on the environment, An Bord Pleanála or the road authority concerned (as the case may be) shall have regard to the criteria specified for the purposes of article 27 of the European Communities (Environmental Impact Assessment) Regulations, 1989."

The purpose of this EIA Screening Report is to assist Limerick City & County Council in determining whether the proposed Golf Links Road upgrade works are likely to have significant effects on the environment.

According to European Commission Guidance (2017[1])

"Screening has to implement the Directive's overall aim, i.e. to determine if a Project listed in Annex II is likely to have significant effects on the environment and, therefore, be made subject to a requirement for Development Consent and an assessment, with regards to its effects on the

[1] Environmental Impact Assessment of Projects Guidance on Screening (Directive 2011/92/EU as amended by 2014/52/EU). European Commission 2017. Page 23.

environment. At the same time, Screening should ensure that an EIA is carried out only for those Projects for which it is thought that a significant impact on the environment is possible, thereby ensuring a more efficient use of both public and private resources. Hence, Screening has to strike the right balance between the above two objectives."

Recent guidelines from the Department of Housing, Planning and Local Government (2018) [2] in relation to screening state:

"3.1. Screening is the initial stage in the EIA process and determines whether or not specified public or private developments are likely to have significant effects on the environment and, as such, require EIA to be carried out prior to a decision on a development consent application being made. A 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.

3.2. Screening must consider the whole development. This includes likely significant effects arising from any demolition works, which must be carried out in order to facilitate the proposed development. In the case of transboundary developments, screening must consider the likely significant effects arising from the whole project both sides of the boundary. A screening determination that EIA is not required must not undermine the objective of the Directive that no project likely to have significant effects on the environment, within the meaning of the Directive, should be exempt from assessment."

Annex III of the EIA Directive (as amended)/Schedule 7 to the Planning and Development Regulations 2001, as amended, lists the criteria for determining whether a project should be subject to EIA.

Annex IIA of the EIA Directive (as amended)/Schedule 7A to the Planning and Development Regulations, 2001, as amended, set out the information to be provided for the purposes of EIA Screening. The information set out in Schedule 7A is grouped together under 3 main headings:

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[2] Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment

Annex IIA requirements	Relevant section of this screening report
A description of the proposed development, including in particular – a description of the physical characteristics of the whole proposed development and, where relevant, of demolition works, and a description of the location of the proposed development, with particular regard to the environmental sensitivity of geographical areas likely to be affected	Section 3 of this Report describes the characteristics of the project and provides an assessment against the criteria contained in Schedule 7A under this category heading
A description of the aspects of the environment likely to be significantly affected by the proposed development	Section 4 of this Report describes the aspects of the environment that may be affected by the proposed development
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	Section 5 of this Report describes the characteristics of the project and provides an assessment against the criteria contained in Schedule 7A under this category heading.

During the assessment of the aspects of the environment likely to be significantly affected by the project and the description of any likely significant effects on the environment current Transport Infrastructure Ireland (TII) assessment guidelines have been relied upon to inform these assessments. While it is acknowledged that the project does not represent a national road scheme the various environmental assessment guidelines published by TII represent best practice guidance for the assessment of road schemes in Ireland. As such these guidelines have been relied upon during the preparation of this Screening Report.

3.0 CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

3.1 PROJECT AIMS

The Golf Links Road (L1116) is a local county primary road within the Limerick City urban boundary in the south eastern city suburbs of Ballysimon & Castletroy. It is an arterial urban distributor road that links the R445 Dublin Road from the Milford Road traffic signals in Castletroy, running south and then west towards Ballysimon, where it passes under the R527 Ballysimon Road, near the M7/N24 Ballysimon Interchange, and forms a cross roads with the L1171 Old Ballysimon Road at O'Shea's Pub, overall a distance of 2.3km. The northern section of Golf Links Road from the Dublin Road to the Evanwood area is fit for purpose as an urban distributor road, but the southern section from Evanwood to O'Shea's junction is substandard with pinch points at Ballysimon Bridge and at the Mill Race where only one car can pass between the bridge parapet walls, with road widths of only 3.3m and 3.7m respectively.

The aim of this project is to upgrade the section of L1116 between O'Shea's Junction, including the junction and the L1171 south eastern approach, to the Cairnsfort housing estate, north of the R527/N24 underpass. The L1116 is an important link between the residential areas of Castletroy/Monaleen/Newtown/Annacotty and the employment/retail hub of Ballysimon. The purpose of these upgrades is to provide a suitable road arrangement to accommodate existing and future pedestrian, cycle and vehicular traffic accessing the Golf Links Road from the Ballysimon and Castletroy areas. This will be achieved through road widening, road realignment, bridge replacement, junction upgrade to traffic signal control, upgrade of existing footways and creation of new pedestrian and cycle links and where necessary through land acquisition. This project, while including junction and road upgrades, will have a significant focus on active travel modes, namely the provision of safe walking and cycling facilities.

The area is also subject to river flooding in the vicinity of the Ballysimon Bridge of the Groody River and it is the intention that the existing bridge would be replaced by a new structure that can cope with a 100 year design flood return period.

3.2 PROJECT OVERVIEW

The work extents are from the Golf Links Road (L1116) junction with the Old Ballysimon Road (L1171) to the entrance to Cairnsfort housing estate – approximately 350m north along the L1116 and also extending 300m from the L1171/L1116 Junction south-eastwards along the L1171 Old Ballysimon Road. It is proposed to signalise the Golf Links Road/Old Ballysimon Road junction and to create a new gateway and transition zone from the rural to the urban environment on the L1171 approach to the cross roads.

The road works scheme is to consist of the widening of the Golf Links Road into the adjoining private lands to the west of the existing road, providing a safer public road environment for all road users. The Old Ballysimon Road will be widened into lands to the south of the L1171 on the eastern approach to the Golf Links Road junction to create the new transition zone. The works will require the realignment and widening of the existing roads, the replacement of the existing bridge over the River Groody and the old millrace culvert on Golf Links Road, some Groody river flood prevention works, installation of traffic signals at the realigned junction, installation of new street lighting, the diversion of services, installation of new services and drainage works, road and footpath construction works, road resurfacing, new road markings and traffic signage as well as accommodation works to private properties with new boundary treatments.

3.3 DESCRIPTION OF WORKS

The works will include road realignment, road widening, bridge replacement, mill race culvert replacement, signalisation of the L1171/L1116 junction at O'Shea's, road embankment earthworks construction, road reconstruction and resurfacing, new footpath construction, new cycle facility construction, services diversions and new ducting for gas, power supply, telecommunications, watermain replacement, new surface water drainage system, new road lighting scheme, new boundary treatments, retaining walls, embankments, flood prevention walls and bunds, accommodation works driveways, walls, gates and fences, new landscaping, traffic calming measures including new "gateway" entry to city, roadside buildouts and road centre traffic islands, designated roadside car parking, new road markings, upgraded road signage and street furniture and all ancillary works necessary for completion of the scheme. Figure 3.1 provides an aerial view of the project site boundary. Detailed drawings for the proposed upgrade works are provided in the Part VIII Planning Drawing Pack.

The new bridge culvert that will replace the existing bridge has been designed to cater for a storm event with a 100-year Return Period flow. The dimensions of the new bridge aperture to accommodate these flows will be twin pre-cast concrete (PCC) box culverts 3m width x 2.4m in height **(**including associated freeboards and river bed material) laid side by side in the main river channel and an additional set of twin PCC box culverts 2.1m width x 2.4m in height **(**including associated freeboards and river bed material) in the flood channel to the south of the main river channel. The overall length of the culverted river will be 22m.

A concrete apron forms the river bed upstream, under and downstream of the bridge. As part of the river culverting works the concrete apron will be removed and a new concrete apron will be constructed under the bridge inlet wing walls upstream and outlet wing walls downstream of the bridge. This apron will be 500mm underneath the river bed. The river bed will be restored to a natural bed over the concrete aprons and over the box culvert floors. A low level weir wall will be constructed upstream of the bridge culvert so that normal river flows are taken through the normal river channel and flood flows will spill over the weir into the flood culverts to the south of the main channel. The works have been designed to ensure adequate low flow depths within the watercourse are maintained at all times so that fish and other lotic fauna can be sustained. Minor bank reinforcing of the river banksides will also be completed downstream of the bridge so that banksides and the riparian zone are protected and also so that heterogeneity in river habitat is provided. The reinforced sections of bankside will slope gently from the river bed at an angle of less than 45°. Natural stone will be used for re-profiling and such re-profiling sections will alternate between both banksides within 45m downstream of the bridge. Planting of the bankside with shrubs will also be undertaken. The removal of the concrete apron and the reinstatement of a natural river bed are in keeping with the aims of the Water Frameworks Directive which seeks to maintain natural morphological conditions within and along watercourses.

An untreated point source discharge is located immediately adjacent to the upstream elevation of the bridge and as part of the works it is proposed to eliminate this discharge and instead connect it to the existing public foul sewer.

As part of the design all storm water generated on the upgraded road surface will be collected in road side drainage gulleys and conveyed in a new surface water drainage pipe network. All road gullies will have silt traps for collection of debris. The drainage pipe network will pass through a large silt trap chamber and a hydrocarbon interceptor chamber before discharging the treated

surface water runoff to the Groody River. The provision of the new drainage system will represent a positive development for road drainage and the water quality of the River Groody and its provision is in keeping with the aim of the Water Frameworks Directive to achieve good status for surface watercourses.

3.4 APPROACH TO BRIDGE REPLACEMENT AND INSTREAM WORKS

The existing triple eye stone masonry arch bridge is to be demolished and replaced by four rectangular precast concrete culverts laid contiguously. The L1116 Golf Links Road will be closed for the bridge replacement section of the works. The Ballysimon Bridge has three separate stone masonry arches, two of which are dry and unused. The two unused arches south of the river will be demolished, excavated and replaced by twin box culverts in advance of the main river bridge replacement works. The demolition of the main, live, arch will require construction of cofferdams and dewatering of the bridge arch barrel by diversion of the river through the new twin culverts to the south so that works can be carried out in dry conditions. Once the demolition works and ground preparatory works are completed the replacement culverts will be lifted into position and placed. The backfill and surrounding fill will be completed to formation level of the road. Once the newly placed culvert joints are dried and cured, the river will be rediverted through the completed main channel twin culverts. Using this approach there will be continual flow along the Groody River at all times during the bridge replacement works. All cofferdams, or other structures installed within the channel, to allow working in dry conditions will be designed by a competent person, be constructed of appropriate materials and take account of site conditions (i.e. depth of water, available space, bed substrate, flow velocities, flow patterns, duration of works, accessibility and potential ingress of water). During any working with cofferdams the following methods will be adhered to:

- The cofferdam will be inspected daily for any movement, leakage and general deterioration; any defects found will be remedied immediately.
- De-watering of the coffer dam may be required in order to maintain dry working conditions. Any water being pumped from the coffer dam will not be discharged directly into the River Groody.
- Before removal of the cofferdam at completion of the works all materials, debris, tools, plant and equipment will be removed from the work area.

- The de-watered area will be re-watered before the cofferdam is removed to avoid the sudden ingress of water which may cause erosion of the replaced substrate.

- When re-watering is undertaken, the pump inlets will be screened appropriately to prevent the intake of fish or other aquatic animals.

The replacement of the Millrace culvert will be undertaken by temporarily diverting the mill-race water entirely into the Groody River at the upstream weir. This will be carried out during dry weather season. The existing culvert will be demolished and replaced following drying out of the millrace stream be. Once the new culvert is in place, cured and backfilled, the temporary diversion at the weir will be removed.

All bridge replacement and instream works will be carried out under the supervision of an inland Fisheries Officer.

3.5 PLANT & CONSTRUCTION MATERIALS REQUIRED

The type of plant and machinery required will be typical road construction plant for earthworks and paving, and is likely to include:

- 360 degree 20 tonne Excavators (track machines)
- Rubber tyred Excavators 6t JCB
- 3t Mini Digger
- 30t Dump Trucks
- 40 tonne Mobile Crane
- 300 tonne Heavy Crane
- 6t Dumpers
- 7.5 tonne multi-purpose truck
- 20 tonne and 30 tonne delivery trucks (importation of rock and bitumenous paving materials
- Teleporter for erection of lighting columns

- Site Vehicles
- Compactor plates
- 6t vibrating Rollers
- 10t rollers
- Paving Machine
- Bitumen Boiler/Hot Box
- Road Planing Machine
- Extruded Kerb Laying Machine
- Road Saws/Con Saws/chain saws
- Compressors,
- Jack Hammers
- Stihl Saws
- Small tools/hand tools
- Traffic Management Signs, Cones & Barriers
- Traffic Lights
- Road Sweeper &
- PPE

All machinery will be inspected and certified to be free of leaks and weeps prior to mobilisation on site.

The materials will be typical civil engineering road construction materials consisting of cement, sand, gravel of various aggregate sizes, recycled stone from demolition of masonry arch bridge and walls/ditches, imported and reused rock fill, imported and reused top soil, concrete blocks, paviors and sets, natural stone paviors and sets, precast concrete kerbs, manhole bases, covers, precast concrete culverts, pipes, precast concrete services chambers, PVC-u ducts & chambers, PVC-u drainage channels with galvanised steel covers, galvanised metal chamber covers, galvanized, powder-coated street lighting columns and traffic signal poles, galvanised steel sign

posts and metal traffic signs, bituminous road paving materials, thermoplastic road marking materials, LED lighting lanterns & electrical equipment, traffic signals & controller electronic equipment, galvanised metal field gates, driveway gates and posts.

3.6 SITE PERSONNEL

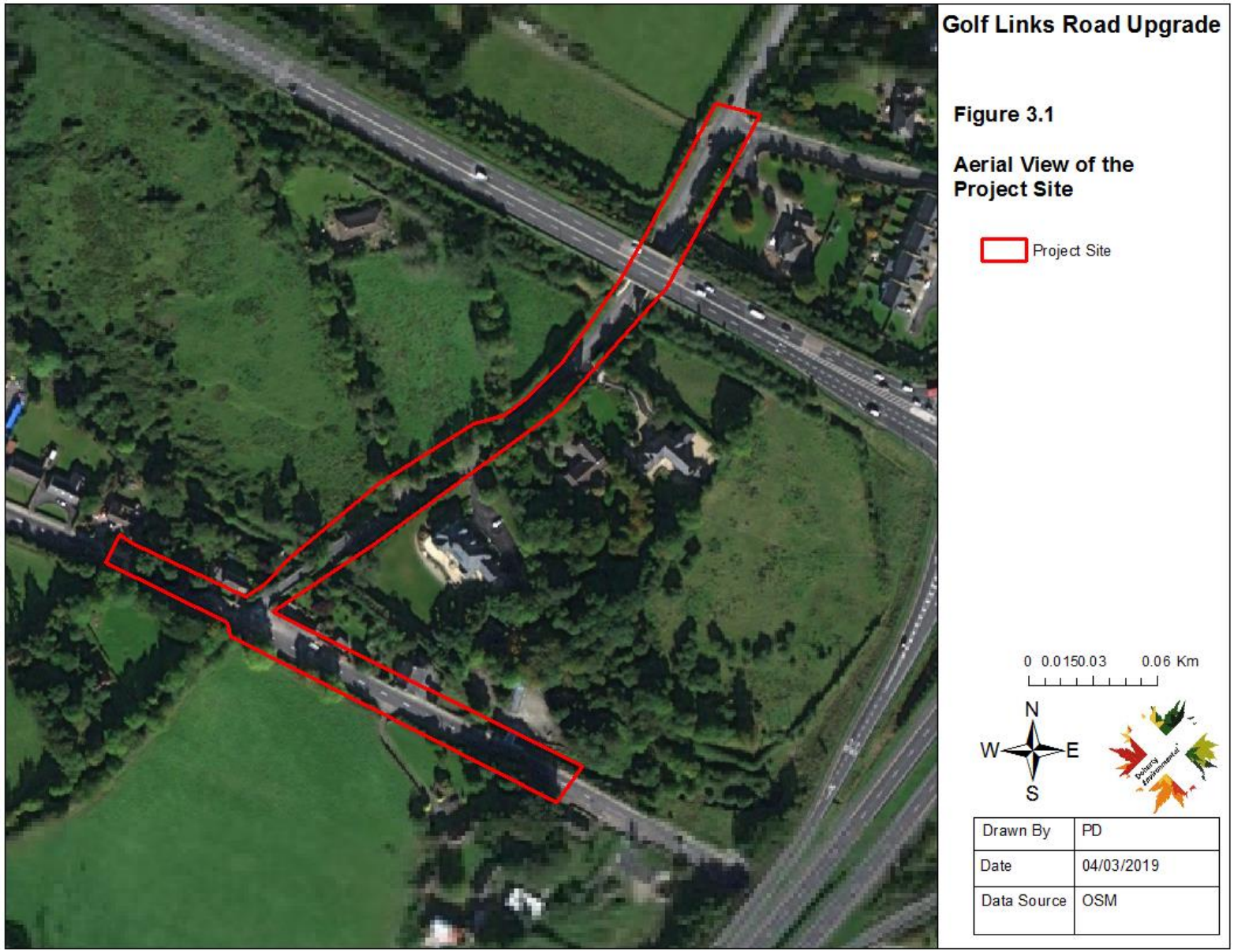
At its peak it is expected that there will be between 20 and 30 personnel on site full time with up to 40 for a limited period of weeks during particularly labour intensive operations. The personnel will consist of general operatives, skilled operatives and tradesmen, apprentice tradesmen, machine operators, truck drivers, engineers, technicians, surveyors and construction managers.

3.7 CONSTRUCTION COMPOUND

The construction compound will be restricted to the footprint of an existing brownfield yard used for the storage of construction materials. This yard is located offsite and well buffered i.e. a minimum of 100m) from the River Groody and any other watercourses.

3.8 DURATION OF CONSTRUCTION PHASE

It is estimated that the construction process will take up to 10 months.


Golf Links Road Upgrade
Figure 3.1
Aerial View of the Project Site
Project Site
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N
W
E
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Drawn By PD
Date 04/03/2019
Data Source OSM

3.9 ASSESSMENT OF THE CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

An assessment of the characteristics of the Proposed Development as described above against the criteria outlined in Schedule 7 of the Planning and Development Regulations 2001 to 2018 are outlined in Table 3.1 below and conclusion and rationale is provided to determine whether these characteristics have the potential to result in likely significant effects to the environment.

Table 3.1: Characteristics of the Proposed Development

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
(a) the size and design of the whole project	The project site is approximately 1 Ha in size. All construction works will be largely restricted to the footprint of the project site and will be completed within a 10-month period. The construction phase will be guided by a Construction and Environmental Management Plan (CEMP) that will seek to ensure the construction phase is completed in line with best practice and does not result in adverse effects to surrounding receptors. The final footprint of the development within the project site will be approximately 1 ha. A landscape design has been prepared for the project, which includes for the provision of boundary treatments and the landscaping within the project site. The scale of the proposed development is in keeping with the scale of the adjoining sections of the Golf Links Road to the north and the L1171 Old Ballysimon Road to the south. The project site is located on the urban fringe of Limerick City and will provide improved traffic, cycling and pedestrian mobility in the area to the north and south of the project site.
(b) cumulation with other existing and/or approved	A review of Limerick City & County Council's EPlan online planning viewer identified a small number of recently granted or

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
projects;	applied for (within the last five years) planning applications along the River Groody upstream and downstream of the project site. A small number of projects were identified. All of these projects are small in scale, are involve the construction of residential dwellings, the extension to the residential dwelling and the retention of structures within the curtilage of residential dwellings. None of these projects will have the potential to combine with the proposed project to result in likely significant effects to the environment.
(c) the nature of any associated demolition works	The demolition works that will be associated with the project will involve the removal of the existing Ballysimon Bridge and the replacement/extension of the Mill Race culvert. These works will be completed in line with the approach described in Section 3.4 above. The implementation of this approach, which is required for the safe and effective delivery of the project, will also ensure that the proposed demolition works do not present a risk to water quality in the River Groody or along the Mill Race and do not result in significant effects to the natural environment. An architectural conservation assessment of the Ballysimon Bridge has been completed for the project and it has determined the bridge to be of minor architectural conservation interest and that its replacement with a new functional bridge will overall represent a positive benefit for the environment and for the greater good.
(d) the use of natural resources, in particular land, soil, water and biodiversity;	Construction related activities will be largely restricted to the footprint of the project site. Soil that will be excavated within the project site will be reused for landscaping and filling. Where surplus soil material is generated it will be disposed of at an approved facility. All masonry work stone recovered from Ballysimon Bridge will be reused for decorative landscaping purposes of the proposed new bridge parapet walls and surrounding boundary masonry stone walls, as directed in the accompanying Architectural Conservation Report. Water required for the construction phase of the project will be

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
	supplied by the existing mains water supply. No significant effects to biodiversity are predicted to arise as a result of the construction or operation of the project. No protected Annex I habitats occur within or adjacent to the project footprint. The River Groody represents the habitat of highest ecological value within the project footprint and is representative of a watercourses of County value. The River Groody supports a small population of breeding Atlantic Salmon and brown trout are also supported by this watercourse. It is also known to support otters and lamprey species are also likely to occur within this watercourse. It is noted that no evidence indicating the presence of otters was identified in the vicinity of the River Groody bridge during field surveys in February and May 2019. As part of the upgrade works it is proposed to remove an existing concrete apron under, upstream and downstream of the existing River Groody bridge. The removal of this apron and the reinstatement of a natural river bed at this location will represent a positive impact for this section of the River Groody and will be in keeping with the aims of the Water Framework Directive which seeks to restore natural morphological conditions to watercourses. It addition the upgrade works will result in the re-grading of the riverbed upstream and downstream of the bridge and this in turn will restore and enhance the ecological status of the river corridor. Natural resources in the form of hydrocarbons will be required for energy and electricity during the construction phase of the project. Other building raw materials will be required during the construction phase. However the natural resources required will be typical of those required for the development and their provision will not have the potential to result in significant negative effects.
(e) the production of waste;	Solid inert waste in the form of soil and stone will be produced during construction but materials will be only ordered as required. Any wastes from the construction process will either be reused within the scheme, or recycled/disposed of at an authorised waste

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
	facility. During the construction phase the waste management hierarchy will be implemented onsite, which prioritises the prevention and minimisation of waste generation. The operation phase is not anticipated to generate large volumes of waste.
(f) pollution and nuisances;	The construction phase presents the greatest risk of pollution to water resources. Potential sources of water pollution to both surface and groundwater include fuel, lubricants, suspended solids and concrete. Silt-laden surface runoff could arise during vegetation stripping. However as the site compound will be located at a remote distance from any surface water features and as all machinery will be inspected and confirmed to be free of leaks and weeps prior to use on site the risk of hydrocarbon contamination on site will be not be likely. Furthermore, as per the description of the approach to the instream works and the bridge replacement works, all construction activities associated with these elements of the project will be completed in dry conditions. The River Groody will be diverted in advance of the commencement of these works and as such there will be no hydrological link between these elements of the construction phase and the River Groody. Given the above the potential for contamination of surface waters downstream of the project site as a result of suspended solids or chemical contamination will be eliminated. The construction phase has the potential to result in nuisance to surrounding receptors as a result of noise, vibrations and dust generated during construction activities. In order to minimise any potential for noise and vibration nuisance mitigation measures will be implemented during the construction phase. These measures will adhere to the best practice guidelines outlined in BS5228: Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 1 Noise (2009 + A1 2014). These standard guidelines offer detailed guidelines on the control of noise and vibration from construction activities. The

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
	following mitigation measures will be implemented during the construction phase of the proposed development to ensure noise and vibration limit values are complied with: • The hours during which site activities are likely to create high levels of noise will be limited to a set time period; • During the construction phase a clear line of communication will be established between the contractor/developer, Local Authority and residents; • A site representative will be appointed to take responsibility of all matters relating to noise and vibration; • Noise monitoring will be undertaken during the construction phase, particularly during critical periods and at sensitive locations; • All site access roads will be kept even to mitigate the potential for noise and vibration from lorries. • Plant with low inherent potential for generating noise and/ or vibration will be selected for construction; • Where required noise barriers will be erected around items such as generators or high duty compressors; • Noisy plant will be sited as far away from sensitive properties as permitted by site constraints. • Construction site hoarding will be erected along noise sensitive boundaries where works are taking place in proximity to existing residential properties where no substantial screening exists. • With the implementation of the measures it is predicted that

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
	the nuisance impact of noise generated during the construction phase will be of a short-term, slight, negative nature. There is the potential for dust emissions arising during construction, particularly during dry and/or windy weather conditions. Dust emissions may also be exacerbated by the presence of dry surfaces and uncovered stockpiles during the construction. The quantity of dust is likely to be relatively small and dust emissions would be temporary in nature. Dust effects are likely to create nuisance in the immediate locale rather than significant environmental effects. Best practice mitigation measures will be put in place to minimise adverse effects. The measures will include the following: A dust minimisation plan will be finalised and implemented for the construction phase of the project, as construction activities are likely to generate some dust omissions. In order to minimise dust omissions during construction the following measure will form part of that plan and will be implemented during the construction phase: • Hard surface roads will be swept to remove mud and aggregate materials from their surface while any un-surfaced roads will be restricted to essential site traffic. • Furthermore, any road that has the potential to give rise to fugitive dust must be regularly watered, as appropriate, during dry and/or windy conditions. • Bowsers or suitable watering equipment will be available during periods of dry weather throughout the construction period. • Access gates to the site shall be located at least 10m from sensitive receptors where possible • Vehicles using site roads will have their speed restricted, both on un-surfaced site roads and on hard surfaced

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
	roads, as site management dictates. • During periods of very high winds (gales), activities likely to generate significant dust emissions shall be postponed until the gale has subsided. • Material handling systems and site stockpiling of materials will be designed and laid out to minimise exposure to wind. Water misting or sprays will be used as required if particularly dusty activities such as rock blasting or demolition are necessary during dry or windy periods. • Before entrance onto public roads, trucks will be adequately inspected to ensure no potential for dust emissions and cleaned as necessary. • The Principal Contractor or equivalent will be obliged to monitor the contractors' performance to ensure that the proposed mitigation measures are implemented and that dust impacts and nuisance are minimised; • During working hours, dust control methods will be monitored as appropriate, depending on the prevailing meteorological conditions; • The name and contact details of a person to contact regarding air quality and dust issues shall be displayed on the site boundary, this notice board should also include head/regional office contact details; • Community engagement will be undertaken before works commence on site explaining the nature and duration of the works to local residents and businesses; • A complaints register will be kept on site detailing all telephone calls and letters of complaint received in

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
	connection with dust nuisance or air quality concerns, together with details of any remedial actions carried out; • It is the responsibility of the contractor at all times to demonstrate full compliance with the dust control conditions herein; • At all times, the procedures put in place will be strictly monitored and assessed. At all times these procedures will be strictly monitored and assessed. In the event of dust nuisance occurring outside the site boundary, movements of materials likely to raise dust will be curtailed and satisfactory procedures, such as the covering of all dust-emanating materials, will be implemented to rectify the problem before the resumption of construction operations. With the implementation of these dust minimisation measures in addition to a construction management plan including dust mitigation fugitive emissions of dust from the site will be insignificant and will not pose a nuisance at nearby sensitive receptors.
(g) the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge;	Provided that all measures to be outlined in the CEMP, which will be based on best practice mitigation measures, for the project are implemented and that all associated building and environmental regulations are adhered to it is predicted that the project will not have the potential to result in a major accident or disaster.
(h) the risks to human health (for example due to water contamination or air	Section 3.4 above details the approach to the bridge replacement works and instream works and it is considered that the implementation of this approach will ensure that the project does not result in pollution to surface waters. Item No. F of this Table details

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
pollution).	the measures to be implemented to ensure the project does not result in pollution to air or generate significant nuisance as a result of noise, dust or vibration emissions. All best practice mitigation measures outlined in this screening report will represent a minimum requirement to be implemented as part of the CEMP for the construction phase of the project. With the implementation of these measures the construction phase will not represent a significant risk to human health. As part of the design all storm water generated on the upgraded road surface will be collected in road side drainage gulleys and conveyed in a new surface water drainage pipe network. All road gullies will have silt traps for collection of debris. The drainage pipe network will pass through a large silt trap chamber and a hydrocarbon interceptor chamber before discharging the treated surface water runoff to the Groody River.

Conclusion: No significant effects likely to arise associated with the characteristics of the proposed development.

Rationale: The scale and extent of the works proposed are representative of a small to medium scale project and are proposed on habitats of low to county level ecological value. The proposed approach to the construction phase and the designs measures that form part of the upgrade works will also eliminate the potential for significant effects to the environment as a result of the proposed road upgrade works. These design measures include the implementation of SUDs and the landscaping of the project site boundary with the planting of grass verges and hedging. The implementation of targeted mitigation measures to minimise noise levels at sensitive receptors will also ensure that the project does not result in nuisance to the receiving population.

4.0 LOCATION OF THE PROPOSED DEVELOPMENT

4.1 OVERVIEW OF SITE LOCATION

The project site is located within Ballysimon,Castletroy in Limerick City. Figure 3.1 provides an aerial view of the project site.

4.1.1 Natural Heritage

The following habitats, as categorised in Fossit (2000) occur at and adjacent to the project site:

Building and Artificial Surfaces (BL3): this habitat dominates the land cover within the project site boundary. It is comprised of the existing Golf Links Road, The Old Ballysimon Road, residential driveways, housing, commercial buildings and laybys.

Freshwater Depositing River (FW2): the Groody River flowing under the Golf Links Road is an example of a lowland, depositing watercourse. The River Groody and the associated old mill race represent the principal semi-natural habitat within and adjacent to the project site. Further baseline information for the river is provided in Section 3.9.3 below.

Eroding Watercourse (FW1): The old mill race flowing under the Golf Links Road is an example of an eroding watercourse.

Improved agricultural grassland (GA1): this habitat occurs to the south of the Old Ballysimon Road and to the west of the Golf Links Road and is comprised of species-poor and intensively managed grassland. Grazing by horses and cattle is undertaken in the fields to the west of the project site.

Scrub (WS2): this habitat occurs along the riparian corridor of the River Groody upstream and downstream of the Golf Links Road. It is comprised of Prunus spinosa. Crataegus monogyna and Ulex europaeus.

Hedgerows and Treelines (WL1 & WL2): Hedgerows in the form of amenity landscape planting in residential gardens and along the boundary of agricultural fields occur along

sections of the Golf Links Road. These are interspersed with some mature trees that are generally dominated by Fraxinus excelsior. A treeline dominates the southern boundary of the Old Ballysimon Road. This treeline is dominated by mature Fraxinus excelsior trees.

4.1.2 Fauna

A search for the presence of otters along the River Groody and the old mill race was completed during a field visit to the site in late February and May 2019. The section of the river upstream and downstream of the Golf Links Road was inspected for field signs, such as holts, couches, spraints, footprints etc. indicating the presence of otters. No such field signs were encountered during the survey.

A mink was observed during the survey on the right-hand bankside of the River Groody immediately downstream of the bridge.

No evidence of other protected ground dwelling mammals such as badger was observed during the field surveys.

The bridge was searched for the crevices with potential to support roosting bats. The bridge has been subject to previous maintenance works with repointing noted throughout the arch barrel. Crevices within the arch barrel are limited and these also have limited potential to support roosting bats. No bats were identified as roosting within the bridge during inspection surveys in May 2019.

Commonly occurring passerine and corvid bird species were observed during the field visit. Species observed include robin, wren, bluetit, chaffinch, pigeon, hooded crow and rook. Grey wagtail was also noted foraging along the river.

4.1.3 River Groody

The River Groody is a direct tributary of the River Shannon and the confluence of these rivers is located approximately 3.4km downstream of the project site. Environmental Protection Agency (EPA) monitoring of the River Groody upstream of the project site has classified this watercourses at Moderate status. Previous monitoring completed along the river as part of the Water Frameworks Directive Mulkear Water Management Unit Action Plan report the River

Groody to be in an unsatisfactory ecological condition when surveyed in 2008. Dominance of pollution tolerant macroinvertebrate fauna was recorded at Killonan Bridge (Monitoring Station ID No. 0150) and indicated moderate pollution, other indicators included luxuriant macrophyte growth and excessive siltation. Further downstream at Ballysimon (0200) the lack of sensitive macroinvertebrate taxa, excessive siltation and enhanced macrophyte and algal growth indicated no improvement in ecological quality.

A recent report published by the EPA (EPA, 2018) has identified diffuse urban pressures, caused by misconnections, leaking sewers and runoff from paved and unpaved areas as the principal (and significant) pressure to the River Groody with elevated concentrations of phosphate and ammonia associated with these pressures sources being the significant issues.

The River Groody support a small population of breeding Atlantic Salmon and brown trout are also supported by this watercourse.

The bridge location the riverbed is characterised by an artificial concrete apron that runs upstream and downstream of the existing bridge. The Mulkear WMU has identified pressures to the morphology of this section of the River Groody and the presence of the concrete apron is considered to contribute to these morphological pressures. Its removal as part of the project will have the potential to represent a long-term positive impact for the morphology of the river. The riverbed beyond the concrete apron consists of a gravel and stone bed with some boulders also occurring. Silt was noted along the stretch of the channel upstream and downstream of the bridge during site surveys in February and May 2019.

4.1.4 Cultural Heritage & Landscape

An architectural conservation assessment of the Ballysimon Bridge has been completed for the project and it has determined the bridge to be of minor architectural conservation interest and that its replacement with a new functional bridge will overall represent a positive benefit for the environment.

The landscape surrounding the bridge location is comprised of linear urban land cover in the form of roads and adjacent buildings and agricultural fields with hedgerow boundaries. The upgrade works will not significantly alter the landscape setting as it will replace the existing

road. The provision of landscaping as part of the upgrade works will result in positive benefits for landscape and visual amenity along the road.

4.1.5 Noise

A review of the EPA noise maps indicates that the project site is located in an area where night noise levels range between 50 to 54dB. The day, evening, night noise levels for the location range between 60 and 64dB. This noise is attributable to the presence of the M7 road which overpasses the project site. The construction phase will not result in any long term changes in noise levels in the vicinity of the project. Incidental noise will occur during construction but this will be short lived and will be minimised with the application of best practice measures and mitigation as outlined above. The operation phase of the road will not result in any increases to the baseline noise levels. The enhanced flow of traffic along the golf links road will have the potential to reduce noise as a result of idling vehicles.

4.1.6 Air Quality

The project site is located within Air Quality Zone C Other cities and towns. A review of air quality in December 2019 indicated that air quality at the project site was classified by the EPA as Good.

The construction phase of project will have the potential to result in the generation of dust, however with the implementation of the measures detailed in Section 3 above the generation of dust will be minimised such that significant nuisance effects are avoided.

The operation phase of the project will decrease vehicular emissions as there will be an improved flow of traffic along the Golf Links Road which will decrease vehicle idling as a result of traffic and overall result in an improvement in air quality in the immediate vicinity of the road.

Table 4.1: Location of the Proposed Development

Screening Criteria ***The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to:***	**Response**
(a) the existing and approved land use;	The existing land use within the project site is dominated by existing artificial surfaces, grassland and scrub habitats. The project site is located within an area otherwise dominated by residential and agricultural land use. The proposed development is in line with approved zoning land use for the project site.
(b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground	The project site is currently representative of a part existing developed site and part greenfield site. The greenfield land cover within the project site is not sensitive in terms of natural resources. The overall design of the project has included a design that aims to blend the development into the existing urban fabric surrounding the project site. The proposed development will not have a significant effect on the relative abundance, availability, quality and regenerative capacity of natural resources.
(c) the absorption capacity of the natural environment, paying particular attention to the following areas: (i) wetlands, riparian areas, river	The potential for the proposed development to significantly effect the absorption capacity of the environment, with respect to the parameters listed in Column 1 opposite are outlined below. (i) no works are proposed that will affect wetlands, riparian areas or river mouths.

Screening Criteria ***The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to:***	**Response**
mouths; (ii) coastal zones and the marine environment; (iii) mountain and forest areas; (iv) nature reserves and parks; (v) areas classified or protected under national legislation; Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC;	(ii) not applicable, the project is located at a remote distance from the coastal zone. (iii) not applicable, the project is located at a remote distance from mountainous and forested areas. (iv) not application, the project is located at a remote distance from any nature reserves and parks. (v) The Screening Statement in support of Appropriate Assessment that accompanies the proposed development application has assessed the likely significant effects of the proposal on the conservation objectives of European Sites within a 15km buffer of the development and has concluded in a finding of no likely significant effects. In addition no NHAs or pNHAs are located in the vicinity of the project site and there will be no potential for the project to interact with such areas.
(vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;	(vi) Surface water quality along the River Groody has been classified as moderate. Environmental Quality Standards for Noise and Air have been reviewed as part of this EIA Screening and the project will not have the potential to result in any significant changes to baseline noise and air quality during the construction phase and will have the potential to improve noise and air quality during the operation phase. The Groundwater Body in the surrounding area has been assigned

Screening Criteria ***The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to:***	**Response**
	Good status. The design of the project and the best practice measures that will be required to be implemented during the construction phase will ensure that the project does not perturb the long-term quality of the environment in the wider area surrounding the project site.
(vii) densely populated areas;	The subject lands are located within Limerick City and the environs of Castletroy. The surrounding area is representative of a densely populated area and the provision of the upgraded road corridor will provided enhanced vehicular and cycling permeability in the area, thereby contributing to improved vehicle transport mobility and sustainable modes of movement.
(viii) landscapes and sites of historical, cultural or archaeological significance	The footprint of the proposed development is not located within an area of high landscape value and the design of the proposed development has sought to compliment the existing built form in the surrounding area.

Conclusion: No significant effects likely to arise associated with the location of the proposed development.

Rationale: The proposed development relates to a relatively small area of less than 1 ha contiguous with an area of existing and/or zoned residential land use in Castletroy and Limerick City. A Screening Statement for Appropriate Assessment has determined a finding of no likely significant effects on the conservation management objectives of European Sites within a 15km radius of the study area. The proposed development will represent a positive development for permeability and sustainable movement and transport in the area and is consistent with the land use zoning of this location.

5.0 CHARACTERISTICS OF POTENTIAL IMPACTS

Having considered the above environmental factors the aim of t this section is to address likely impacts on the environment by the implementation of the proposed development. Whether an EIA would be deemed necessary relevant to the scale of the project and the environment will then be determined.

The 2014 EIA Directive requires that an assessment of the likely significant effects of a project on the environment must be considered with regard to the factors specified in Article 3(1) of the Directive and Section 171A(b)(i)(I) to (V) of the Planning and Development Regulations 2001 to 2018, taking into account:

(a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);

(b) the nature of the impact;

(c) the transboundary nature of the impact;

(d) the intensity and complexity of the impact;

(e) the probability of the impact;

(f) the expected onset, duration, frequency and reversibility of the impact;

(g) the cumulation of the impact with the impact of other existing and/or approved projects;

(h) the possibility of effectively reducing the impact.

The factors outlined in Article 3(1) of the Directive are presented in Table 5.1 below under the heading of "Environmental Factor". The results of the assessment provided in Table 5.1 are then used to inform an assessment against the criteria evaluating the characteristics of potential impacts.

Table 5.1: Characteristics of Potential Impacts on Environmental Factors

Environmental Topic	Potential Impact
Populations & Human Health	Some short-term local effects from noise and air emissions of the construction phase are expected however all construction activities will have to comply with best practice measures as outlined in this screening report. All relevant best practice mitigation measures required for avoiding likely significant effects to populations and human health through potential effects to soils, water, noise, air etc will be required to be implemented as part of a CEMP for the construction phase of the project. No operational impacts are identified for human beings.
Biodiversity	As the habitats present relate to habitats of low to local value no significant negative impacts are identified for habitats within the project site at construction or operation in this regard.
Soil and Geology	There will be no significant impact to soils or geology.
Water	The project crosses the Groody River and the Old Mill Race. The potential impacts to the river and its water quality and associated instream habitats and fauna have been considered in Section 3 of this report. It is considered that approach required for the effective completion of the project will also ensure that there will be no significant negative impacts to water quality along this watercourse or the instream habitats and fauna supported by it.
Air Quality and climate	The potential will exist for localised, temporary impacts associated with dust generated from construction plant and machinery such as diggers or excavators. Emissions during works phase will be minimised through the implementation of best practice mitigation techniques as outlined in this Screening Report.
Noise and Vibration	Noise during the construction phase may result in nuisance however, noise and vibration during works phase will be minimised through best practice and the implementation of mitigation measures outlined in this

Environmental Topic	**Potential Impact**
	screening report. With the implementation of these measures the construction phase will not result in significant noise nuisance to sensitive receptors and will be minimised to a short term, slight negative impact. Traffic noise and vibration during the operation phase are not considered likely to be significantly increased as a result of the project.
Cultural Heritage	The bridge is of low conservation value and its replacement will have an overall positive environmental effect.
Landscape & Visual	The proposed development is not located in an area of high landscape value and will not have any perceptible changes to the local landscape and visual setting.
Interrelationship between above parameters	The key interrelationship arises between air quality and noise associated with traffic emissions and excavation during construction and human health. The implementation of mitigation measures outlined in this Screening Report will ensure that these emissions are minimised to a level that will not result in significant noise, vibration or dust nuisance to surrounding sensitive receptors.

Table 5.2: Characteristics of the potential impacts

Characteristics of potential impacts (The potential significant effects of proposed development in relation to criteria set out below are informed by the results of the assessment provided in Table 5.1 above)	**Potential Impact**
(a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);	Minor and localized temporary impacts are identified primarily at construction stage only.
(b) the nature of the impact;	The nature of the impact associated with the proposed development to environmental parameters have been set out in Table 5.1 above. It has been concluded that provided all best practice and mitigation measures as outlined in this Screening Report are implemented the project will not have the potential to result in significant environmental effects.
(c) the transboundary nature of the impact;	Given the size, scale and location of the proposed development potential transfrontier impacts will not arise.
(d) the intensity and complexity of the impact;	The project is representative of a small scale road upgrade project. The construction phase will be of a short-term duration being completed within an estimated timeframe of 10 months. With the implementation of best practice measures and associated mitigation it will not result in intense or complex impacts to the receiving environment.
(e) the probability of the impact;	Potential impacts during the construction phase associated with nuisance to sensitive receptors at adjacent dwellings are probable, but the implementation of best practice measures and associated mitigation will ensure that these effects are of a short

	term and slight negative impact.
(f) the expected onset, duration, frequency and reversibility of the impact;	It is estimated that impacts associated with the construction phase will commence within 3 months of planning approval and will last for approximately 9 months. This will represent a short-term impact. No long-term or permanent significant negative impacts are predicted to arise as a result of the construction phase. There will be an irreversible and permanent loss of improved agricultural grassland to the footprint of the project. The conversion of this land to built land will not represent a significant negative environmental effect.
(g) the cumulation of the impact with the impact of other existing and/or approved projects;	As outlined in Table 2.1 an assessment of the potential for cumulative negative impacts to arise in combination with other existing or approved projects has been provided and it has been determined that the proposed upgrade works will not have the potential to combine with these other projects to result in significant negative cumulative effects to the environment. It is further noted that the provision of the road upgrade works are in line with the planning policy of the area as set out in the Castletroy LAP 21019 – 2025.
(h) the possibility of effectively reducing the impact.	Measures to minimise any adverse effects to the environment are detailed in this screening report and are derived from best practice guidelines. These measures have been implemented as a best practice approach for the proposed development and are proven to be effective at reducing the potential for adverse environmental impacts to occur.

Conclusion: No significant effects likely to arise associated with the potential impacts on environmental parameters.

Rationale: As outlined in Table 5.1 the proposed development will not have the potential to result in significant adverse effects to biodiversity, soils and geology, water, landscape and cultural heritage. There will be potential for impacts to human beings as a result of noise and air emissions during the construction phase of the proposed development. However these impacts have been assessed as being of low significance and measures have been outlined to

ensure that these potential impacts are mitigated to in insignificant level. As such no significant residual impacts to environmental parameters as outlined in Table 5.1 are predicted to arise as a result of the proposed road development.

Conclusion: No significant effects likely to arise associated with the characteristics of the potential impacts.

6.0 CONCLUSION

The proposed upgrade of the Golf Links Road does not trigger the threshold for mandatory EIA/EIAR as set out in the 2001 Regulations (as Amended) and has been assessed as a sub-threshold EIA development. This EIA Screening Assessment has determined that the characteristics of the proposed development are considered not significant due to the scale and nature of the proposed development and its footprint, which is confined to an area of approximately 1.1ha, the characteristics and sensitivities of the receiving environment and design and mitigation measures that will be implemented as part of the construction phase and operation phase of the proposed development.

The European Guidance on EIA Screening provides a checklist to assist with the decision of whether an EIA is required based on the characteristics of a project and its environment. This screening checklist is presented in Table 5.1 below and have been informed by the various assessments that have been set out in Sections 2, 3 and 4 above.

Table 6.1: Screening Checklist

Questions to be Considered	Yes / No? Briefly describe	Is this likely to result in a significant effect? Yes/No/? – Why?
1. Will construction, operation or decommissioning of the Project involve actions which will cause physical changes in the locality (topography, land use, changes in waterbodies, etc.)?	Yes	No. The construction of the proposed development will involve a minor change in land cover within sections of its footprint. This will involve a small area of physical land cover change. The project has been designed to be in keeping with the surrounding landscape.
2. Will construction or operation of the Project use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?	Yes	No. The proposed development will require natural resources in the form of standard construction materials. The quantities to be used as part of the proposed development will be relatively small given the scale of the proposed development.

3. Will the Project involve use, storage, transport, handling or production of substances or materials which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health?	Yes	No. Standard construction materials for a proposed project will be used during construction, however it is unlikely that this would include any quantity of materials that could be harmful to human health or the environment. Best practice construction will be implemented during the construction phase and all such materials will be stored in secure locations and will be handled in accordance with accepted construction procedures.
4. Will the Project produce solid wastes during construction or operation or decommissioning?	Yes	No. Waste in the form of construction material wrappings and pallets etc. will be generated during the project. In addition waste generated by site operative at the site canteen etc. will be generated. All solid waste will be managed in accordance with relevant waste legislation and all waste would be removed by the site by a licensed contractor and disposed of at a licensed facilities. Efforts will be made to reuse as part of the project's construction phase wherever possible soil material generated during excavations at the project site. Where materials cannot be reused they will be transferred off site by a licensed contractor and disposed of at a licensed facilities. The movement of a soil material from the project site will be subject to the control measures.
5. Will the Project release pollutants or any hazardous, toxic or noxious substances to air?	Yes	No. It is expected that dust and emissions from construction vehicles, plant and equipment may be released temporarily during construction. Mitigation measures as outlined in this Screening Report will be implemented to minimise emissions and prevent discharge. All emissions will be kept within standard air quality limits outlined in the relevant legislation.
6. Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?	Yes	No. It is expected that noise and vibration will occur during construction of the project. Mitigation measures have been outlined this Screening Report to minimise the potential impact of noise and vibration. The project site is located within an urban environment with existing night time lighting. The project will not change the extent of night time lighting in the area.
7. Will the Project lead to risks of contamination of land or water from releases of pollutants onto	Yes	No. All potential polluting substances would be stored

the ground or into surface waters, groundwater, coastal wasters or the sea?		and managed appropriately by the contractor to reduce the risk of accidental spillages and/or discharges. There will be no discharge to surface water; groundwater, coastal waters or the sea and appropriate measures to ensure effective incident control will be provided for the construction phase of the project. The operation phase of the project will not pose a risk of contamination of waters.
8. Will there be any risk of accidents during construction or operation of the Project which could affect human health or the environment?	Yes	No. Construction activities would be undertaken with due regard to occupational health and safety. The site manager would be responsible for the management of health and safety on site during construction.
9. Will the Project result in social changes, for example, in demography, traditional lifestyles, employment?	No	No. The project is not predicted to have the potential to result in social changes in demography, traditional lifestyles or employment.
10. Are there any other factors which should be considered such as consequential development which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality?	Yes	This Report undertook a review of the Limerick City & County Council planning portal to identify other existing and approved projects within the wider surrounding area. Projects were identified and an assessment for cumulative effects has been completed. This assessment has found that the proposed upgrade works will not have the potential to combine with these other projects to result in significant negative impacts to the environment.
11. Are there any areas on or around the location which are protected under international or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the project?	No	No protected natural areas such as European Sites or NHAs occur in the vicinity of the project site. The Lower River Shannon SAC is located downstream of the project site. A Screening for Appropriate Assessment for the project has been completed and has found that the proposed upgrade works are not likely, alone or in combination with other projects, to result in significant effects to this SAC. No cultural heritage receptors have been identified at or in the vicinity of the project site. The project site is not located within an area of high landscape value and will not result in any perceptible changes to the landscape and visual setting. The project will not have any potential to diminish the value of the landscape in the surrounding area.

12. Are there any other areas on or around the location which are important or sensitive for reasons of their ecology e.g. wetlands, watercourses or other waterbodies, the coastal zone, mountains, forests or woodlands, which could be affected by the project?	No	The habitats occurring within and in the vicinity of the project are dominated by artificial man-made structures or grassland and scrub habitats of low to local value. They are not representative of sensitive ecological receptors.
13. Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the project?	No	The project site and surrounding area does not support habitats that are relied upon by important or sensitive species of fauna or flora.
14. Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the project?	Yes	No.
15. Are there any areas or features of high landscape or scenic value on or around the location which could be affected by the project?	No	No.
16. Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the project?	Yes	No.
17. Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?	Yes	No. The construction phase will be of a short-term duration and will involve a low number of construction vehicular movements that are not predicted to have the potential to result in significant traffic volumes that could lead to congestion. The provision of the project will have positive implications for traffic and transport congestion by improving traffic flows and offering alternative cycling permeability in the surrounding area.
18. Is the project in a location where it is likely to be highly visible to many people?	Yes	Yes. During the construction phase mitigation measures will be put in place to minimise the visual disturbance caused by the construction works.

		Once constructed the project will blend in with the surrounding built landscape.
19. Are there any areas or features of historic or cultural importance on or around the location which could be affected by the project?	No	No.. .
20. Is the project located in a previously undeveloped area where there will be loss of greenfield land?	Yes	Yes. There will be a loss of a small area of improved agricultural grassland as a result of the widening of the road approaching the River Groody Bridge. This habitat is of low nature conservation value and its loss will represent a negligible impact.
21. Are there existing land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the project?	Yes	No. As outlined in this Report the potential exists for disturbance and nuisance to properties occurring adjacent to the project site. Mitigation measures have been outlined in this Report and it is predicted that, with the implementation of these mitigation measures, potential for disturbance and nuisance to these properties will be minimised.
22. Are there any plans for future land uses on or around the location which could be affected by the project?	No	No.
23. Are there any areas on or around the location which are densely populated or built-up, which could be affected by the project?	Yes	No. The construction phase will be restricted to the project site and with the implementation of a best practice approach to the construction phase and all measures outlined in this Report there will be no potential for significant effects to the population occurring in the surrounding area.
24. Are there any areas on or around the location which are occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project?	Yes	No.
25. Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals, which could be affected	No	No.

by the project?		
26. Are there any areas on or around the location which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project?	No	No.
27. Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?	Yes	No.

Given the scale and nature of the project and taking account of all available information, the overall probability of impacts on the receiving environment arising from the proposed development (during the construction or operational phases) is considered to be low, as summarised in Table 5.3 above.

No significant environmental impacts will occur once mitigation measures outlined in this Report are implemented. These mitigation measures are representative of standard industry environmental management that are implemented to minimise the impact of projects to the environment.

The information provided in this EIA Screening Report can be used by the competent authority, Limerick City & County Council, to conclude and determine that an EIA is not required for the proposed upgrade works to the Golf Links Road, Limerick as there will be no significant environmental effects.