ENVIRONMENTAL IMPACT ASSESSMENT SCREENING REPORT

FOR THE PROPOSED

LEHENAGHMORE ROAD IMPROVEMENT SCHEME

southern scientific services ltd
with
MHL & Associates Ltd.
Consulting Engineers

EIA SCREENING REPORT

M.H.L & ASSOCIATES LTD.

LEGHENAGHMORE ROAD IMPROVEMENT SCHEME

TOGHER

CORK

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Executive Summary

This Environmental Impact Assessment (EIA) Screening Report has been prepared to consider the requirement or otherwise of carrying out an EIA in respect of the proposed development consisting of the widening of the L2455 and L2454 local roads to facilitate road realignment, road widening, pedestrian/cycle bridge construction with associated abutment and structural retaining works, signalisation of the Forge Hill junction, new 30.8m diameter roundabout at “Barrett’s Junction” road reconstruction and resurfacing, new footpath construction, new cycle facility construction, services diversions, new surface water drainage system, new road lighting scheme, new boundary treatments, retaining walls, embankments, accommodation works, new landscaping, traffic calming measures, roadside buildouts and road centre traffic islands, designated roadside car parking, new road markings, upgraded road signage and street furniture and all ancillary works at Lehenagh More, Togher, Cork. This screening exercise was undertaken in two stages.

The first stage considered the requirement for a mandatory EIA, while the second stage considered the requirement or need for a sub-threshold EIA. As part of the sub-threshold screening exercise, the potential for impacts on environmental sensitivities was considered. This report concludes that this is a sub-threshold type project which is not likely to have a significant effect on the environment, either by itself or in combination with other plans or projects, and that an Environmental Impact Assessment (EIA) is not required in this instance.

1. Introduction

1.1 Background

Southern Scientific Services Ltd was commissioned by M.H.L. & Associates Ltd. to prepare an Environmental Impact Assessment (EIA) screening report for development works at Lehenaghmore, Togher, Cork. M.H.L. & Associates Ltd intends to apply to Cork City Council for planning permission for the following development at the aforementioned location:

- an on-road segregated 2m wide uphill cycle lane, from N40 Pouladuff Road Roundabout South (Cork Builders Providers Roundabout) to the Togher Community Sports Grounds, south of a proposed new Roundabout at Barrett's Junction - 1.5km in length.
- There will be a minimum 3m wide footpath linking the Pouladuff Road Roundabout South over the N40 Flyover Bridge to N40 Pouladuff Road Roundabout North (Tramore Road) - 300m in length. This is widening of the existing footpath on the eastern side, while maintaining a 1.8m minimum footpath on the western side.
- A minimum 1.8m wide footpath will be maintained uphill inside the 2m wide cycle lane - 1.5km
- At the old Railway Bridge there will be a 4m wide bridge structure for pedestrians and cyclists on the uphill eastern side, with links down to the old Railway line (Future Greenway) on both sides of the road.
- A 2m wide footpath (1.8m minimum at pinch points is provided on the downhill, western side of Lehenaghmore Road, opposite side from the Cycle facility, for 1.5km, with the exception of a 30 to 40m stretch at the old railway bridge.
- The road alignment will be altered, widening and realigning, improving it to provide DMURS standard minimum horizontal and vertical radii curves.
- The facilities will continue through public road junctions as zebra crossings (N40 slip road and Barret's Junction) , a Toucan Crossing (Forge Hill), uncontrolled crossings (N40 north slip roads) and Raised Entry Treatment crossing at access roads (Southside Ind. Estate, Matthew Hill Business Park, Swan's Nest Business Park, Lehenaghmore Business Park, Manor Farm, Laurel Brook, Matthew Hill.

- A new 2m wide footpath will be provided on the eastern side of L2454 Togher Road from Togher Community Sports Grounds through Barrett's proposed new roundabout junction, to connect to the existing footpaths on Togher Road - 500m in length and
- A new 1.8m wide footpath on the western side of Togher Road along the built up area of road - 200m
- A minimum 6m wide road carriageway has been designed through the length of the project.
- As well as a new "City Gateway" Roundabout at Barrett's Junction, it is proposed to alter the roundabout at N40 Pouladuff Road Roundabout South to provide an additional traffic lane from the south and pedestrian crossing facilities, the signalisation of the Forge Hill/Pouladuff Road junction with additional traffic lanes and pedestrian/cycle facilities. The additional traffic lanes will extend between the new signalised junction at Forge Hill and the N40 Pouladuff Road Roundabout South.
- A new surface water drainage system for part of the project and new low energy LED public lighting scheme for the length of the project.

The overall length of the roads to be upgraded measures approximately 2.5km. The proposed road improvement scheme study area that is the subject of this report includes approximately 1.8km of the L2455 Lehenaghmore Road and approximately 0.7km of the L2454 Togher Road. The start point of the scheme is the existing junction of the Pouladuff road and the Tramore road, at the roundabout adjacent to Kelleher Electrical and proceeds up the L2455 local road to the top of Matthew Hill and the area adjacent to the Togher Community Grounds (Figure 1) The L2455 Road heads in a south-easterly direction past the Southside Industrial Estate entrance before climbing up and over the old disused rail line corridor. At the southern end of the study area, the L2455 intersects the L2454 and this junction is known locally as ‘Barrett’s Junction’. An area of farmland west of the L2455 is zoned for housing development in the Local Area Plan (LAP).

In 2013, Togher Community Association opened a new sports facility approximately a hundred metres south of Barrett’s Junction on the L2455. Improving access to this facility (including providing a new footway and public lighting) forms part of this road improvement scheme. From Barrett’s junction, the proposed road improvement scheme will extend north along the L2454 for a distance of approximately c.700 metres. It is intended that the road improvement scheme will finish in the vicinity of Alderbrook/Fernwood Crescent residential development located on the L2454.

The road works scheme is to consist of the reassignment of the existing road corridor space and widening of this space into adjoining properties and road bed space to facilitate the construction of new pedestrian and cycle facilities along the length of the scheme. The scheme is to comprise of a segregated 2m cycle lane on one side of the road, 2m footpaths on both sides and a 6m carriageway. The cycle lane is to serve southbound (climbing) cyclists. A new pedestrian/cyclist bridge is also proposed alongside the existing disused railway bridge. Road surface water causes problems along the roads within the study area and a new positive drainage system will need to be designed and introduced over the full length of the road upgrade project. This is likely to comprise of a new surface water drainage network. Acquiring lands and setting back private boundary lines will be necessary to deliver the road improvement project. This set back will involve the removal of existing roadside hedges and trees.

Therefore, the proposed development does not exceed the threshold for the mandatory requirement for an EIA based on the nature or scale of the development, as addressed in the EU Directive 2014/52/EU and Roads Act 1993 - 2016. It is considered that the proposed road scheme is not one which falls within the scope of this category. It is noted that a roadway of four or more lanes is not proposed as part of this proposal. It should be noted that mandatory EIA requirements for non-road type development have also been considered and discounted in this instance. As part of this infrastructure and tourism and leisure type projects listed in the Planning and Development Regulations 2001, as amended and in Annex I and II of the EIA Directive 2014/52/EU were considered. This report has been prepared to comply with this requirement and to assist the planning authority by providing the necessary information to ‘screen’ the proposal.

1.2 Purpose of the report

The purpose of this EIA Screening Report is to detail findings from a desktop analysis and site walkover of the receiving environment that may be affected by the road widening and construction activities. The assessment aims to establish the likely effects of the works on the environment and advise if an EIA would be appropriate for the works.

1.3 Application of EIA Regulations

Under legislation, EIA is required for certain prescribed projects and is required for others which are likely to have significant impacts on the environment, by reason of their nature, extent or

location. Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment (commonly known as the Environmental Impact Assessment or EIA Directive), which was adopted in 1985 (with subsequent amendments) requires that certain developments be assessed for likely environmental effects in advance of consent being granted. EIA legislation sets down the types of projects that may require an Environmental Impact Assessment (EIA). Annex I defines mandatory projects that require an EIA and Annex II defines projects that are assessed based on set mandatory thresholds for each of the project classes. The relevant threshold summaries of legislative requirements for EIA Screening for road type developments (in Ireland) are set out in Table 1 below.

Table 1 Summary of Legislative requirements for EIA screening – from the Roads Act (1993-2016) NRA Guidelines on EIA (2008)

Mandatory		**Regulatory Reference**
(1) Construction of a motorway		S. 50.— (1) (a)(i) of the Roads Act, 1993-2016.
(2) Construction of a busway		S. 50.— (1) (a)(ii) of the Roads Act, 1993-2016.
(3) Construction of a service area		S. 50.— (1) (a)(iii) of the Roads Act, 1993-2016.
4) 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:	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 kilometers more in length in a rural area, or 500m or more in length in an urban area;	Article 8 of the Roads Regulations, 1994 (Part V Environmental Impact Assessment)
	The construction of a new bridge or tunnel which would be 100 meters or more in length.	Article 8 of the Roads Regulations, 1994 (Part V Environmental Impact Assessment)

Sub-Threshold	**Regulatory Reference**
(5) Where An Bord Pleanála considers that any proposed road development (other than development to which mandatory requirement 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, they shall direct the road authority to prepare an environmental impact statement in respect of such proposed road development and the authority shall comply with such direction.	S. 50.— (1) (b) of the Roads Act, 1993 - 2016.
(6) Where a road authority considers that any proposed road development (other than development to which mandatory	S. 50.— (1) (c) of the Roads Act, 1993 - 2016.

<table>
<tr><td colspan="2">requirement 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 inform the Board in writing and where the Board concurs with the road authority he shall give a direction to the road authority (as above).</td><td></td></tr>
<tr><td>(7) Where a proposed road development (other than development to which mandatory requirement applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be located on certain environmental sites, the road authority concerned shall decide whether the proposed road development would or would not be likely to have significant effects on the environment. The sites concerned are:</td><td>A European Site, meaning
(i) a candidate site of Community importance,
(ii) a site of Community importance,
(iii) a candidate special area of conservation,
(iv) a special area of conservation,
(v) a candidate special protection area, or
(iv) a special protection area
(vi) Land established or recognised as a nature reserve within the meaning of section 15 or 16 of the Wildlife Act, 1976 (No. 39 of 1976)
(vii) Land designated as a refuge for fauna under section 17 of the Wildlife Act, 1976 (No. 39 of 1976)</td><td>S. 50.— (1) (c) of the Roads Act, 1993 - 2016.</td></tr>
<tr><td colspan="2">If the authority decides that the proposed road development would be likely to have significant effects, it shall inform An Bord Pleanála in writing (as outlined in (6) above).</td><td></td></tr>
</table>

Planning permission accompanied by an Environmental Impact Assessment may be required even in respect of projects below the threshold in cases where the drainage would have a significant effect on the environment. The key issue for the planning authority in the context of the possible need for EIA of sub-threshold development is whether such development is likely to have significant effects on the environment.

‘Sub-threshold projects may require an EIA depending on individual assessment in accordance with certain criteria. The guiding principle is that projects likely to have significant effects on the environment by virtue of, inter alia, their nature, size, or location should be subject to EIA. Article 4(2) of the Directive requires EU Member States to provide a statutory mechanism for deciding whether EIA is required through either a case-by-case examination or by setting specific thresholds or criteria. This decision process is known as “screening” for EIA. The Directive also provides that, when a case-by-case examination is carried out or thresholds or criteria are set,

the relevant selection criteria set out in Annex III of the Directive must be taken into account. These criteria include:

- the characteristics of the project (including the size, the cumulative impacts with other projects, the use of natural resources, the production of waste etc),
- the location of the project (including the relative abundance, quality and regenerative capacity of natural resources in the area, the absorption capacity of the natural environment) and
- the characteristics of the potential impact (including the magnitude and complexity of the impact and the probability of the impact).

The 1997 amending Directive (97/11/EC) introduced guidance for Member States in terms of deciding whether or not a development is likely to have 'significant effects on the environment'. The criteria have been transposed into Irish legislation, in the Third Schedule to the EC EIA (Amendment) Regulations 1999 (S.I. No. 93 of 1999) and in Schedule 7 to the Planning and Development Regulations 2001 (S.I. No. 600 of 2001). The criteria as transposed in Irish legislation, are grouped under three headings:

1. Characteristics of the Proposed Development
2. Location of Proposed Development
3. Characteristics of Potential Impacts

The appropriate test to be applied therefore is whether the proposed development would have significant effects on the environment by virtue of factors such as its nature, size and location.

The DoEHLG Guidance Document *Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development* states that "those responsible for making the decision must exercise their best professional judgment, taking account of considerations such as the nature and size of the proposed development, the environmental sensitivity of the area and the nature of the potential effects of the development. Each decision on the need for EIA must be taken on the basis of a global assessment of all these factors. In general, it is not intended that special studies or technical evaluations will be necessary for the purpose of making a decision".

The new Directive (2014/52/EU) introduces the addition of Annex IIA, the information which a developer must provide to the competent authority to inform a screening determination, which includes:

1. A description of the project, including:
    - the physical characteristics of the whole project and, where relevant, of demolition works;
    - the location of the project, 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 affected by the project.

3. A description of any likely significant effects, to the extent of the information available on such effects at that time, including:
    - residues and emissions from the production of waste, where relevant;
    - the use of natural resources, in particular soil, land, water and biodiversity

The new Directive confirms that the screening information (and subsequent determination) should include and take account of any mitigation measures proposed by the developer, and the cumulative impacts of the proposed project with other existing and/or approved projects. Annex IIA provides that the Criteria set out in Annex III shall be taken into account when compiling the Annex IIA information. Annex III sets out the criteria to determine whether Annex II projects should be subject to EIA:

1. Characteristics of projects

The characteristics of projects must be considered, with particular regard to:

(a) the size and design of the whole project;
(b) cumulation with other existing and/or approved projects;
(c) the use of natural resources, in particular land, soil, water and biodiversity;
(d) the production of waste;
(e) pollution and nuisances;
(f) 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;
(g) the risks to human health (for example due to water contamination or air pollution).

2. Location of projects

The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to:

(a) the existing and approved land use;

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

(c) the absorption capacity of the natural environment, paying particular attention to the following areas:

(i) wetlands, riparian areas, river mouths;

(ii) coastal zones and the marine environment;

(iii) mountain and forest areas;

(iv) nature reserves and parks;

(v) areas classified or protected under national legislation; Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC;

(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;

(vii) densely populated areas;

(viii) landscapes and sites of historical, cultural, or archaeological significance.

3. Type and characteristics of the potential impact

The likely significant effects of projects on the environment must be considered in relation to criteria set out in points 1 and 2 of this Annex, with regard to the impact of the project on the factors specified in Article 3(1) - population and human health; biodiversity; land, soil, water, air and climate; material assets, cultural heritage and the landscape; the interaction between the foregoing 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 publication ‘Guidance for Planning Authorities on Drainage and Reclamation of Wetlands’ by the Department of the Environment, Community and Local Government, 2011, was also referred to in the preparation of this report.

2. Project Description

2.1 Site Location

The proposed development site is located in the townland of Lehenaghmore, Togher, Cork (Figure 1 & 2). The proposed development site starts at the existing junction of the Pouladuff road and the Tramore road, at the roundabout adjacent to Kelleher Electrical and proceeds over the existing N40 flyover and up the L2455 local road to the top of Matthew Hill and the area adjacent to the Togher Community Grounds (Figure 1). The L2455 Road heads in a south-easterly direction past the Southside Industrial Estate entrance before climbing up and over the old disused rail line corridor. At the southern end of the study area, the L2455 intersects the L2454 and this junction is known locally as 'Barrett's Junction'. Land use in the vicinity of the site is a mix of commercial units, one off housing and residential housing estates.

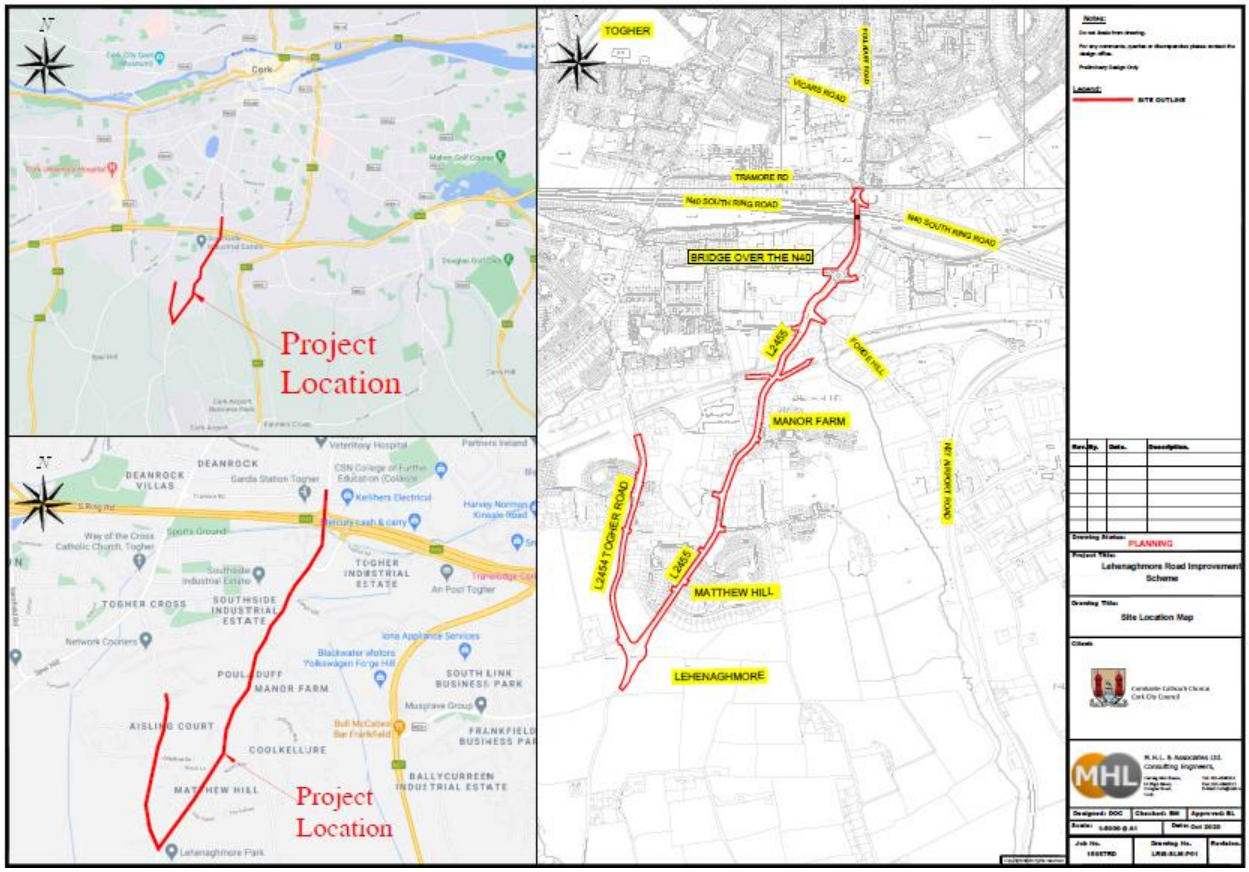

Figure 1: Site location map

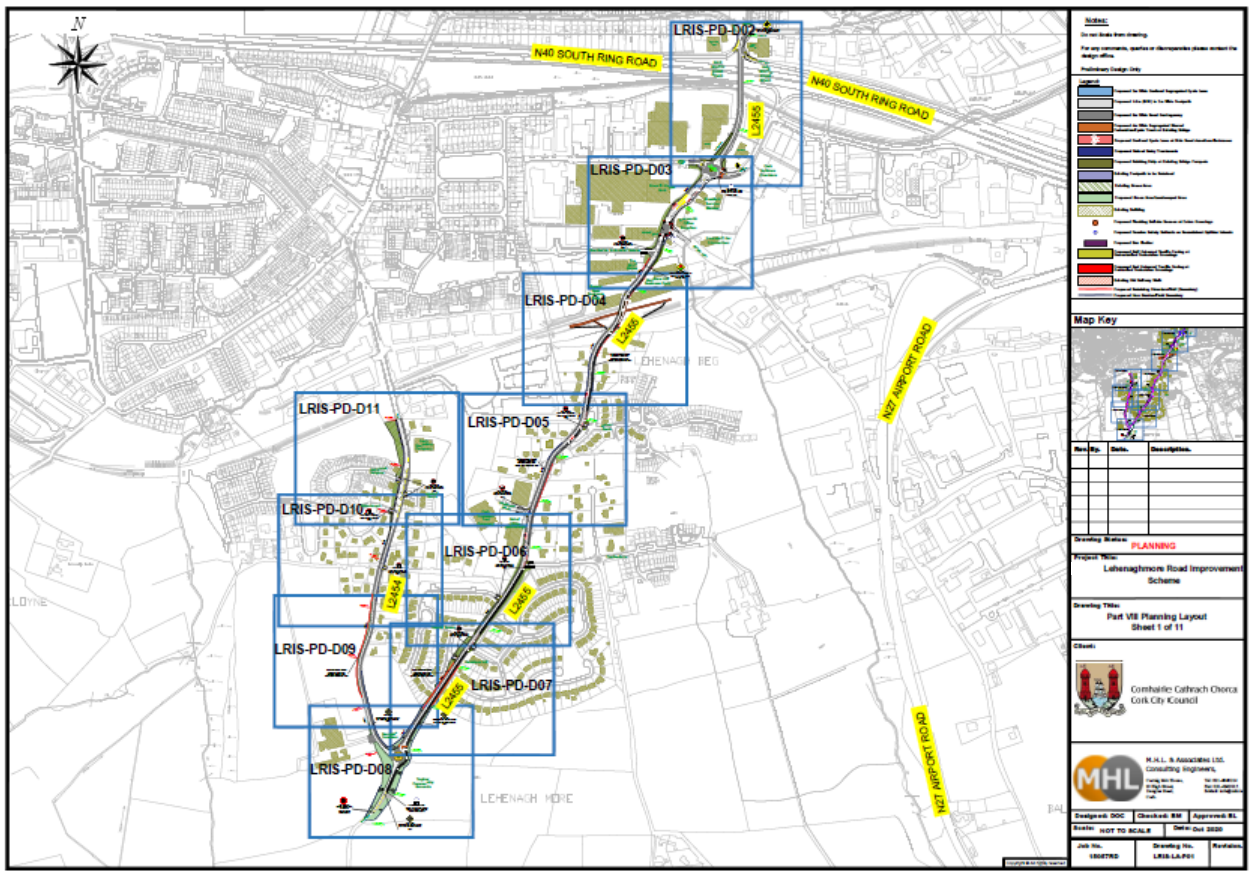

Figure 2: Site plan

2.2 Site History

The site is located on the L2455 and L 2454 local roads. There has been considerable development of residential housing along both these local roads. The roads themselves are narrow in places and are not conducive to pedestrians and cyclists due to the lack of footpaths and cycle lanes.

2.3 Development Description

Cork City Council is seeking Part 8 Planning Approval for the following:

The works will include road realignment, road widening, pedestrian/cycle bridge construction with associated abutment and structural retaining works, signalisation of the Forge Hill junction, new 30.8m diameter roundabout at “Barrett’s Junction” road reconstruction and resurfacing, new footpath construction, new cycle facility construction, services diversions, new surface water

drainage system, new road lighting scheme, new boundary treatments, retaining walls, embankments, accommodation works, new landscaping, traffic calming measures, roadside buildouts and road centre traffic islands, new road markings, upgraded road signage and street furniture and all ancillary works necessary for completion.

Existing roadside boundaries that are to be set back to accommodate new footpaths and cycle lanes. This space will be formed of standard 100mm – 150mm concrete footpath on 150mm Cl.804 sub base. The cycle lanes are likely to be constructed of a surface course macadam on Cl.804. Existing trees and hedgerows that are to be removed as part of the works will be replaced by similar native variety semi-mature trees and hedging.

The works will also include new road construction and reconstruction and resurfacing of the existing carriageway.

3. EIA Screening of the Development

3.1 Introduction

This section of the report sets out the approach to screening the development for EIA. Even if the relevant thresholds for mandatory EIA are not exceeded, the development will be assessed as a 'sub-threshold' project. The key issue in the context of the possible need for EIA of sub-threshold development is whether or not such development is likely to have significant effects on the environment by virtue of factors such as its nature, size and location.

3.2 Mandatory EIA Screening Assessment

This is a linear site which is approximately 2.5km long. It consists of the L2455 Lehenaghmore Road from the at the existing junction of the Pouladuff road and the Tramore road, at the roundabout adjacent to Kelleher Electrical and proceeds south up to the junction with the L2454. The site them runs down the L2454 Togher Road until the Ashbrook estate. These local roads have limited facilities for pedestrians and cyclists. The road is very narrow in places making it very unsafe for same especially during busier commuting times. The road is lined with earth and stone ditches, hedgerows and tree lines (BL1, WL1 and WL2, (Fossitt, 2000)). It is proposed to remove these earth and stone ditches, hedgerows and tree lines where required along the route to construct a 2m wide footpath along the length of the western boundary and to construct a 2m wide footpath and an additional 2m wide cycle path on the eastern side of the existing L2455 carriageway. There will be a 6m wide road carriageway between the paths. It is proposed to construct a 2m wide footpath along both side of the L2454, which may require the removal of stone ditches and tree lines.

3.3 Sub-threshold EIA Screening Assessment

As outlined in Section 1.3 above the criteria for deciding whether a development is likely to have 'significant effects on the environment' are grouped under three headings:

1. Characteristics of the Proposed Development

2. Location of Proposed Development
3. Characteristics of Potential Impacts

The screening assessment below follows this format. This screening study has comprised a desk-based appraisal of existing information pertaining to the site, and a site walkover.

3.3.1 Characteristics of the Proposed Development

3.3.1.1 Size & design of development

The proposed development site is a linear development approximately 2.5km long and occurring on the existing L2455 Lehenaghmore Road and L2454 Togher Road. Works will require the widening of the existing carriageways to facilitate the construction of the previously mentioned footpaths and cycle lane.

3.3.1.2 Cumulation with other developments

Cumulation can occur when impacts caused by one project, which may be considered minor and insignificant, can combine with other environmental impacts already present or planned in the project area and together may become significant. The surrounding land use is a mixture of commercial, residential and agricultural activities. There are currently no other significant projects planned for the immediate area. Cumulative impacts on the environment arising from interaction with other activities, which would mainly be agriculture and commercial activities in this area, are not considered significant.

3.3.1.3 Use of natural resources

Examples of natural resources in the area include the following:

- Land
- Soil
- Water
- Biodiversity

The use of natural soil and rock resources associated with the development would not cause unusual, significant, or adverse effects. Some natural resources will be required for the construction, such as crushed stone. There will be no requirement for water abstraction for the

proposed development. Overall, it is considered the use of natural resources associated with the development would not cause unusual, significant, or adverse effects of a type that would, in themselves, require an EIA.

3.3.1.4 Production of waste

There is unlikely to be any significant volumes of waste generated by the proposed development and any soil / sub soil waste arising on site would be inert in nature. Any residual waste of this material should be limited and will be removed from the site for recycling/disposal at authorised sites. Overall, it is considered the production of waste associated with the development will be of negligible proportions and would not cause unusual, significant, or adverse effects of a type that would, in themselves, require an EIA.

3.3.1.5 Pollution and nuisances

There is a risk of nuisance and pollution during the development phase of the proposed development, but this risk can be mitigated against by standard best management practices and environmental controls which will be implemented on site and which are long-established practices known to be effective for same. The development phase of the project is likely to result in potential for dust emissions, noise emissions, and contaminated runoff (silt, hydrocarbons) due to the particular nature of the development. Furthermore, it is expected that these emissions will be regulated by the planning permission for the proposal that will also impose a range of controls on same. Having regard to the scale and duration of the work and considering that the project will involve the implementation of best practice environmental measures and controls (see CIRIA Guidelines – Control of Water Pollution from Construction Sites – Guide to Good Practice (2001) it is concluded that proposed works are unlikely to result in pollution or nuisances of a scale to cause a significant effect on the human or natural environment. The development is unlikely to cause unusual, significant, or adverse effects of a type that would, in themselves, require an EIA.

3.3.1.6 Risk of major accidents and/or disasters, including those caused by climate change

It is envisaged that a health and safety management plan will be put in place at the site to address occupational and human health and safety issues to avoid any major accidents. Reference Health and Safety Authority (HSA) guidelines in relation to the Project Supervisor Design Process (PSDP) for best practice. Given the nature and scale of the development it is considered that the risk of major accidents and/or disasters is unlikely with an appropriate health and safety

management plan in place. The construction phase of the development will primarily involve the use of inert soil and stone materials. The proposal does not require the storage of chemicals, fuels or dangerous substances to be stored on site. Climate change may impact the potential for flooding in this area over time. However, given the separation distance from the Tramore River the potentially vulnerability to flooding during extreme events this risk is much reduced. In addition, the closest point of the site is 5-10m above the level of the Tramore river (based on OS map contours). It is also noted that the type of development proposed would not be considered especially vulnerable to the adverse impacts of flooding. It is considered that the risk of major accidents/disasters associated with the development would not be of a type that would cause unusual, significant, or adverse effects that would, in themselves, require an EIA.

3.3.1.7 Risk to human health

It is envisaged that a health and safety management plan based on HSAs PSDP, mentioned previously will be put in place at the site to address occupational and human health and safety issues. The construction phase of the development will primarily involve the removal of inert soil and stone materials and the addition of aggregate, concrete and tarmacadam. The site will be landscaped on completion. The proposal does not require the storage of chemicals, fuels or dangerous substances which could present a significant risk to human health. It is expected that adequate controls will be put in place through standard planning conditions. The effectiveness of these will be verified through a programme of monitoring e.g. noise monitoring. It is envisaged that the health and safety management plan for the site will address health and safety issues associated with the development phase of the project and the day to day operational aspects of the finished development. Overall, it is considered that the risk to human health associated with the development would not be of a type that would cause unusual, significant or adverse effects that would, in themselves, require an EIA.

The process involves the widening of the existing roadway to facilitate the construction of footpaths and a cycle lane, which will likely require the removal of inert waste and importation of construction material. As such the likelihood of attrition or disturbance will be at a minimum therefore dust emissions from fines will be at a minimum and localised and therefore insignificant in intensity, duration and spatial distribution.

3.3.2 Location of the development

The development to which the planning application relates is located at Lehenaghmore, Togher, Cork. The nearest water course is the Tramore river which occurs adjacent to the site. There is

an extensive buffer area between the site and the river making contamination unlikely. This consist of existing buildings and vegetated areas. Surrounding Natura 2000 sites include the Great Island Channel SAC (Site code 001058) 10.9km and Cork Harbour SPA (Site code 004030) 3.5km east of the site. The most common habitats within the site include hedgerows which form the boundary for the existing road. There are several mature trees also growing along the road boundary which may need to be removed during construction. The removed trees should be suitably compensated at another site to enhance biodiversity in the area.

Land use in the vicinity of the site is a mixture of commercial, residential and agriculture. It is therefore considered that the site can assimilate the construction works proposed. The works, the subject of this screening assessment, will not occur within an area designated historical, cultural or archaeological. The proposed works are also unlikely to have significant effects on nearby SAC, SPA or NHA sites (this is discussed in further detail below under 'biodiversity'). Overall, and having regard to the above, it is considered that the risk to the environment associated with the location of the development would not be of a type that would cause unusual, significant or adverse effects that would, in themselves, require an EIA.

3.3.3 Characteristics of the potential impacts

This section has regard to the Environmental Topics as set out in the EIA Directive as follows:-

- Population & Human Health
- Biodiversity
- Land and Soil
- Water
- Air and Climate
- Material Assets
- Landscape and Cultural Heritage, and
- The interrelationship between the aforementioned

The following section considers the characteristics of the potential impacts associated with the development.

3.3.3.1 Population & Human Health

It is expected that this proposal will have a positive impact on human beings, population and human health by improving road safety and by making outdoor recreation more accessible to vulnerable road users. The proposed footpaths and cycle lane will be used for active outdoor recreational purposes and as a means of getting from A to B in a manner which is beneficial to human health and wellbeing.

Potential exists, particularly at the construction stage for an amount of nuisance associated with localised traffic disruption and noise (refer to 3.3.1.5 & 3.3.1.6). However, this will be temporary and transitional as it is envisaged that construction will take place on a phased basis. It is estimated that construction will take 12 months to complete. For the most part construction works related to this project are likely to be 'low-key' and similar in nature to other road improvement works. Significant negative impacts on Human Beings, Population or Human Health have not been reported from other cycle lanes and footpaths and are unlikely to arise in this instance.
Overall, it is considered that the environmental effects related to population and human health associated with the development would not be of a type that would cause unusual, significant or adverse effects that would, in themselves, require an EIA.

3.3.3.2 Biodiversity

The proposed site is located on the existing L2455 Lehenaghmore Road and L2454 Togher Road and is bounded by commercial properties to the north of the site, residential housing estates and one-off housing and agriculture to the south. The works will result in habitat change along the footprint of the proposed footpaths and cycle lane to habitat characteristic of a roadway (buildings and artificial surfaces BL3). Currently the proposed site is a combination of Buildings and artificial surfaces (BL3) in the form of commercial units, residential housing estates and one-off housing, Stone walls (BL1), Hedgerows (WL1), Treelines (WL2) with a mixture of mature and young trees. These habitats are interspersed along the proposed site. In addition to the extreme south of the site there are areas of arable land (BC1) and grassland (GA1).

The proposal will result in habitat loss along the footprint of the works area. Widening of the road to construct footpaths and a cycle lane will require the removal of the existing hedgerows and tree lines. However, based on the NRA guidelines, the habitats lost are considered to be of local importance (low ecological value). The Tramore river is located adjacent to the site and is hydraulically linked to Cork Harbour SPA (Site code 004030) but given the separation distance it is unlikely that construction activities will have a significant effect on this protected site.

As with any construction project, there will be noise from the operation of machinery and plant on site during the works. This construction noise has the potential to temporarily disturb or displace species. However, the works will be temporary and are not expected to result in any significant impacts to species. Overall, it is therefore concluded that the proposed development is unlikely to have a significant effect on the ecological environment and the environmental effects related to biodiversity associated with the development would not be of a type that would cause unusual, significant or adverse effects that would, in themselves, require an EIA.

3.3.3.3 Land & Soil

The proposed development will require removal of some existing stonewalls, hedgerows and treelines to facilitate construction of the road widening. There will be opportunities for re-use of any soil resource ‘won’, elsewhere within the works. However, in the event that there is any excess material it will be disposed of at authorised permitted site, with the capacity to accept inert waste and C&D.

The underlying geology at this location is made up of purple mudstone and sandstone. There may be areas along the route where bedrock is located near the surface. These areas may require rock breaking; however, the areas will be small the resulting noise emissions will be negligible due to duration and location. Subsoils in the vicinity of the site are classified as sandstone till. The soil is classified as Fine loamy drift with Siliceous stones. The bedrock aquifer beneath is classified as a Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones.

Construction works inevitably result in soil disturbance with potential for soil erosion. However, it is envisaged that the site will be developed with best practice controls (see 3.3.1.5 and Appendix I) in place so that any erosional impacts should be temporary and unlikely to be significant in nature. Overall, it is therefore concluded that the construction works at the proposed development are unlikely to have a significant effect on land and soil and the environmental effects related to land and soil associated with the development would not be of a type that would cause unusual, significant or adverse effects that would, in themselves, require an EIA.

3.3.3.4 Water

The bedrock aquifer beneath is classified as a Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones and the groundwater vulnerability is classified as

having Extreme Vulnerability. The Tramore river flows to the north of the site. Therefore, there is a potential hydrological connection between the development site and Cork Harbour SPA (Site code 004030) which occurs downstream. However, given the lack of surface water drains located near the site this may indicate good absorption by the land. Connectivity may be predominately via sub-surface flow and groundwater flow. The Water Framework Directive (WFD) status of the Tramore river and its tributaries remain “unassigned”.

Key impacts during any construction project relate to the potential for pollution of watercourses / groundwater from works and or spillages. Discharges of water from the site during works could potentially release sediment and other pollutants to watercourses. However, given the absence of surface water features, transmission is predominately via groundwater flow to the river. These factors should minimise the potential for any significant impact on receiving waters. Overall, it is concluded that the works are unlikely to have a significant effect on water and the environmental effects related to water associated with the development would not be of a type that would cause unusual, significant or adverse effects that would, in themselves, require an EIA.

3.3.3.5 Cultural Heritage & Archaeology

No protected structures or Architectural Conservation Areas adjoin the proposed construction site or would be impacted by the proposal. The proposed road widening development will not impact on recorded archaeological sites located within the receiving environment as the original construction of the road and commercial and residential developments in the area are likely to have removed any previously existing archaeological resource. However, should any archaeological monuments be discovered during construction of the proposed development they should be reported immediately to Cork City Council.

3.3.3.6 Landscape & Visual

In terms of landscape the site occurs within a predominantly urban setting with commercial and residential properties along its length. The site is linear, with an approximate length of 2.5km and occurs along the existing L2455 Lehenaghmore Road and L2454 Togher Road which are bordered by stone walls, hedgerows and treelines. The main landcover types include commercial properties, residential housing estates and one-off housing. At the most southern point of the site there is agriculture consisting of arable area and improved grassland.

The proposed works will occur at the same level as the existing road. The works should not adversely impact on any views or prospects. The site itself is not of special landscape or visual interest. The end use will be greatly benefitting the local area by producing a safe area for

pedestrians and cyclists. Due to these mitigating factors it is expected that the proposed development will assimilate into its receiving environment. Overall, it is therefore concluded that the construction works are unlikely to have a significant effect on landscape and visual amenity, and the environmental effects related to water associated with the development would not be of a type that would cause unusual, significant or adverse effects that would, in themselves, require an EIA.

3.3.3.7 Air and Climate

A proposal of this nature has minimal potential for air and climate related impacts.

In terms of air quality: Linear works of this type will have minimal potential by virtue of its scale and duration on the local air quality. Pm^{10}, NO_x, hydrocarbons and dust-fall are the unavoidable emissions to air. Mitigation measures will diminish these to negligible amounts (see appendix II).

In terms of Climate: Global warming emissions of CO_2 from fuel combustion will be negligible having regard to the scale and duration of the works.

Overall, it is considered that this proposal is likely to have a long-term beneficial impact on air and climatic factors as a consequence of facilitating sustainable modes of transport (cycling and walking). This proposal will offer an alternative more sustainable, family friendly means of movement at this location, to the private car.

3.3.3.8 Noise

Road traffic noise is the most significant noise source in the area. Other noise sources in the area include commercial and agricultural activities. There are many residential housing developments and one-off housing adjacent to the proposed development. However, given the liner nature of the site (approx. 2.5km) and given that the construction works will be temporary and likely progressed on a phased basis along the site it is concluded that the proposed development would not be likely to have a significant effect on the environment with respect to noise. Mitigation measures will diminish these to negligible amounts (see appendix III). In addition, the current lack of safe walking and cycling facilities are most likely adding to traffic volumes and therefore noise in the area. The construction on the adequate cycling and pedestrian facilities will offer residents adjacent to the site the option to walk or cycle therefore reducing noise from vehicles.

3.3.3.9 Material Assets

Material assets, of either human or natural origin, comprise resources that are valued and that are intrinsic to specific places. These material assets may be of value for economic or cultural

reasons. The material assets of interest in the context of this assessment would include: agricultural land, access roads and public utilities such as water and electricity supply. As most of the equipment on-site is diesel powered, the impact on electricity supply capacity in the area is not considered significant.

It is considered that material assets in the area will be significantly improved by way of this proposal which would provide enhanced public transport and amenity infrastructure with the addition of safe walking and cycling facilities.

4. Assessment Findings

Overall, based on the findings of this assessment, it is considered that the proposed development works would be unlikely to have a significant effect on the environment having regard to the size, location, nature, and characteristics of the proposed development. It is thought that any potential effects can be effectively managed through the implementation of the management practices and planning controls typically applied at such sites. The potential effects identified are not considered to be of a type or significance that would require an EIA.

5. Conclusion

This screening exercise was undertaken in two stages. The first stage considered the requirement for a mandatory EIA, while the second stage considered the requirement or need for a sub-threshold EIA. As part of the sub-threshold screening exercise, the potential for impacts on environmental sensitivities were considered. It is concluded that this is a sub-threshold type project which is not likely to have a significant effect on the environment, either by itself or in combination with other plans or projects, and that an Environmental Impact Assessment is not required for the proposal.

Appendix I

CIRIA Guidelines – Control of Water Pollution from Construction Sites – Guide to Good Practice (2001)

The guidance document provides practical help for consultants and contractors on how to plan and manage construction projects to control water pollution. It has seven main chapters.

- Benefits and obligations
- Water pollution from construction
- Legislative framework
- Construction contracts
- Managing water pollution from construction
- Water management techniques
- Summary and recommendations

Appendix II – Air Quality mitigation measures

- **Never burn waste materials.** Doing so will cause smoke, releasing poisonous gases such as carbon monoxide into the atmosphere.
- **Adopt hybrid technology** in place of diggers and excavators with diesel engines. For example, Volvo is currently trialling a prototype hybrid excavator that runs on electric power generated from the down-swing of its boom arm.
- **Use low sulphur diesel** to power equipment and vehicles.
- **Improve your existing equipment** by using particulate filters and catalyst converters.
- **Use water sprays or sprinklers** to control some types of dust and stop it spreading. This will be particularly beneficial during tasks such as the filling of skips or breaking down of concrete.
- **Use an on-tool extraction** to control some types of dust. This is a type of exhaust that fits onto some tools and removes dust as it is being produced.
- **Source local materials** to avoid the need for them to be transported hundreds of miles.
- **Use renewable or sustainable materials**, such as timber from sustainably managed forests.
- **Wear appropriate PPE,** such as the correct type of respiratory protective equipment (RPE) depending on the task.

Appendix III – Noise mitigation measures

- **Use quiet power tools and equipment** to manage noise pollution. Where possible, use modern construction equipment that has been designed specifically to produce less noise.
- **Schedule work during sociable hours** rather than when residents are likely to be sleeping. For example, between 8 to 6pm on weekdays. You could also notify local residents of the working hours and keep them updated on the project.
- **Put acoustic (movable noise) barriers in place** to manage the levels of noise pollution.
- **Ensure plant and equipment is properly maintained and operated.**
- **Switch off plant when it's not in use.**
- **Ensure employees wear the correct PPE** when required to reduce the risk of hearing loss due to excessive noise.