



N8 Silversprings Junction Upgrade

Cork City Council

Environmental Impact Assessment Screening Report

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Contents

1.	Introduction.....	3
2.	Description of the Proposed Scheme	4
2.1	Proposed Scheme Location	4
2.2	The Need for the Scheme	4
2.3	The Proposed Scheme.....	4
3.	EIA Screening Process	6
3.1	Introduction	6
3.2	Relevant Legislation	6
3.3	Methodology	6
3.4	Characteristics of the Proposed Scheme	11
3.5	Location of Project.....	12
3.6	Characteristics of the Potential Impact.....	13
4.	Conclusion	26

1. Introduction

Cork City Council (CCC) has developed proposals for the improvement of the Silversprings junction section of the N8 Lower Glanmire Road to the east of Cork City, hereafter referred to as “the proposed scheme”,

The purpose of this report is to identify the legal requirement or otherwise for an Environmental Impact Assessment (EIA) for the project. This EIA Screening Report, documents the methodology applied during the screening of the proposed scheme, with reference to relevant legislation and guidance documents.

2. Description of the Proposed Scheme

2.1 Proposed Scheme Location

The N8 is a national primary road which runs from the junction with the N22 at St. Patrick's Street in Cork City to the Dunkettle Interchange west of Cork City. From there it becomes a motorway (the M8) merging with the M7 near Portlaoise.

The section of the N8 under consideration in this report is approximately 1km in length. It is located north of the River Lee to the east of Cork City centre. It extends along the N8 route corridor from a point just prior to the area where the westbound N8 carriageway merges from a dual carriageway into a single lane, to a point just before the junction with Trafalgar Hill / Lover's Walk. The extent of the study area and its location in a wider context is shown in Figure 1 – Scheme Overview.

2.2 The Need for the Scheme

The proposed scheme is needed in order to improve safety on the section of the N8 Lower Glanmire Road.

At peak periods, traffic queues on the diverge slip to the Silversprings Overbridge and backs up onto the N8 westbound mainline. Vehicles travelling into the city via the N8 mainline have been observed using the hatched section of the N8 westbound lane drop to pass the queueing traffic.

The proposed scheme will regularise this driver behaviour through the extension of the right hand lane of the N8 westbound and removal of the left hand lane through a lane drop arrangement to the Silversprings Overbridge.

Safety concerns were identified on the existing length of the acceleration lane on the eastbound side of the road, the existing merge lane from the Silversprings Hotel junction is very short on the eastbound merge to the N8 Lower Glanmire Road. Making the proposed amendments to the junction removes the need for vehicles joining the N8 Lower Glanmire Road to merge into the left-hand lane over a very short distance.

Scheme Objectives

The objective of the proposed scheme is to improve road safety through regularising the effect of driver behaviour. Improving the capacity at the junction is not an objective of this proposed scheme, but includes improving safety for motorists, cyclists and pedestrians.

2.3 The Proposed Scheme

The Silversprings Junction is located on the N8 Lower Glanmire Road within Cork City at the junction of the N8, R635 North Ring Road and a local access to the Tivoli Docks. The junction is located approximately 900m from the city limits.

The Proposed Scheme comprises the reconfiguration of approximately 950m of the N8 Lower Glanmire Road and the junction slip roads including:

- 390m of raised central reserve to be installed on the N8 Lower Glanmire Road;
- Reconfiguration of the N8 westbound carriageway and diverge slip to extend the existing dual carriageway by 450m with a new lane drop diverge configuration and including 880m of pavement works;
- Reconfiguration of the N8 eastbound carriageway and merge/diverge slip to a lane drop/lane gain arrangement including the extension of the existing splitter island and 535m of pavement works;
- Approximately 220m of new shared pedestrian/cyclist facilities adjacent to the westbound carriageway;

- Provision of a new signalised crossing of the N8 Lower Glanmire Road;
- Provision of new zebra crossings on the westbound merge and diverge slips;
- Various road marking and signage across the extent of the scheme;
- Relocation of existing street lighting and drainage gullies; and
- New boundary wall to the former HSS hire building.

All works to the eastbound carriageway including the reconfiguration of the existing eastbound diverge/merge slips roads are fully contained within the existing road-cross section with no additional land required.

The modifications to the westbound carriageway including the new shared pedestrian/cyclist facilities are predominantly within the existing road cross-section with the exception of the works adjacent to the former HSS hire building which requires a 170m strip of land to be purchased from the landowner. The strip of land to be obtained is concrete hardstanding and is approximately 170m long.

The proposed development is expected to be published in November 2017. Subject to a success outcome of the statutory processes, a Contractor will be appointed to undertake the works in early 2018. Site works are likely to commence in Q3 2017 and should be completed within 12 weeks. Works shall be carried out in daylight hours. However, some pavement tie-in works may be required in the evening under low flow traffic conditions.

3. EIA Screening Process

3.1 Introduction

This EIA Screening Report has been prepared to document the consideration of whether the proposed scheme would be likely to have significant effects on the environment. In addition, this report has been prepared having regard to the following documents:

- Department of the Environment, Heritage and Local Government (August 2003), Environmental Impact Assessment (EIA) Guidelines for Consent Authorities regarding Sub-threshold Development (2003);
- National Roads Authority (2008), Environmental Impact of National Road Schemes – A Practical Guide (Revision 1, November 2008);
- Director General Environment – European Commission (June 2001), Guidance on EIA Screening; and
- Environmental Protection Agency (August 2017), Draft Guidelines on the Information to be Contained in Environmental Impact Assessment Reports.

3.2 Relevant Legislation

3.2.1 EU legislation

EIA requirements derive from EU Directive 85/337/EEC (as amended) on the assessment of the effects of certain public and private projects on the environment. This directive along with three amendments was amalgamated into Directive 2011/92/EU in December 2011. Proposed changes to the directive were adopted by the Council of the European Union in May 2014 and came into effect in May 2017.

3.2.2 Irish Legislation

In relation to roads projects, the requirements of these EU Directives have been transposed into Irish Law through the Roads Act, 1993 to 2007 (as amended by the European Communities (Environmental Impact Assessment) Regulations, 1989 to 2006 and the Planning and Development Acts, 2000 to 2006) and the Roads Regulations, 1994 to 2000.

This results in the categorisation of all road projects into one of two categories:

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

3.3 Methodology

3.3.1 Introduction

Screening is the term used to describe the process of ascertaining whether a proposed scheme requires an EIA and is determined by reference to the mandatory and discretionary provisions set out in the Roads Act, 1993 to 2007 (as amended).

The overriding consideration in determining whether a proposed scheme should be subject to EIA is the likelihood of significant environmental effects. Significant effects may arise by virtue of the type of the proposed scheme, the scale or extent of the proposed scheme and the location of the road scheme in relation to sensitive environments.

A methodology was developed to formally screen the proposed scheme, which was based on Environmental Impact Assessment (EIA), Guidance for Consent Authorities regarding Sub-threshold Development (EPA, 2003), the Environmental Impact Assessment of National Road Schemes – A Practical Guide (NRA, 2008) and The European Commission Guidelines on EIA Screening (June 2001). The screening process to ascertain whether a road development requires EIA is determined by reference to mandatory and discretionary provisions set out in the Roads Act, 1993 to 2007 (as amended). The screening exercise is divided into a section on

mandatory EIA and another on sub-threshold or discretionary EIA. In each section below a screening matrix is presented which examines the requirement for EIA according to the criteria set out in the relevant legislation.

3.3.2 Mandatory EIA

Section 50 of the Roads Act, 1993 to 2007 (as amended) and Article 8 of the Roads Regulations, 1994 outline the legislative requirements that determine whether an EIA is mandatory for a proposed scheme.

Table 3.1 provides an overview of the relevant legislation (in accordance with the NRA EIA of National Road Schemes - Practical Guide) and identifies its applicability to the proposed scheme. The proposed scheme is not a Motorway, Busway or Service Area. It does not involve the provision of four or more lanes of any length, and it does not involve the provision of a bridge or tunnel greater than 100m in length.

The proposed scheme does not exceed any of the thresholds that trigger the mandatory requirement for an EIA, as shown in Table 3.1.

3.3.3 Sub-Threshold Development

The Roads Act, 1993 to 2007 (as amended) outlines three circumstances under which an EIA for a subthreshold road project may be required. These are summarised in Table 3.2.

Where a decision is being made on whether a proposed scheme would or would not be likely to have significant effects on the environment, regard must be given to the criteria specified for the purposes of Article 27 of the European Communities (Environmental Impact Assessment) Regulations, 1989.

The Article 27 screening criteria are grouped into three categories:

- i. Characteristics of the Proposed Development,
- ii. Location of the Proposed Development,
- iii. Characteristics of Potential Impacts.

The criteria associated with each category (i.e. the criteria that must be taken into account when making screening decisions on a case-by-case basis) will be considered in the context of the proposed scheme in the following paragraphs.

In addition, the European Commission publication, Guidance on EIA Screening (June 2001), provides a number of checklists to aid the decision making process. In particular, the 'Screening Checklist' (completed and included in Table 3.3) and the complementary 'Checklist of Criteria for Evaluation of the Significance of Environmental Effects' were used to inform the Article 27 screening criteria.

Table 3.1 EIA Screening Matrix – Mandatory Requirement

Mandatory Threshold		Regulatory Reference ¹	Response
Construction of a motorway.		S. 50(1)(a)(i) of the Roads Act, 1993, as substituted by S.9(1)(d)(i) of the Roads Act, 2007.	Mandatory Threshold Trigger not reached.
Construction of a busway.		S. 50(1)(a)(ii) of the Roads Act, 1993, as substituted by S.9(1)(d)(i) of the Roads Act, 2007.	Mandatory Threshold Trigger not reached.
Construction of a service area.		S. 50(1)(a)(iii) of the Roads Act, 1993, as substituted by S.9(1)(d)(i) of the Roads Act, 2007.	Mandatory Threshold Trigger not reached.
Any prescribed type of proposed 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 kilometres or more in length in a rural area, or 500 metres or more in length in an urban area;	S. 50(1)(a)(iv) of the Roads Act, 1993, as substituted by S.9(1)(d)(i) of the Roads Act, 2007. Article 8 of the Roads Regulations, 1994 (Road development prescribed for the purposes of S.50(1)(a) of the Roads Act, 1993).	The proposed scheme is a Safety Scheme which involves partially extending a short section of the existing dual carriageway to allow for a lane drop from the westbound carriageway to the Silversprings overbridge; to reconfigure the Silversprings Junction, which includes the provision of lane drop diverge and lane gain merge from the existing junction with the eastbound carriageway; and other safety provisions including pedestrian and cyclist facilities. Mandatory Threshold Trigger not reached.

¹ It should be noted that sections 50 and 51 of the Roads Act, 1993, have been amended by the European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1999; the Planning and Development Act, 2000; the Planning and Development (Strategic Infrastructure) Act, 2006; and the Roads Act, 2007

Mandatory Threshold		Regulatory Reference ¹	Response
	The construction of a new bridge or tunnel which would be 100 metres or more in length.	Article 8 of the Roads Regulations, 1994 (Road development prescribed for the purposes of S.50(1)(a) of the Roads Act, 1993).	Mandatory Threshold Trigger not reached.

Table 3.2 EIA Screening Matrix – Sub-Threshold Requirement

Sub-Threshold Requirement		Regulatory Reference ²	Response
Where An Bord Pleanála (ABP) considers that a proposed road development would be likely to have significant effects on the environment it shall direct the road authority to prepare an EIS.		S. 50(1)(b) of the Roads Act, 1993.	The Minister has not directed the Road Authority (Cork City Council) to prepare an EIAR for the proposed scheme
Where a road authority considers that a 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 EIS.		S. 50(1)(c) of the Roads Act, 1993.	The proposed scheme is not anticipated by the Road Authority (Cork City Council) to have significant effects on the environment (see the following Section 3.4) and the Screening Checklist included in Table 3.3).
Where a proposed development would be located on certain environmental sites the road authority shall decide whether the proposed development would be likely to have significant effects on the environment. The sites concerned are:	(i) Special Area of Conservation (SAC)	S. 50(1)(d) of the Roads Act, 1993, as inserted by Art. 14(a) of the EIA (Amendment) Regulations, 1999.	An Appropriate Assessment Screening has been carried out which has concluded: It can be excluded, on the basis of objective scientific information, and in light of the conservation objectives of relevant sites, that the proposed works, either individually or in combination with other plans or projects, would have likely significant effects on any European site. See Appropriate Assessment Screening Report for further details
	(ii) A site notified in accordance with Regulation 4 of the European Communities (Natural Habitats) Regulations, 1997 (S.I. No. 94 of 1997)		
	(iii) Special Protection Area		
	(iv) A site where consultation has been initiated in accordance with Article 5 of Council Directive 92/43/EC of 21 May, 1992, on the conservation of natural habitats and of wild flora and fauna.		
	(v) A Nature Reserve within the		

² It should be noted that sections 50 and 51 of the Roads Act, 1993, have been amended by the European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1999; the Planning and Development Act, 2000; the Planning and Development (Strategic Infrastructure) Act, 2006; and the Roads Act, 2007

Sub-Threshold Requirement		Regulatory Reference ²	Response
If the road authority considers that significant environmental effects are likely, it shall inform ABP in accordance with section 50(1)(c).	meaning of sections 15 or 16 of the Wildlife Act, 1976.		
	(vi) Refuge for Fauna under section 17 of the Wildlife Act, 1976.		
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, the Minister 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.		S. 50(1)(e) of the Roads Act, 1993.	The proposed scheme is not anticipated by the road authority to have significant effects on the environment (see the following Section 3.4) and the Screening Checklist included in Table 3.3).

3.4 Characteristics of the Proposed Scheme

3.4.1 Size of the Project

The N8 is an existing roadway. The proposed scheme extends over a distance of approximately 1km along the existing N8 east of Cork City and is a Traffic Management Scheme which involves reconfiguring of the Silversprings junction, extending the existing dual carriageway to increase the length of the existing right lane beyond the junction; and to improve facilities for pedestrians and cyclists. In this regard, there are not anticipated to be any significant effects on the environment.

3.4.2 Cumulation with Other Projects

Scheduled to start in advance of Dunkettle, the upgrade of the Dunkettle Interchange is due to begin construction in 2018-2019. The N8 Lower Glanmire Road originates at the Dunkettle Interchange approximately 2km east of the proposed scheme. Should the construction of both projects overlap, there will likely be cumulative impacts associated with temporary traffic management measures being put in place at two locations on the same road. Both projects will improve traffic flows on the N8 once completed. The Dunkettle Interchange project has been subject to planning requirements and EIA and Appropriate Assessment to address the impacts.

The proposed development, subject to successful completion of the planning process, will be constructed in advance of the Dunkettle Interchange Upgrade Scheme.

3.4.3 Use of Natural Resources

It is anticipated that approximately 564m³ of imported fill material will be required for the construction of the proposed scheme, but none during operation aside from ongoing maintenance. Periodic maintenance and resurfacing will be required in the future but will only utilise a small proportion of the quantity used in initial construction. Based on the scale and nature of works proposed it is not likely that there will be any significant effects on the environment.

3.4.4 Production of Waste

The proposed scheme will result in approximately 572m³ of pavement and footway material being excavated as part of the site clearance works. This material will be processed and reused in the proposed scheme, but it is anticipated that approximately 20% of this material will be disposed of off-site. Therefore, approximately 114m³ of waste material will be disposed of off site. It is not likely that there will be any significant effects on the environment.

3.4.5 Pollution and Nuisances

During the estimated 12 week construction period, there are likely to be minor additional delays to commuters using the N8 as a result of temporary traffic management measures required to facilitate the construction of the proposed scheme. On average, one lane of the existing N8 will be closed during the construction period, rising to more than one lane for short periods for certain elements of the construction.

The proposed scheme will not result in a significant change in air or vibration emissions during the operation of the scheme. Dust minimisation measures will be put in place during construction.

3.4.6 Risk of Pollution Incidents

The likelihood for pollution of the River Lee associated with the transport of sediment or accidental release during construction is very low due to the distance between the proposed scheme and the river. Construction best practice guidelines will be used for the proposed scheme.

As the proposed scheme involves upgrade works to an existing road, the drainage system currently in place will continue to be used after the works are completed. No changes to the existing drainage from the N8 will be required, with the exception of replacement or relocation of gullies.

The risk of hydrocarbon and other dangerous substance contamination as a result of accidental spillage by vehicles using the proposed scheme during the operational phase would be unchanged compared to the current likelihood.

3.5 Location of Project

3.5.1 Existing Land Use

The proposed scheme is part of the existing N8 national road. It is located in Cork City and therefore the majority of the proposed scheme will be confined to the existing carriageway. There will be the need to acquire a small portion of the HSS Hire site, just south of the road adjacent to the Silversprings junction, in order to provide the additional space for the extension of the dual carriageway. This segment of land is already a hardstanding area and therefore the impact as a result of the land-take will be minimal.

3.5.2 Abundance, Quality and Regenerative Capacity of Natural Resources

It is anticipated that no imported fill material will be required for the proposed scheme. 564m³ of bituminous pavement product to be imported.

3.5.3 The Absorption Capacity of the Natural Environment

Wetlands and Coastal Zones

There are no wetlands affected by the proposed scheme. The River Lee is located approximately 60m south of the proposed scheme at its nearest point.

Cork Harbour SPA (Site Code 004030) and the Douglas River Estuary pNHA (Site Code 001046) are located approximately 1km south-east of the proposed scheme at their closest point. See N8 Silverspring Junction Upgrade Scheme Appropriate Assessment Screening Statement, for further details.

Mountain and Forest Areas

There are no Mountain and Forest Areas affected by the proposed scheme.

Nature Reserves and Parks

There are no Nature Reserves or Parks affected by the proposed scheme.

Areas classified or protected under legislation, including special protection areas designated pursuant to Directives 79/409/EEC and 92/43/EEC

The proposed scheme is situated approximately 1.3km from Cork Harbour Special Protection Area (SPA) and 1km from Douglas River Estuary proposed Natural Heritage Area (pNHA) at its closest point. See N8 Silverspring Junction Upgrade Scheme Appropriate Assessment Screening Statement, for further details.

Areas in which the environmental quality standards laid down in legislation of the EU have already been exceeded

There are no areas known of where the legal environmental standards have been exceeded. There will be no change to the existing drainage system required as part of the proposed scheme, albeit existing gullies will be relocated and replaced as required. Increase in impermeable area is less than 4% of the existing area.

Densely Populated Areas

The proposed scheme is situated in the north-east of Cork City, which 2016 census data showed has a population of over 125,000. The specific small areas in which the scheme is proposed had a population of less than 700 in the 2016 census.

Landscapes of Historical, Cultural or Archaeological Significance

Whilst national monuments and architectural heritage sites are known in the wider area, within the study area no known archaeological sites have been identified and unknown monuments and sites are not expected to given the proposed scheme location on existing highway and hardstanding.

3.6 Characteristics of the Potential Impact

3.6.1 Extent of the Impact (geographical area and the size of the effected population)

The circa 1km proposed scheme represents an upgrade of an existing heavily trafficked urban road corridor. The overall effect is to provide for improved road safety and traffic management, and provision of appropriate enhanced footpaths and cycle facilities. These works will necessitate local widening of the road corridor which will have direct effects on various roadside boundaries and immediate lands.

3.6.2 Transfrontier Nature of the Impact

There are no transfrontier impacts associated with the proposed scheme.

3.6.3 Magnitude and Complexity of the Impact

Human Beings: The construction phase of the proposed scheme will result in a small number of direct construction employment jobs.

There are likely to be minor additional delays to commuters using the N8 as a result of temporary traffic management measures required to facilitate the construction of the proposed scheme. There are a number of private accesses off the eastbound carriageway in the vicinity of the proposed scheme, with most of these being house driveways directly on the N8. However as these are all on the eastbound carriageway disruption to access will be minimal. The permanent loss of land from the HSS Hire site will be 323m³ hectares in total. The loss of land is compensated through agreement with the landowner the and new boundary walls and accesses provided.

The improvement in journey times, access and connectivity are considered to be a positive improvement for people and economic development prospects in and around Cork.

Flora and Fauna: Impacts and mitigation associated with designated sites are contained within the N8 Silverspring Junction Update Scheme Appropriate Assessment Screening Statement.

The proposed scheme is not anticipated to result in any habitat loss or impacts to designated sites.

Surface Water: There will be no changes to the existing drainage system as part of the proposed scheme, albeit existing gullies will be relocated and replaced as required. Increase in impermeable area is less than 4% of the existing area. Surface water from the roadway currently drains through a series of gullies to an outfall in the River Lee. The River Lee flows out into Cork Harbour, therefore there is the potential that run-off from the proposed scheme entering the River Lee will flow into Cork Harbour SPA and Douglas River Estuary pNHA. Standard construction best practice measures will need to be taken during construction to ensure that sediment and other contaminated run-off from the construction works are prevented from entering the drainage system and therefore entering the River Lee.

Soils and Geology: The proposed scheme design does not propose any areas of cutting with most of the route being constructed at grade. Therefore, any impacts to the subsurface will be limited to shallow excavation works linked to clearance activities but are not anticipated to be significant. Made ground will be disturbed during the construction works.

Hydrogeology: As the works will be taking place entirely within the hardstanding areas of the existing roadway and HSS Hire site, the risk of contaminating the groundwater would be minimal during both construction and operation.

Air Quality and Climate: Construction activities such as excavation, earth moving and backfilling may generate quantities of dust, particularly in dry and windy weather conditions. Dust minimisation measures will be implemented. Air pollutants are not expected to significantly increase as a result of the proposed scheme.

Noise and Vibration: There will be increases in noise and vibration in the vicinity of the proposed scheme during construction works. This will likely have a temporary impact on the houses located along the road and the businesses (hotels in particular) in the vicinity of the Silversprings junction. Once operational it is not anticipated that there will be any increases in noise above the current baseline.

Landscape and Visual: There will be very minor impacts associated with the construction phase of the proposed scheme. The area is largely industrial, with the road running just north of the Tivoli Docks and Industrial Estate so the visual amenity of the area is already relatively low. When operational, there will be no impacts associated with the proposed scheme.

Archaeology and Cultural Heritage, and Architectural Heritage: There are no recorded monuments, protected structures, or objects on the National Inventory of Architectural Heritage within the main works area of the proposed scheme. There are a few sites just north of the roadway for which there are no impacts anticipated. There is one recorded monument, a post box (Reg. No. 20864008) on the corner between the N8 and Trafalgar Hill, where it is proposed to erect a new sign as part of the proposed scheme. This monument will need to be protected to ensure no damage occurs while the signage is being installed.

Waste Management: The proposed scheme will result in approximately 572m³ of material being excavated as part of the site clearance works. It is likely that this material will be unacceptable for reuse in the scheme, therefore it is anticipated that all of this material will be disposed of off-site. There will also be approximately 114m³ of waste material generated through the demolition of the existing road or structures, including structural material and surrounding backfill.

Material Assets: 564m³ of imported fill material will be required for the proposed scheme. Impacts associated with the transport of these primary raw materials include increased HGV movements to and within the proposed scheme. The source(s) of the imported fill materials will be selected from local and regional approved and licenced suppliers where practicable, thereby reducing the length of vehicle trips required.

3.6.4 Probability of the Impact

The potential impacts of all aspects of the proposed scheme have been considered. There is a slight probability of impacts on air quality, noise and human beings during the construction phase of the proposed scheme. However, these effects will be temporary in nature and the probability of them occurring will be minimised through the development of the project in accordance with construction best practice.

It is not anticipated that there will not be any significant effects during operation on the receiving environment.

Impacts and mitigation associated with designated sites are contained within the N8 Silversprings Junction Upgrade Scheme Appropriate Assessment Screening.

3.6.5 Duration, Frequency and Reversibility of the Impact

The construction period is expected to be a 12 week duration. The proposed scheme is just under 1km in length and part of the existing N8 national road. It is located in Cork City and therefore the proposed scheme's land-take comprises existing built lands.

Construction phase impacts are anticipated however will be temporary in nature, of short duration, will not reoccur once construction has been completed and the effects will be reversible over time.

Table 3-1 EIA Screening Checklist - Determining Significance with respect to Sub Threshold Development

Questions to be Considered	Y/N - Brief Description	Likely to Result in a Significant Effect? Y/N - Why?
1. Could the size of the proposed scheme be considered significant?	<p>Yes</p> <p>The proposed scheme extends over a distance of approximately 1km.</p>	<p>No</p> <p>The proposed scheme is located in Cork City, extends over a distance of approximately 1km along the existing N8 and is considered a Traffic Management Scheme.</p> <p>The proposed scheme's land-take comprises existing built lands.</p>
2. Are there any other factors which may lead to potential for cumulative impacts with other existing or planned activities in the locality?	<p>Yes</p> <p>The Dunkettle Interchange is to be upgraded with construction works to commence in 2018-2019. It is located approximately 2km east of the proposed scheme and the N8 runs between it and Cork City.</p>	<p>No</p> <p>Should the construction of both projects overlap, there will likely be some minor cumulative impacts to traffic associated with temporary traffic management measures needed to be put in place at two locations on the same road. The proposed scheme is much smaller than the Dunkettle project, and will be completed in a much shorter timeframe, and therefore any overlap will be relatively short. Both projects will improve traffic flows on the N8 once completed.</p> <p>The Dunkettle Interchange project has been subject to planning requirements and EIA and Appropriate Assessment to address the impacts.</p>

Questions to be Considered	Y/N - Brief Description	Likely to Result in a Significant Effect? Y/N - Why?
3. Will the proposed scheme involve the use of natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?	<p>Yes</p> <p>It is anticipated that approximately 564m³ of imported fill material will be required for the proposed scheme.</p>	<p>No</p> <p>The source(s) of the imported fill materials will be selected from local and regional approved and licenced suppliers where practicable. Where granular fill is required for the proposed scheme, local or regional virgin sources, or recycled materials held at waste management/transfer facilities that meet the required specification will be sourced</p>
4. Will the proposed scheme produce solid wastes during construction or operation or decommissioning?	<p>Yes</p> <p>The proposed scheme will result in approximately 572m³ of material being excavated as part of the site clearance works. It is likely that this material will be unacceptable for reuse in the scheme, therefore it is anticipated that all of this material will be disposed of off-site. There will also be approximately 114m³ of waste material generated through the demolition of the existing road or structures, including structural material and surrounding backfill.</p>	<p>No</p> <p>All waste generated in any phase of the proposed scheme will be handled, transferred and disposed of appropriately in accordance with the relevant waste management regulations/guidelines.</p>

Questions to be Considered	Y/N - Brief Description	Likely to Result in a Significant Effect? Y/N - Why?
5. Will the proposed scheme create a significant amount or type of pollution during its construction or operation?	<p>No</p> <p>Significant air, noise, water, or groundwater pollution is not anticipated.</p>	<p>No</p> <p>Construction management best practices will be implemented. It is anticipated that the proposed scheme will not result in the creation of a significant amount or type of pollution during the construction or operational phases</p>
6. Will the proposed scheme create a significant amount of nuisance during its construction or operation?	<p>Yes</p> <p>There are likely to be minor additional delays to commuters using the N8 as a result of temporary traffic management measures required to facilitate the construction of the proposed scheme.</p> <p>HGV movements to and within the proposed scheme will increase during construction.</p>	<p>No</p> <p>Effects will be temporary in nature at the construction phase is anticipated to be XX months in duration.</p> <p>The improvement in journey times, safety and connectivity are considered to be a positive improvement for people and economic development prospects in and around Cork.</p>
7. Could the risk of accidents, having regard to substances or technologies used be considered significant?	<p>Yes</p> <p>There is a risk of hydrocarbon and other dangerous substance contamination during construction and operation as a result of accidental spillage by vehicles using the proposed scheme.</p>	<p>No</p> <p>The likelihood of any accidents during construction and operation will be managed in accordance with relevant health and safety legislation and by the implementation of best practice construction management.</p> <p>The likelihood of an operational phase serious pollution incident is low.</p>

Questions to be Considered	Y/N - Brief Description	Likely to Result in a Significant Effect? Y/N - Why?
8. 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?	<p>Yes</p> <p>The eastern end of the proposed scheme is approximately 1.3km upstream of the Cork Harbour Special Protection Area (SPA) and approximately 1km upstream of the Douglas River Estuary proposed Natural Heritage Area (pNHA).</p>	<p>No</p> <p>An Appropriate Assessment Screening has been carried out which has concluded: It can be excluded, on the basis of objective scientific information, and in light of the conservation objectives of relevant sites, that the proposed works, either individually or in combination with other plans or projects, would have likely significant effects on any European site.</p> <p>See N8 Silversprings Junction Upgrade Scheme Appropriate Assessment Screening Report for further details.</p>

Questions to be Considered	Y/N - Brief Description	Likely to Result in a Significant Effect? Y/N - Why?
9. Are there any other areas on or around the location, which are important or sensitive for reasons of their ecology, e.g. wetlands, the coastal zone, mountains, forests or woodlands, which could be affected by the project?	<p>Yes</p> <p>There are no wetlands mountains, forests or woodlands, which could be affected by the proposed scheme.</p> <p>The eastern end of the proposed scheme is approximately 1.3km upstream of the Cork Harbour Special Protection Area (SPA) and approximately 1km upstream of the Douglas River Estuary proposed Natural Heritage Area (pNHA).</p>	<p>No</p> <p>An Appropriate Assessment Screening has been carried out which has concluded: It can be excluded, on the basis of objective scientific information, and in light of the conservation objectives of relevant sites, that the proposed works, either individually or in combination with other plans or projects, would have likely significant effects on any European site.</p> <p>See N8 Silversprings Junction Upgrade Scheme Appropriate Assessment Screening Report for further details.</p>
10. 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?	<p>Yes</p>	<p>No</p> <p>As the majority of the proposed Scheme will be constructed within the footprint of the existing roadway, there will be minimal need to remove any vegetation. Where any removal is needed it will be done between March and August inclusive, where practicable.</p>

Questions to be Considered	Y/N - Brief Description	Likely to Result in a Significant Effect? Y/N - Why?
11. Are there any inland, coastal, marine or underground waters on or around the location, which could be affected by the project?	Yes The River Lee flows parallel to the proposed scheme, approximately 50m south of the proposed scheme at its closest point. Surface water run-off from the road drains to an outfall into the River Lee.	No The small scale of the proposed scheme, and the fact that it is to be constructed almost entirely within the existing road footprint, means that there is minimal scope for impact to the river. The proposed scheme will not include changes to the existing surface water drainage system. Measures will need to be taken during construction to ensure that run-off from the construction activities (i.e. sediment) is not released into the existing drainage and does not discharge into the River Lee.
12. Are there any areas or features of high landscape or scenic value on or around the location, which could be affected by the project?	Yes Parts of the Tivoli Ridge area on the north side of the proposed scheme are designated as Areas of High Landscape Value. There are no protected views.	No The proposed scheme will not interact with any of the high value landscape to the north of the site. There are no impacts to anticipated.
13. 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?	No There are no recreational amenities immediately accessible from the section of road impacted by the proposed scheme.	No The proposed scheme will not impact any recreational locations or facilities.

Questions to be Considered	Y/N - Brief Description	Likely to Result in a Significant Effect? Y/N - Why?
14. Are there any transport routes on or around the locations which are susceptible to congestion or which cause environmental problems, which could be affected by the project?	Yes The proposed scheme is being developed to address an ongoing traffic congestion issue at the junction and to address road safety issues at this location.	No Reducing safety hazards related to traffic congestion is a primary objective of the proposed scheme. While the capacity of the junction is not being addressed as part of the proposed scheme, improvements to road layout to allow vehicles to safely avoid the queuing traffic at the exit for the Silversprings Overbridge will have benefits to the local environment, particularly to the local road users (drivers, cyclists and pedestrians).
15. Is the project in a location where it is likely to be highly visible to many people?	Yes The proposed scheme is situated in the north-east part of Cork City, which 2016 census data showed has a population of over 125,000. The specific electoral division in which the scheme is proposed (065 Tivoli B) had a population of over 2,700 in the 2016 census.	No The circa 1km proposed scheme represents an upgrade of an existing heavily trafficked urban road corridor.
16. Are there any areas or features of historic or cultural importance on or around the location, which could be affected by the project?	Yes There are no such features within the proposed scheme extents. However, there is a postbox (RMP Reg No 20864008) which is located in an area where new signage is to be erected.	No All proposed works are within the existing N8 carriageway or on acquired built land, at a distance from all known features of importance. The postbox will be protected from damage while the new signage is being put up.

Questions to be Considered	Y/N - Brief Description	Likely to Result in a Significant Effect? Y/N - Why?
17. Is the project located in a previously undeveloped area where there would be a loss of greenfield land?	<p>No</p> <p>The proposed scheme is part of the existing N8 national road.</p>	<p>No</p> <p>Proposed scheme to be constructed entirely within the existing N8 or adjacent hardstanding.</p>
18. 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?	<p>Yes</p> <p>There is a narrow section of land needing to be acquired from the HSS Hire commercial site as a result of the proposed scheme.</p> <p>There are also a number of residential and commercial properties located along the northern edge of the roadway. There will be no landtake required from any of these sites.</p>	<p>No</p> <p>The landtake will be 323m³ hectares in total, comprising only a small section of the overall site. Landowners will be compensated through the Compulsory Purchase Order (CPO) process.</p> <p>While no landtake is required from any other properties, their proximity to the proposed scheme may result in some temporary impacts during construction through increased traffic congestion, noise and dust. Measures to mitigate against these impacts will be in place during construction.</p>

Questions to be Considered	Y/N - Brief Description	Likely to Result in a Significant Effect? Y/N - Why?
19. Are there any plans for future land uses on or around the location, which could be affected by the project?	<p>No</p> <p>There are no known current plans in the vicinity of the proposed scheme. The Cork City Development Plan 2015-2021 includes objectives around redeveloping the Tivoli Docks and Industrial Estate area, including looking at the feasibility of developing it as a residential quarter.</p> <p>Cork City Council have begun the process of compiling a Local Area Plan for the Tivoli Docks area, which is south of the proposed scheme and accessed via the Silversprings Overbridge. However, the proposed LAP is not due to be finalised and published until 2018.</p>	<p>No</p> <p>There are no known current plans in the vicinity of the proposed scheme. The Tivoli Docks Issues Paper states that due to constraints at Tivoli, redevelopment would not be able to commence for 4-5 years.</p>
20. Are there any areas on or around the location, which are densely populated or built-up, which could be affected by the project?	<p>Yes</p> <p>The proposed scheme is situated in the north-east section of Cork City, which 2016 census data showed has a population of over 125,000. The specific electoral division in which the scheme is proposed (065 Tivoli B) had a population of over 2,700 in the 2016 census.</p>	<p>No</p> <p>The circa 1km proposed scheme represents an upgrade of an existing heavily trafficked urban road corridor.</p>

Questions to be Considered	Y/N - Brief Description	Likely to Result in a Significant Effect? Y/N - Why?
21. Are there any areas on or around the location that are occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project?	Yes There are a number of hotels and residential properties located in the vicinity of the proposed scheme.	No The temporary nature of the works and the fact that the proposed scheme is located on the existing N8 road, there will be no significant impact to any sensitive land uses.
22. Are there any areas on or around the location that contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals, which could be affected by the project?	Yes The River Lee runs parallel to the proposed scheme, approximately 60m south of the site at its closest point. The river is popular with anglers and rowers, with Lee Rowing Club based across the river from the proposed scheme. The proposed scheme is located approximately 1.3km up-river from Cork Harbour SPA and approximately 1km from Douglas River Estuary pNHA.	No There will be no changes to the current drainage system or increases in hardstanding areas as part of the proposed Scheme. There will be mitigation in place during the construction phase to prevent sediment from entering the existing drainage, and therefore entering the River Lee. There will therefore be no significant effect. See Appropriate Assessment for further details
23. Are there any areas on or around the location, that 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 There are no areas known of where the legal environmental standards have been exceeded.	No There will be no change to the existing drainage system required as part of the proposed scheme.

Questions to be Considered	Y/N - Brief Description	Likely to Result in a Significant Effect? Y/N - Why?
24. 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 Flooding	No The Lee Catchment Flood Risk Assessment and Management Study mapping concluded that there is a slight chance (1 in 200) of tidal flooding from the River Lee into the area of the proposed scheme in a given year. As the proposed project is a junction upgrade and traffic management scheme, largely within the existing road footprint, there will be no change to the flood risk as a result of the works. The risk of flooding is so small that it additional environmental problems are unlikely.

4. Conclusion

The proposed scheme does not exceed any of the thresholds that trigger the mandatory requirement for an EIA.

The proposed scheme was considered as sub threshold and was therefore assessed in accordance with the Criteria for Determining Whether or Not a Development Would or Would Not Be Likely to have Significant Effects on the Environment as specified in Article 27 of the European Communities (Environmental Impact Assessment) Regulations, 1989, in accordance with S. 50(1)(e) of the Roads Act, 1993.

Based on the assessment and information determined, the proposed scheme would not be likely to have significant impacts on the environment and the N8 Silversprings Junction Upgrade does not require an Environmental Impact Assessment.

Appendix A.

Figure 1 – Scheme Overview

