

**Road Safety Improvement Scheme** 

TII Ref: N60RN\_029.0

**Castlerea Safety Scheme Preliminary Design Report** 



Date: 01/09/2023



# Contents

1	Intro	oduct	tion	.4
2	Colli	ision	History	. 6
3	Safe	ty Ob	ojectives	. 6
4	Exist	ting C	Conditions	. 6
	4.1	Spee	ed	. 6
	4.2	Traf	fic Volumes	6
	4.3	Hori	zontal Alignment	. 6
	4.4	Vert	ical Alignment	. 6
	4.5	Cros	ss Section Crossfall & Superelevation	6
	4.5.3	1	Cross Section	. 6
	4.5.2	2	Crossfall	6
	4.5.3	3	Superelevation	6
	4.6	Junc	tions & Accesses	. 6
	4.7	Faci	lities for Vulnerable Road Users	. 7
	4.8	Visik	pility & Sightlines	. 7
5	Envi	ronm	nental, Archaeological and Other Constraints	. 7
	5.1	Арр	ropriate Assessment	.7
	5.2	Ecol	ogical Assessment	. 7
	5.3	Othe	er Environmental Surveys	. 7
	5.4	Arch	naeological Constraints	. 7
6	Prop	oosec	Design	. 7
	6.1	Gen	eral	. 7
	6.2	Land	d Acquisition	. 7
	6.3	Hori	zontal Alignment	. 8
	6.4	Vert	ical Alignment	. 8
	6.5	Cros	ss Section Crossfall & Superelevation.	8
	6.5.3	1	Cross Section	. 8
	6.5.2	2	Crossfall	. 8
	6.5.3	3	Superelevation	. 8
	6.6	Faci	lities for Vulnerable Road Users	. 8
	6.7	Junc	tions & Accesses	. 8
	6.8	Visik	pility and Sightlines	. 8

	6.9	Drainage	. 8
	6.10	Pavement	.8
	6.11	Safety Barrier Risk Assessment and Provision	. 8
	6.12	Traffic Signs and Road Markings	.8
	6.13	Accommodation Works	.9
	6.14	Lighting	.9
	6.15	Departures from Standard	.9
7	Road	l Safety Audit	.9
8	Tota	I Scheme Budget	.9
9	Proje	ect Appraisal Balance Sheet	.9
A	opendix	A – Site Photos	10
A	opendix	B – Design Drawings	14
A	opendix	C – Quality Audit & Road Safety Audit	28
A	opendix	D – Cost Estimate	iii
A	opendix	E – PABS	iv
A	opendix	F - Departures from Standard	. v
A	opendix	G – AA Screening Report	iv

### **1** Introduction

Roscommon County Council in conjunction with TII has identified the urban area of Castlerea town as a high-risk location for road collisions. Various sections of the N60 through Castlerea town have a history of serious, minor injury and material damage collisions.

This section of road was assessed under HD15 previously in 2014. Analysis of collision specifics would indicate that a pattern of pedestrian type collisions are occurring at this location. Road collision data available on the Road Safety Authority Database, within the period 2017 to 2020, indicate that 5 no. minor collisions have occurred along the Main street and St Patricks Street. The Main Street and Patrick Street are relatively busy commercial streets and with on street parking throughout the town passing widths are confined particularly for commercial vehicles and visibility can be poor for pedestrians trying to cross at various locations on the two main streets.

Roscommon County Council Road Design Office are creating this preliminary design report to provide details on works to be carried out to remedy the problem and make Castlerea Urban area a safer environment for pedestrians and vulnerable road users. This preliminary design report has been prepared to recommend infrastructure that will address all the safety concerns highlighted in the Feasibility & Options report.

The study area is defined as the N60, mainly Patrick St & Main St and its junction with regional road R361 in the urban centre of the village of Castlerea, County Roscommon. It's a 50km/h speed zone. For the purpose of this report the N60/R361 junction is identified as priority junction 1 and the N60/Patrick St has been identified as priority junction 2.

The proposed scheme has been assessed under the HD15 Review of NRA High Collision Locations and is identified as a site having a collision rate threshold of twice the average for National roads therefore needing further assessment of collisions to identify if there is a treatable Engineering solution. The scheme identification is Type A.



# **Priority Junction 1**

## **Priority Junction 2**



# Pedestrian Safety Priorities to be addressed on main street to address HCL locations



Site extents cover Patrick St & Main St. Junction operation and pedestrian safety along this section to address the HCL as detailed on the above map and table below. Site photos are shown in Appendix A and preliminary design drawings are detailed in Appendix B.

### 2 Collision History

No further collision analysis has been carried out since the production of the Feasibility and Options Report.

## **3** Safety Objectives

- To provide a safe & efficient means for pedestrians and vulnerable roads users to make their way across the main street & junctions.
- Prevent vehicles mounting the footpaths and endangering pedestrians
- Force vehicles to slow down more when driving through the town centre

### 4 Existing Conditions

#### 4.1 Speed

The N60 – Patrick St/Main St is within the 50 km/hr built up area speed limit zone.

#### 4.2 Traffic Volumes

Traffic Counts were taken from on the two main junctions as part of the feasibility study. Traffic is in the order of 3000 vehicles per day in each direction.

#### 4.3 Horizontal Alignment

It is not proposed to alter the existing horizontal alignment.

#### 4.4 Vertical Alignment

The N60 is relatively level on Main Street. The N60 (Patrick Street) has a constant grade of 2.7% on approach to the junction. It is not proposed to alter the existing Vertical Alignment.

#### 4.5 Cross Section Crossfall & Superelevation

#### 4.5.1 Cross Section

The existing Cross section of the N60 is a single carriageway through the town of Castlerea. The average carriageway width on Patrick Street is approximately 7.5m while the carriageway width on Main Street varies from 7.5m - 9.4m. The majority of Main Street has on street parking on one side so in some instances the usable road width is down to 5.4m. Cross sections and available road widths are shown in Appendix B – Design Drawings.

#### 4.5.2 Crossfall

There is normal crossfall (2.5%) from the centreline of both the N63 and the R371 on approach to the junction.

#### 4.5.3 Superelevation

Not Applicable.

#### 4.6 Junctions & Accesses

The study area is defined as the N60, mainly Patrick St & Main St and its junction with regional road R361 in the urban centre of the village of Castlerea, County Roscommon. It's a 50km/h speed zone. For the purpose of this report the N60/R361 junction is identified as priority junction 1 and the N60/Patrick St has been identified as priority junction 2. Both junctions are considered to have inadequate crossing facilities for pedestrian's particularly vulnerable road users.

There are various off street access laneways contained within the study are that present challenges for pedestrians using the footpaths in Castlerea.

### 4.7 Facilities for Vulnerable Road Users

The junction between Patrick Street and Main Street is a fairly constricted and its current geometry coupled with on street parking makes it difficult for HGVs to navigate the junction without mounting the nearside footpath. This creates a hazardous situation for all road users' particularly vulnerable road users. The junction between the R361 and Main Street has no actual designated crossing points, crossing lengths are long and visibility is restricted for drivers trying to navigate the junction which makes it more hazardous for vulnerable road users. There are also no designated crossing facilities along Main Street so crossing safely can be difficult in peak traffic.

### 4.8 Visibility & Sightlines

Due to the current junction geometry visibility is restricted for drivers on both of the main junctions.

## 5 Environmental, Archaeological and Other Constraints

### 5.1 Appropriate Assessment

Appropriate Assessment screening for this project has been carried out and has concluded that either alone or in combination with other plans or projects, there would be no likely significant effects on any European Sites. The Appropriate Assessment screening report is detailed in Appendix G.

#### 5.2 Ecological Assessment

The requirement for further ecological assessment for this project will be determined by the consultant once appointed.

#### 5.3 Other Environmental Surveys

The requirement for further environmental surveys for this project will be determined by the consultant once appointed.

### 5.4 Archaeological Constraints

Archaeological Assessments for this project will be determined by the consultant once appointed.

### 6 Proposed Design

#### 6.1 General

The proposed design will provide a much safer environment for pedestrians and vulnerable road users in Castlerea by introducing various engineering measures that will enable the two main junctions in the town to operate more efficiently. This is to be achieved by installing signal controlled junctions & pedestrian crossing facilities at both locations. We are also proposing to install a number of new zebra crossings at locations where pedestrian desire lines are currently leading to a high level of uncontrolled street crossings. Pedestrian crossing facilities that are currently in place in the town at Patrick St near the church and on Main St are to be upgraded to current standards as part of the proposed scheme.

#### 6.2 Land Acquisition

Not Applicable.

### 6.3 Horizontal Alignment

The horizontal alignment follows the existing centreline of the N60.

#### 6.4 Vertical Alignment

The vertical alignment will broadly match the existing vertical alignments of Patrick St & Main St

#### 6.5 Cross Section Crossfall & Superelevation.

#### 6.5.1 Cross Section

Typical cross sections are shown in Appendix A.

#### 6.5.2 Crossfall

The current crossfall will not be altered as result of the proposed scheme.

#### 6.5.3 Superelevation

Not Applicable.

#### 6.6 Facilities for Vulnerable Road Users

New junction layout will improve facilities for vulnerable road users by reducing road widths and introducing tactile paving, providing controlled crossing points along Main Street and signalising the busy junctions. All proposed works are to be in accordance with DMURS.

#### 6.7 Junctions & Accesses

Both of the main junctions are to be signalised under the proposed scheme. The design will incorporate pedestrian crossing facilities on all arms of each junction. An access point at one of the junctions is to be closed off to enable the signalised junction to operate efficiently.

#### 6.8 Visibility and Sightlines

Visibility is poor for drivers at both junctions which puts pedestrians in a more vulnerable situation as there is potential for drivers to be distracted and focused by oncoming traffic and not on pedestrians trying to cross the road.

#### 6.9 Drainage

At the junction's kerbs and gullies will be provided. The capacity of the existing drainage system was checked and there is sufficient capacity to cater for surface water. There are no extra quantities of surface water associated with the new arrangement.

#### 6.10 Pavement

It is not anticipated to carry out any significant pavement renewal as part of this project, the existing pavement has been upgraded recently.

#### 6.11 Safety Barrier Risk Assessment and Provision

#### Not Applicable

#### 6.12 Traffic Signs and Road Markings

It is proposed to replace/relocate the existing signage as required by the detailed design in accordance with TII standards.

### 6.13 Accommodation Works

The detailed design will identify any/all accommodation works required to facilitate the scheme as proposed.

### 6.14 Lighting

No alterations to lighting at existing junctions is proposed however this will be reviewed at detailed design stage.

### 6.15 Departures from Standard

A departure will be required to implement the signalisation of the junction between Patrick Street and Main Street. Intervisibility will be compromised if the signalised junction is installed. This can be seen on Drawing 002 in Appendix B.

### 7 Road Safety Audit

A Combined Stage 1&2 Road Safety Audit has been carried out. This report is included as part of the overall Quality Audit of the scheme and is detailed in Appendix C.

### 8 Total Scheme Budget

The cost estimate for the scheme in the Feasibility and Options Report approved at Gateway 1 was €727,500 including VAT. A cost estimate has been prepared and a breakdown of the estimate is provided in Appendix D of this report.

### 9 Project Appraisal Balance Sheet

A project appraisal balance sheet is included in Appendix E.

# Appendix A – Site Photos

# **Priority Junction 1**



Junction with Main St/Frenchpark Rd



T Junction, right turning lane on 2 legs

**Priority Junction 2** 



Main St Junction/St Patricks Street



St Patricks Street Junction/ Main St

Pedestrian Priority Locations to be addressed



1. Upgrade existing zebra crossing at the church – Drawing 003



2. Upgrade existing Puffin Crossing on Main Street - Drawing 004



3. Proposed Zebra Crossing on Main St bridge - Drawing 005



4. Proposed Zebra Crossing at SUPERVALU - Drawing 006

Appendix B – Design Drawings





LEGEND:	Å
	S EXISTING KERB
	PROPOSED KERB
	TACTILE BLISTER PAVINGS
	PROPOSED PARKING SPAACES
	PROPOSED BUILD OUTS
0	COMBINED BELISHA BEACON AND LIGHT
	PROPOSED ACO CHANNELS
GY	EXISTING GULLY TO BE RETAINED
GY	PROPOSED GULLY TO
	EXISTING INSPECTION CHAMBER
	TO BE RETAINED
	SADDLE CONNECTION TO EXISTING STORM DRAINAGE SYSTEM
	Saint Patrick's Church
erea Pedestriar Zebra Crossir	n Safety Project 2022 Ing on St. Patrick Street
	Am         Tuesday, May 24, 2022         Dealsr Ac: R8-2022-CPSP-002           M. West

-Raised Platform Puffin Crossing with road markings as per Chapter 7

S

3 parking spaces will be lostincluding the existing disabled space. The existing parking widths are too narrow for a designated space

> There are no proposed change toparking bay widths or road widths.

#### Note

Upgrade existing Puffin crossing Upgrade existing Traffic Lights Apply road markings as per Chapter 7 Replace existing build out to comply with Chapter 7. Please take note of TII Pedestrian/Driver visibility standards chapter 9, DN-GEO-03084 Prior to construction the effect of the build out on drainage will need to be determined and addition drainage designed if required.

			(m)		State State	Castler
An Roing lompair	ROSCOMMON COUNTY COUNCIL Boats Design Section.	1	***	~~		Existing P
Turasóireadhta agus Spóirt	Aras an Chontae, Roscorsmon.	12 V 2-				+++ 1:250
Department of Transport,	MCN Mr. State Terrar, Director of Roads & Transportation,					Onto -
Tourism and Sport	Planning and Dayle MD Area Manager.	W Startinger	-	-	26 26	























# Appendix C – Quality Audit

### Contents

6	Road Safety Audit Error! Bookmark not defin	ed.
5	Street Design Audit	. 30
4	Proposed Design	. 30
3	Scheme Objectives	. 30
2	Safety Priorities to be addressed on Main Street to address HCL locations	. 29
1	Introduction	. 28

## Introduction

Roscommon County Council in conjunction with TII has identified the urban area of Castlerea town as a high-risk location for road collisions. Various sections of the N60 through Castlerea town have a history of serious, minor injury and material damage collisions.

The study area is defined as the N60, mainly Patrick St & Main St and its junction with regional road R361 in the urban centre of the village of Castlerea, County Roscommon. It's a 50km/h speed zone. For the purpose of this report the N60/R361 junction is identified as priority junction 1 and the N60/Patrick St has been identified as priority junction 2.

The proposed scheme has been assessed under the HD15 Review of NRA High Collision Locations and is identified as a site having a collision rate threshold of twice the average for National roads therefore needing further assessment of collisions to identify if there is a treatable Engineering solution. The scheme identification is Type A.

This section of road was assessed under HD15 previously in 2014. Analysis of collision specifics would indicate that a pattern of pedestrian type collisions are occurring at this location. Road collision data available on the Road Safety Authority Database, within the period 2017 to 2020, indicate that 5 no. minor collisions have occurred along the Main street and St Patricks Street. The Main Street and Patrick Street are relatively busy commercial streets and with on street parking throughout the town passing widths are confined particularly for commercial vehicles and visibility can be poor for pedestrians trying to cross at various locations on the two main streets.

Roscommon County Council Road Design Office are preparing this Quality Audit to demonstrate that appropriate consideration has been given to all of the relevant aspects of the design.

The Quality Audit process seeks to integrate existing auditing processes, such as the Road Safety Audit, and expand the utilisation of several other multidisciplinary audits, assessments and approaches into street design. This approach is set out in the Design Manual for Urban Streets and Roads.

Quality Audits generally consist of a number of individual and overlapping audits or assessments that inform the Design Process and aid decision making and problem solving.

The key benefits of a Quality Audit are: -

• A transparent process that demonstrates that the needs of all user groups and the design objectives are being considered.

- Enables the projects objectives to be delivered by putting in place a check procedure.
- Contributes to cost efficiency in design and implementation.
- Encourages engagement with stakeholders.

The Quality Audit Report should summarise the issues raised within each individual audit or assessment used to inform the design process, identify any potential conflicts between audits or assessments and propose solutions. All solutions should be measured against the main objectives of the scheme/project and presented as a series of recommendations and decisions.

A Quality Audit involves various assessments of the impacts of a street scheme in terms of road safety, visual quality and the use of streets by the community. Access for disabled people, pedestrians, cyclists and drivers of motor vehicles is considered.

DMURS states that Quality Audits should consist of the following parts:

• DMURS Street Design Audit

m• Individual Design Audits

Quality Audit Report



## Safety Priorities to be addressed on Main Street to address HCL locations

Site extents cover Patrick St & Main St. Junction operation and pedestrian safety along this section to address the HCL as detailed on the above map and table below. Individual proposed works drawings are detailed in Appendix A.

# **Scheme Objectives**

- To provide a safe & efficient means for pedestrians and vulnerable road users to make their way across the main street & junctions.
- Prevent vehicles mounting the footpaths and endangering pedestrians
- Force vehicles to slow down more when driving through the town centre

# **Proposed Design**

The proposed design will provide a much safer environment for pedestrians and vulnerable road users in Castlerea by introducing various engineering measures that will enable the two main junctions in the town to operate more efficiently. This is to be achieved by installing signal controlled junctions & pedestrian crossing facilities at both locations. We are also proposing to install a number of new zebra crossings at locations where pedestrian desire lines are currently leading to a high level of uncontrolled street crossings. Pedestrian crossing facilities that are currently in place in the town at Patrick St near the church and on Main St are to be upgraded to current standards as part of the proposed scheme.

# **Street Design Audit**

1.0 Connectivity -					
Key Issues Key DMURS Reference		Design Response			
Strategic routes/major desire lines been identified and are clearly incorporated into the design.	<ul> <li>3.1 – Integrated</li> <li>Street Network</li> <li>3.2.1 – Movement</li> <li>Function</li> <li>3.3.1 – Street</li> <li>layouts</li> <li>3.3.4 - Wayfinding</li> </ul>	The proposed design will provide a much safer environment for pedestrians and vulnerable road users in Castlerea by introducing various engineering measures that will enable the two main junctions in the town to operate more efficiently.			
Multiple points of access are provided to the site/place, in particular for sustainable modes.	3.3.1 – Street Layouts	The proposed design limits access to the main junction by closing off an access road. Sightlines are currently very poor and an alternative access is available. This will improve the overall operation of the junction and will also minimise the potential for conflict points between motorised road users, cyclists and pedestrians.			

Accessibility throughout the site is maximised for pedestrians and cyclists, ensuring route choice.	3.3.1 – Street Layouts 3.3.2 – Block Sizes 3.4.1 – Vehicle Permeability	The design significantly improves movement through the main junctions for pedestrians and cyclists and creates a much safer environment right through the town centre for vulnerable road users. Designated pedestrian crossings are being introduced based on pedestrian desire lines & signalised crossings are provided at junctions. The introduction of raised pedestrian crossing facilities will have an overall effect of slowing down the through traffic thereby creating a much safer environment for cyclists.
Through movements by private vehicles on local streets are discouraged by an appropriate level of traffic calming measures.	3.2.1 – Movement Function 3.2.3 – Place Context 3.4.1 – Vehicle Permeability	Junction upgrades within the space available have been designed to optimise the movement of traffic through the junctions in a safe manner by signalising the two main junctions on the N60. Focus has been given in design to providing connectivity and accessibility demands of pedestrians while design and landscaping proposals promote the importance of the place. Design elements within the scheme will reduce vehicle speeds and increase ease of movement for more vulnerable road users
2.0 Self-Regulating Str	reet Environment -	
Key Issues	Key DMURS Reference	Design Response
A suitable range of design speeds have been applied with regard to context and function.	<ul> <li>3.2.1 – Movement Function.</li> <li>3.2.2 – Place Context. 4.1.1 – A Balanced Approach to Speed</li> </ul>	The geometric design parameters and traffic calming measures included in the design aim to lower operational speeds and create a main street that is more appealing to pedestrians and cyclists.
The street environment will facilitate the creation of a traffic calmed environment via the use of 'softer' or passive measures.	<ul> <li>4.2.1 – Building Height and Street Width</li> <li>4.2.2 – Street Trees</li> <li>4.2.3 – Active Street Edges</li> <li>4.2.4 – Signage and Line Marking 4.2.7 – Planting</li> <li>4.4.2 – Carriageway Surfaces</li> <li>4.4.9 - On-Street Parking Advice</li> </ul>	Introduction of signalised junctions and raised table crossings will regularise the operation of the two main junctions and have an overall traffic calming effect on the main street. It is proposed to remove some on- street parking to facilitate the introduction of signalised junctions. Extensive road markings are proposed throughout the scheme to help narrow active carriageway widths, discourage illegal parking manoeuvres and vehicle speeds

	Transitions and	
A suitable range of design standards/measures have been applied that are consistent with the applied design speeds.	Gateways 4.4.1 - Carriageway Widths 4.4.4 – Forward Visibility 4.4.5 – Visibility Splays 4.4.6 – Alignment and curvature	Design standards as outlined in DMURS have been adopted to improve the operation of the two main junctions. DMURS has been used as the defining document when determining carriageway widths, road geometry, junction design and providing for pedestrians and cyclists.
	4.4.7 – Horizontal and Vertical Deflections Advice Note 1 – Transitions and Gateways	
3.0 Pedestrian & Cycli	ing Environment -	
Key Issues	Key DMURS Reference	Design Response
The built environment contributes to the creation of a safe	4.2.1 – Building Height and Street Width 4.2.3 – Active Street Edges	Introduction of signalised junctions and raised table crossings will regularise the operation of the two main junctions and have an overall traffic calming effect on the main street. Pedestrian crossing
and comfortable pedestrian environment.	4.2.5 – Street Furniture 4.4.9 - On-Street parking	
Junctions been designed to ensure the needs of pedestrians and cyclists are prioritised.	<ul> <li>4.3.2 - Pedestrian</li> <li>Crossings</li> <li>4.3.3 - Corner Radii</li> <li>4.4.3 - Junction</li> <li>Design</li> </ul>	The proposed design will provide a much safer environment for pedestrians and vulnerable road users in Castlerea by introducing various engineering measures that will enable the two main junctions in the town to operate more efficiently. Pedestrian crossings are to be added to cater for all desire line movements.
Footpaths are continuous and wide enough to cater for the anticipated number of pedestrian movements.	<ul> <li>3.2.1 – Movement Function.</li> <li>3.2.3 – Place Context.</li> <li>4.2.5 – Street Furniture</li> <li>4.3.1 - Footways,</li> </ul>	Part of the reason for the scheme as proposed is to significantly reduce the amount of vehicles driving on the footpath. This presents a very dangerous situation for VRU's and is to be addressed as part of the proposed scheme.
	Verges and Strips 4.3.2 - Pedestrian Crossings	

The particular needs of visually and mobility impaired users been identified and incorporated in the design.	<ul> <li>4.2.5 - Street</li> <li>Furniture</li> <li>4.3.1 - Footways,</li> <li>Verges and Strips</li> <li>4.3.2 - Pedestrian</li> <li>Crossings</li> <li>4.3.4 -</li> <li>Pedestrianised and</li> <li>Shared Surfaces</li> </ul>	The Designer has been cognisant of the use of tactile paving, kerbing at shared surfaces, pedestrian crossings and height changes between areas in the proposed design to consider needs of visually and mobility impaired users. Crossing points are being designed to ensure access for all
Cycling facilities will cater for cyclists of all ages and abilities.	<ul> <li>3.2.1 – Movement Function.</li> <li>3.2.3 – Place Context.</li> <li>4.3.5 - Cycle facilities.</li> </ul>	Given width constraints and the focus on prioritising pedestrian facilities space is not available within the study area to provide an offline cycle facility. Cyclists will share the carriageway with motorised road users. The designer notes that no cycle facilities exist on the N60 main street and that provision of offline or cycle lane facilities is not possible due to the constrained lane widths in the town.
4.0 Visual Quality -		
Key Issues	Key DMURS Reference	Design Response
The landscape plan responds to the street hierarchy and the value of the place	<ul> <li>3.2.1 – Movement Function.</li> <li>3.2.3 – Place Context.</li> <li>4.2.2 – Street Trees</li> <li>4.2.7 – Planting Advice Note 1 – Transitions and Gateways</li> </ul>	TOBIN Consulting Engineers have liaised with the Conservation Department of Roscommon County Council and Archaeology sections to ensure that the landscape plan is in keeping with the Planning specifications of the area.
Street furniture is orderly placed.	<ul> <li>3.2.1 – Movement Function.</li> <li>3.2.3 – Place Context.</li> <li>4.2.5 - Street Furniture.</li> <li>4.3.1 - Footways, Verges and Strips</li> </ul>	Street Furniture will be placed cognisant of pedestrian desire lines, footpath widths and likely use of available space within the scheme extents
The use of signage and line marking has been minimised	<ul> <li>3.2.1 – Movement</li> <li>Function.</li> <li>3.2.3 – Place</li> <li>Context.</li> </ul>	Appropriate levels of signage and delineation in accordance with current standards are being included as part of the design process.

	4.2.4 - Signage and Line Marking.		
Materials and finishes used throughout the scheme have been selected from a limited palette and respond to the value of the place 4.2.6 - Materials and Finishes 4.2.8 - Historic Contexts. 4.3.2 - Pedestrian Crossings 4.4.2 - Carriageway Surfaces Advice Note 2 - Materials and Spacifications		Materials and finishes will be chosen at detailed design stage. Full consideration will be given to construction guidance as outlined in DMURS Advice Note 2 – Materials and Specifications to ensure that appropriate surface and sub-surface materials and construction are implemented The Design team are engaging with Roscommon County Council Architectural and Conservation departments along with planners to ensure a design in keeping with the area.	
6.0 Additional Commo	ents -		
7.0 Personnel Informa	ation -		
	Name	Date	Signature
Prepared By	John Freeman	15/08/20023	John freeman
Designer	Roscommon County Council	15/08/2023	

# Road safety Audit

# Stage 1/2 Road Safety Audit, Pedestrian Safety Scheme, Castlerea, Co. Roscommon,

### **Document Control Sheet**

Client:	Roscommon County Council
Document No:	230879-ORS-XX-XX-RP-TR-13g-001

Revision Status		Author:	Reviewed by:	Approved By:	Issue Date
P01	S2	MG	AP	DMcC	30/06/2023

### **Table of Contents**

Introduction	2
Description of the Proposed Development	4
Problems Raised from the Road Safety Audit	5
Audit Team Statement 17 Appendix A – Inspected	
Documents	18
pendix B – Designer Response Form	19
pendix C – TII Approval	20
	Introduction Description of the Proposed Development Problems Raised from the Road Safety Audit Audit Team Statement 17 Appendix A – Inspected Documents pendix B – Designer Response Form pendix C – TII Approval
#### Introduction

This report documents the findings of a Stage 1/2 Road Safety Audit (RSA) carried out with respect to Pedestrian Safety Scheme in Castlerea, Co. Roscommon.

The audit team conducted the site visit on Tuesday the 20<sup>th</sup> of June 2023. The audit was carried out in the offices of ORS on Friday the 23<sup>rd</sup> of June 2023.

The audit team comprised of the following people:

Audit Team Leader:

Adam Price BEng (Hons), CEng, MIEI

Audit Team Member:

David McCormack: BEng (Hons), Dip Eng., CEng, MIEI

Audit Team Observer:

Mark Gallagher AEng MIEI

During the site visit the weather was dry. The road surface was dry, and the traffic levels were noted to be moderate across the audit period.

Previous Road Safety Audits were not available for review. The audit team reviewed the following documents and drawings provided by Roscommon County Council.

- (1) RS\_2022-CPSP-001 Street Layout
- (2) RS\_2022-CPSP-002 Existing Zebra Crossing on St. Patrick Street
- (3) RS\_2022-CPSP-003 Existing Puffin Crossing on Main Street
- (4) RS\_2022-CPSP-004 Proposed Zebra Crossing on Main Street at Bridge near Mart
- (5) RS\_2022-CPSP-005 Proposed Zebra Crossing on Main Street at Supervalu
- (6) RS\_2022-CPSP-006 Proposed Zebra Crossing on Main Street at Kieran Madigan
- (7) RS\_2022-CPSP-009 Proposed Alterations to Road Markings on St. Patrick Street
- (8) RS\_2022-CPSP-010 Junction of N60 and R337 Traffic Light Layout
- (9) RS\_2022-CPSP-010-ATR01 Junction of N60 and R337 Traffic Light Layout
- (10) RS\_2022-CPSP-010-ATR02 Junction of N60 and R337 Traffic Light Layout
- (11) RS\_2022-CPSP-010-ATR03 Junction of N60 and R337 Traffic Light Layout
- (12) RS\_2022-CPSP-012 Junction of N60 and R361 Traffic Light Layout
- (13) RS\_2022-CPSP-012-ATR01 Junction of N60 and R361 Traffic Light Layout (14) RS\_2022-CPSP-012-ATR02 Junction of N60 and R361 – Traffic Light Layout.

Documents/Information not supplied.

- Speed Survey
- Traffic Count Data
- Departures from Standards.

The terms of reference / procedure for the Audit were as per the relevant sections of the **Transport Infrastructure Ireland Road Safety Audit Standard GE-STY-01024**. The audit examined only those issues within the design relating to the road safety implications of the scheme and has therefore not examined or verified the compliance of the designs to any other criteria. The Road Safety Audit should not be treated as a design check.

The problems identified and described in this report are considered by the Audit Team to require action to improve the safety of the development and minimise accident occurrence.

All comments, references and recommendations in this safety audit are in respect of the review of information supplied by Roscommon County Council.

#### Description of the Proposed Development

The proposed development put forward by Roscommon County Council is to provide pedestrian safety measures in various locations around Castlerea, Co. Roscommon

The proposed scheme aims to enhance infrastructure for pedestrians within Castlerea and to reduce vehicle speeds. It encompasses various elements such as road narrowing/altered road markings, alterations to existing crossing points, zebra crossing points, alterations to existing puffin crossing points, and new roundabout, road markings, and signage. The speed limit along the within Castlerea is 50 km/h.

Please refer to **Figure 2.1** below for the proposed scheme masterplan prepared by Roscommon County Council.



Figure 2.1: Site Masterplan (Source: Roscommon County Council)

#### 9.0 Problems Raised from the Road Safety Audit

The following are problems and recommendations to address the safety issues associated with the proposal. The recommendations are proposed to the designer of the scheme to reduce any safety risks associated with it.

#### 9.1 Potential Problems Identified

#### **Problem No.01: Substandard Parking Facilities**

#### Location: Outside of Coyle Environmental (Drawing No. RS-2022-SPSP-003)

The audit team note that it is intended to provide a larger build out to the existing crossing location outside of Coyle Environmental. The audit team note that the designated parallel parking bay is being removed as part of the new works. It is not clear form the drawings if this parking bay and other parking bays affected will be replaced. This could result wheelchair users parking in standard parking bays and not having sufficient clearance to both enter and exit the vehicle safely. It is also not clear if the existing parking spaces are being reduced to 2.48m. This could result in users of the space exiting the car into the driving lane. This could result in potential conflict with vehicles in both the parked spaces and on the driving lane.



#### **Recommendation:**

The design team should detail the revised parking arrangements as a result of the new island build-out. The design team should also provide detail of the location of associated dropped kerbs for the relocated wheelchair designated parking space. The design team should also ensure that revised parking arrangements are detailed on the drawings and should also ensure they are of appropriate standard for designated usage.

## ORS Problem No.02: Location:

#### **Footpath Widths**

#### Proposed Zebra Crossing on Main Street at Bridge (Drawing No. RS-2022-

#### **SPSP-004**)

The audit team note from the site visit and drawings provided that footpath widths are less than 1.7m at the location of the proposed crossing point. The audit team are concerned that the narrow footpath widths will restrict the passage of vulnerable users and will force users into the roadway to pass one another which could increase the risk of conflict with motorists and/or trip and falls. This could result in injury to vulnerable users should a collision with a vehicle or a trip and fall occur.



#### **Recommendation:**

The design team should reposition this crossing to an alternative location where appropriate footpath widths are available.



## Kerb Heights Proposed Zebra Crossing on Main Street at Bridge (Drawing No. RS-2022-

#### **SPSP-004**)

The audit team note from the drawing that the kerbs are not being replaced as part of the proposed crossing. The crossing itself does not detail if it is a raised table crossing and the audit team are concerned that there would be a step down from the path to the crossing point and this could lead to trips and falls for vulnerable users. This could result in injury to vulnerable users.



## ORS Problem No.04:

Location:

#### **Recommendation:**

The design team should ensure that appropriate kerbing or infrastructure is provided at crossing points to mitigate the safety risk identified.

#### **Kerb Heights**

#### Proposed Zebra Crossing on Main Street at SuperValu (Drawing No. RS-2022-

#### **SPSP-005**)

The audit team note from the drawing that the kerbs on the southern side are not being replaced as part of the scheme. The crossing itself does not detail if it is a raised table crossing. The audit team are concerned that there would be a step down from the path to the crossing point and this could lead to trips and falls for vulnerable users.

## ORS Problem No.05: Location:



#### **Recommendation:**

The design team should ensure that appropriate kerbing or infrastructure is provided at crossing points to mitigate the safety risk identified.

#### **Parallel Parking Spaces Width**

#### Parallel Parking Spaces on Main Street at SuperValu (Drawing No. RS-2022-

#### **SPSP-005**)

The audit team note from the drawing that the parking spaces to the southeast of the proposed build out is noted as 2.36m wide. The audit team are concerned that these parking spaces are less than the

## ORS Problem No.06: Location:

minimum which could lead to parked cars being close to the driving lane which could lead to a narrowing of the driving lane. It also does not allow sufficient clearance for a person exiting the vehicle.



#### **Recommendation:**

The design team should provide adequately sized parallel parking spaces to ensure sufficient clearance distances are achieved.

### 6: Kerb Height at Crossing Points and Tactile Paving Controlled Crossings on N60 & R377 Main Street (Drawing No. RS-2022-SPSP-

#### 010)

The audit team note from drawing that the kerbs at all crossing points are not being replaced as part of the scheme. The crossings all appear to be on-road crossings with no formal tactile paving shown on any of the crossing points. The audit team are concerned that there would be a step down from the path to the crossing points and this could lead to trips and falls for vulnerable users and with no provision of tactile paving that there would be no awareness of a crossing point by visually impaired users. This could result in injury to vulnerable users should a collision with a vehicle occur.



#### **Recommendation:**

The design team should provide details of dropped kerbs, tactile paving, and all appropriate provisions for vulnerable users are provided for at all crossing points.

# 07: Tie in with Existing Footpaths & Carriageway N60/R361 (Drawing No. RS-2022-SPSP-012)

The audit team note from drawings that there are no tie ins with the existing footpaths and carriageways in the vicinity of the proposed junction upgrade. The audit team are concerned about the lack of detail on the proposed plans and as such the audit team is unable to assess the safety risk associated with the proposal at the identified locations.



#### **Recommendation:**

The design team should also ensure that the existing carriageway, footpaths, and accesses are appropriately tied into the proposed scheme.

## 08: Relocation of Existing Street Furniture and Street Parking N60/R361 (Drawing No. RS-2022-SPSP-012)

The audit team note from the drawings that there is no detail in relation to existing street furniture and relocation of same. The audit team also note that there is existing street parking detailed on the drawings which is within the junction which could create a serious safety risk for users. The audit team are concerned about the lack of detail on the proposed plans in relation to the above and as a result the audit team is unable to assess the safety risk associated with the proposal.



#### **Recommendation:**

The design team should ensure that existing and proposed street furniture is clearly detailed on the proposed plans and appropriately positioned so they do not create a hazard for vulnerable users.

The design team should also ensure that any existing parking is relocated and detailed outside of the junction area to mitigate the safety risk identified.

# 09: Laneway to the South of the Junction N60/R361 (Drawing No. RS-2022-SPSP-012)

The audit team note from the site visit and the drawing that the laneway to the south of the junction is not shown. It is noted from the site visit that 2No. vehicles entered and exited this laneway. This laneway leads to the rear of the premises and a car park. There is also an exit entry/exit point further east. The audit team are concerned that if this is not addressed it could lead to conflicts with vehicles on the proposed junction who may not be aware of this arm of the roundabout. Pedestrians may also not be aware of this arm if it is not formally addressed with a crossing point which could lead to vulnerable road users walking into the line of oncoming traffic.



#### **Recommendation:**

The design team should detail how they propose to detail this arm for both vehicles and vulnerable road users. If achievable, access to this lane from the main junction should be removed.

# 10: Kerb Height at Crossing Points and Tactile Paving N60/R361 Crossing Points (Drawing No. RS-2022-SPSP-012)

The audit team note from drawing that the crossings all appear to be on-road crossings with no formal tactile paving shown on any of the crossing points. The audit team are concerned that there would be a step down from the path to the crossing points and this could lead to trips and falls for vulnerable users and with no provision of tactile paving that there would be no awareness of a crossing point by visually impaired users. This could result in injury to vulnerable users should a collision with a vehicle occur.



#### **Recommendation:**

The design team should provide details of dropped kerbs, tactile paving, and all appropriate provisions for vulnerable users are provided for at all crossing points.

#### Problem No. 11: Signage & Road Markings

#### **Location: At all Locations**

The audit team note that there is a lack of signage and markings on the drawings provided. Signage and markings aid in informing road users of the direction of travel and presence of vulnerable road users and ramps. Inadequate signage and road markings may result in vehiclevehicle or vehicle-cycle conflicts causing injury.

#### **Recommendation:**

The design team should ensure that signage and road markings are provided in line with the applicable Road Traffic Sign Manual.

#### Problem No.12: Drainage

#### Location: At all Locations

The audit team note from the drawings provided that there is no provision for drainage channels/ gully positions for the proposed stormwater network throughout the proposed development. Inadequate gully positioning may lead to issues of ponding in areas of the development which poses a risk of slips, trips or falls to vulnerable road users.

#### **Recommendation:**

The design team should ensure that details and locations of all drainage gullies etc are provided for across the site and positioned strategically to avoid the risk of ponding across the scheme.

#### **Problem No.13: Lack of Dimensions**

#### **Location: Throughout Scheme**

The audit team note from the drawings provided that there is a lack of dimensions on the drawings. Roadway widths, corner radii, and footpath widths are not detailed on the drawings provided. Inadequate

infrastructure geometry may create an increased risk of potential conflicts for both vulnerable users and motorists.

#### **Recommendation:**

The design team should ensure that adequate road, footpath, and radii geometry are provided for throughout the scheme.

#### 10 Audit Team Statement

We certify that we have examined the drawings listed in Appendix A and examined the site by means of a site visit. This examination has been carried out with the sole purpose of identifying any features of the design that could be removed or modified to improve the safety of the scheme. The issues that we have identified have been noted in the report, together with suggestions for improvement, which we recommend should be studied for implementation.

Audit Team Leader: Adam Price: BEng (Hons), CEng, MIEI

ORS

Signed:

ALP

Date: 29<sup>th</sup> June 2023

Audit Team Member: David McCormack: BEng (Hons), Dip Eng., CEng, MIEI ORS

## ORS

Dail to Count

Date: 29<sup>th</sup> June 2023

### Audit Team Observer: Mark Gallagher: AEng, MIEI

ORS

Signed:

Date: 29<sup>th</sup> June 2023

#### **Inspected Documents**

The audit team reviewed the following drawings and documents provided by Roscommon County Council:

- (1) RS\_2022-CPSP-001 Street Layout
- (2) RS\_2022-CPSP-002 Existing Zebra Crossing on St. Patrick Street
- (3) RS\_2022-CPSP-003 Existing Puffin Crossing on Main Street
- (4) RS\_2022-CPSP-004 Proposed Zebra Crossing on Main Street at Bridge near Mart
- (5) RS\_2022-CPSP-005 Proposed Zebra Crossing on Main Street at Supervalu
- (6) RS\_2022-CPSP-006 Proposed Zebra Crossing on Main Street at Kieran Madigan
- (7) RS\_2022-CPSP-009 Proposed Alterations to Road Markings on St. Patrick Street
- (8) RS\_2022-CPSP-010 Junction of N60 and R337 Traffic Light Layout
- (9) RS\_2022-CPSP-010-ATR01 Junction of N60 and R337 Traffic Light Layout
- (10) RS\_2022-CPSP-010-ATR02 Junction of N60 and R337 Traffic Light Layout
- (11) RS\_2022-CPSP-010-ATR03 Junction of N60 and R337 Traffic Light Layout
- (12) RS\_2022-CPSP-012 Junction of N60 and R361 Traffic Light Layout
- (13) RS\_2022-CPSP-012-ATR01 Junction of N60 and R361 Traffic Light Layout
- (14) RS\_2022-CPSP-012-ATR02 Junction of N60 and R361 Traffic Light Layout.

ORS

## **Designer Response Form**

Job: 230879 – Pedestrian Safety Scheme (Various Locations) Castlerea, Co. Roscommon

Stage of Audit: Stage 1/2

Date Audit Completed: 28/06/2023

Problem	To Be Completed by the Designer			To be Completed Audit Team Leader
Reference in Safety Audit Report	Problem Accepted (Yes/No)	Recommendation Accepted (Yes/No)	Alternative Option (Describe) (Only complete if recommendation not accepted)	Alternative Option Accepted by Auditors (Yes/No)
P1	Yes	Yes		
P2	Yes	Yes		
Р3	Yes	Yes		
P4	Yes	Yes		
P5	Yes	Yes		
P6	Yes	Yes		
P7	Yes	Yes		
P8	Yes	Yes		
Р9	Yes	Yes		
P10	Yes	Yes		
P11	Yes	Yes		
P12	Yes	Yes		
P13	Yes	Yes		

John freeren

Signed:... Designer

Signed: ALL Audit Team Leader

John freeman

Signed:... Employer

08/08/2023

Date: .....

Date: ...15/08/2023...

08/08/2023

Date: .....

Note: Roscommon County Council Design team have amended the Preliminary Design Drawings to take into account comments made by the RSA team. Updated Preliminary Design Drawings are available in Appendix B.

#### **TII Approval**

Subject: RSAAS - Road Safety Audit Approvals System - Audit Approval 39676404/40354/Stage 1 & 2 Importance: High

John Freeman

County Buildings

Roscommon

Date: 23/06/2023

Our Ref: 39676404/40354/Stage 1 & 2

#### re: N60 Castlerea HD15 Safety Scheme

#### APPROVAL OF ROAD SAFETY AUDIT TEAM, Stage 1 & 2

Dear John Freeman,

The following members of the proposed road safety audit team are approved to carry out the Stage 1 & 2 road safety audit of N60 Castlerea HD15 Safety Scheme.

- 1. David McCormack ORS Consulting Engineers Leader
- 2. Adam Price ORS Consulting Engineers Leader
- 3. johannes Matthys de klerk ORS Consulting Engineers Member

A copy of all audit reports, design team response and exception reports must be uploaded through RSAAS. Successful upload of these reports and completion of the audit approval process is necessary for any further audit approval on this scheme.

Yours sincerely,

Lucy Curtis

Regional Road Safety Engineer <a href="mailto:roadsafetyaudits@tii.ie">roadsafetyaudits@tii.ie</a>

### Appendix D – Cost Estimate

Item	Cost (€)
Land	0
Property	0
Design & Statutory	10,000
Consultant Fees	110,000
Preliminaries	35,000
Ground Radar Surveys	20,000
Footpaths/build outs/islands	95,000
Pavement	74,000
Drainage	15,000
Lining	10,000
New Signs	10,000
Soft Furniture	5,000
2 No Signalized Junctions	200,000
Supervision	8,500
New Zebra Crossings	95,000
Upgrade Existing Crossings	40,000
Total Cost	727,500

## Appendix E – PABS

Sector Sector		PAG Unit 14 Project Apprairal Balance Sheet -	Summers Table 1	fur Hinne Prais	ctr f10.5m to 15	m) ar defined l	DH-GE0-030	30		
Scheme Heme:		Description:	Problems Identified:							
Cartloroa HD15safoty Schomo		Safety Interventions along the N60 route through Castlerea to: Improvements, signalisation of two junctions and the introducti pedestrian crassings at various locations.	taun invaluing dunction compromised at the tau main junction. due to poor visibility for driver, ction of controlled cortricted readspace for turning HGVs and a lack of safe creating faciliti		for drivers, crsing facilities	Budget Cart Im				
Current Typical Carriageway Width:		Bauto Ma:	Speed Limit: Propared Carriageway S		iaqaway Stand	ord:	10.77	7.		
Approximately 7.0m average		N60	50 kph Type 1 Single Carriage way		I.					
Apprairal Critoria	Appraizal Sub- Critoria	Objectives (Buidence eveileble in PAB Unit 3.4)	Qualitativo Sta	itement:				Sub-critoria Porfurmanco Dorcriptiun	Sub- critoria Scaro	Apprair al Critoria
Air Quality		NoImpact	The proposed scheme may have some environmental impact on the town as it will facilitate pedestrians and may promote more walking journeys.			Madoratoly paritivo	6			
	Hairs and vibration	NaImpact	The proposed scheme may have some environmental impact on the town as it will facilitate codestrians and may promote more walking journeys.		Maderately paritive	6				
	Landreaps & virual anality	NaImpact	Noutral					Notzignificant or Noutral	4	
F	Bindiversity	NaImpact	Noutral					Notsignificant or Neutral	4	Slightly
	Cultural, Archaeological, Architectoral	NaImpact	Noutral					Natzignificant ar Noutral	4	Paritiva
	Land Uro	NoImpact	Marcofficient we af raadspace.		Madoratoly paritivo	6				
	Water resources	NaImpact	Noutral					Notsignificant or Noutral	4	
			Current ?PlA/nyuk		uvkm					
Safety Callivi	Collizion reduction	tian Taroduco callirian rator	Scheme uill reduce	collirion rater	Propared Rate (ree PAG 6 11)-	2Lano Singlo carriagoway ( 6Nbnk	0.213 PIAłmukm	Major or highly paritive	7	Highly Paritive
	Security	Improvos afoty for all road usors				General Galeria		Major or highly paritive	7	
	Transport Efficiency and Effectiveness	Improve the operation of the N60 ar a national route.			Current AADT		6,000	Major or highly paritive	7	
					Faracart 2030	HE AADT:	6,000			Webber
Economy	Vider economic impact	Improve the operation of the N60 ar a national route.	Implementation of the propozed scheme uill have a positive impact			Major or highly paritive	7	Paritive		
	Transport Reliability and Quality		Implementation of t	mplementation of the proposed scheme will have a paritive impact			Major or highly paritive	7		
Accessibility and Sacial	Tulaarabla qraups	Improvasafaty for Vulnarabla road wars	Implementation of t	ho proposod schoma	• uill have a paritive i	mpact		Major or highly paritive	7	Highly
Inclurion	Deprived gengraphic arear	Improvo ovoralizafoty for all	Implementation of t	ho proposodschoma	uill have a paritive i	mpact		Major or highly paritive	7	Paritiva
	Transport integration	Improvoment in road operation for all road wers	Implementation of t	he proposed scheme	uill have a paritive i	mpact		Major or highly paritivo	7	
Integration	Land-uro integration	Bottor aporation of the overall roadspace as a facility for all road wers.	Implementation of t	ho proposod schome	uill have a paritive i	mpact	1	Major or highly paritive	7	Highly
	Gengraphical integration	Bottor operation of the overall roadspace as a facility for all road wers.	Implementation of t	ho proposod schome	uill have a paritive i	mpact		Major or highly paritive	7	Paritiva
	Integration with other	Bottor operation of the overall roadspace as a facility for all road wers.	Implementation of t	he proposed scheme	uill have a paritive i	mpact		Major or highly paritive	7	
Physical Activity	Physical Activity	Improvement in facilities that uill promote active travel	Implementation of t	he proposed scheme	uill have a paritive i	mpact		Major or highly paritive	7	Highly Paritive
Overall Description of Scheme: Moderately Pavitive										

#### Scaling collision Benefits

Current collision rate:	0.151		
Proposed collision rate:	0.081		
Proposed difference in rate / Current collision Rate	0.5		
Reduce current rate by half		=	Major or highly positive
Reduce current rate by less than h	alf	=	Moderately positive
Limited change to current rate		=	Not significant or Neutral
Increase current rate by less than	half	=	Moderately negative
Increase current rate by half		=	Major or highly negative

## **Appendix F - Departures from Standard**



5. Intervisibility Envelope at Junction 2 (Departure from standards required) - Drawing 008

## Application for a Departure from the TII Publications as part of a Preliminary Design Report in accordance with DN-GEO-03030

Application for a Departure from TII Publications (Standards)				
Includes all documents classified as Standards on <u>www.tiipublications.ie</u> including the Requirements for Measuring and Pricing (RMP)				
General Information for Applic	ation No:			
Route Number:	Scheme:	Contract Type:		
N60	HD15 RSIS Castlerea	Preliminary Design Stage		
Design Speed:	Traffic Flow and Composition (if a	pplicable):		
50_ km/h	Approx6000 AADT (202	22)		
Carriageway Type / Road Cross Se	ction:			
Urban Single carriageway				
Applicant information:				
Applicant Name:	Contact Person and Contact Deta	ils:		
Roscommon County Council Name: John Freeman		on ie		
Applicants Departure Reference No:				
N60RN_029.0				
Departure Information:				
Departure Location and Chainage (	as relevant):			
Patrick St/main St Junction – 53.76	731 -8.48795			
Publication Stream:				
Geometry				
Publication:				
DN-GEO-03030				

Publication Paragraph:

Paragraph 5.0 – Design Reports

Departure Type:

Inter-visibility of pedestrian crossings at traffic signals

Standard Required:

TII Document DN-GEO-03044

Standard Provided:

As shown in Drawing 008

#### Justification:

Due to the number of HGVs using the junction of Patrick St & Main St and the restricted road width available it is required to set back the stop line sufficiently to allow the signalised junction to function. In doing so intervisibility is compromised due to the building line around the junction.

Other Departures or Relaxations at same location:

N/A

Additional Information:

Auto-tracking of the junction has been included as part of this report to demonstrate the requirement to set back the stop lines.

#### Comments:

The junction is currently catering for 6000 vehicles per day, approximately 9% of these are HGVs, many of which are mounting the footpaths to make this manoeuvre due to restricted road widths and on street parking around the junction. It is the opinion of the design team that the appropriate safety intervention at this location is to install a signalised junction.

Supporting Documentation:

F&O report submitted previously. Design Drawings included above.

Status:

Appendix G – AA Screening Report

## APPROPRIATE ASSESSMENT SCREENING REPORT FOR

## N60 Safety Scheme, Castlerea, Co Roscommon, RSIS Type A



**Comhairle Contae Ros Comáin** Roscommon County Council

#### **Screening for Appropriate Assessment:**

Table 1: Project Details

Development Consent Type Development	Part VIII Local Authority Own Development
Location	
Description of the Project	The proposed scheme has been assessed under the HD15 Review of NRA High Collision Locations and is identified as a site having a collision rate threshold of twice the average for National roads Site extents cover Patrick St & Main St in the urban centre of Castlerea, County Roscommon. Junction operation and pedestrian safety along this section to addressed to provide a safe & efficient means for pedestrians and vulnerable roads users to make their way across the main street & junctions. To prevent vehicles mounting the footpaths and endangering pedestrians. And to force vehicles to slow down more when driving through the town centre.

#### Table 2: Identification of Natura 2000 Sites (SACs and SPAs) which may be impacted by the proposed development

The following questions are posed in order to determine whether there are any Natura 2000 sites which could potentially be impacted by the proposed development.

#### **Special Areas of Conservation (SAC)**

#### Impacts on Habitats

1	1.	Impacts on Freshwater Habitats	Likely Effects
		·····	(direct, indirect or cumulative)
		Is the development within a Special Area of Conservation whose qualifying interests include freshwater habitats, or within 1km of same?	No
		Sites to consider <u>Mullygollan Turlough SAC</u> (Site Code: 000612) Distance from Site: 11.49 km Designated features: Turloughs (#3180)	No significant impacts on these Natura Sites are likely
		Croaghill Turlough SAC (Site Code: 000255) Distance from Site: 11.86 km Designated features: Turloughs (#3180)	
		Coolcam Turlough SAC (Site Code: 000218) Distance from Site: 13.0 km Designated features: Turloughs (#3180)	
		Errit Lough SAC (Site Code: 000607) Distance from Site: 13.61 km Designated features: Hard oligo- mesotrophic waters with benthic vegetation of Chara spp. (#3140)	

	Williamstown Turloughs SAC (Site Code: 002296) Distance from Site: 14.6 km Designated features: Turloughs (#3180)	
2.	Impacts on Bog Mires and Fens Habitats	Likely Effects (direct, indirect or cumulative)
	Is the development within a Special Area of Conservation whose qualifying interests include Bog Mires and Fens habitats, or within 1km of same?	No
	Sites to consider Cloonchambers Bog SAC (Site Code: 000600) Distance from Site: 2.99 km Designated features: Active raised bogs (#7110),Degraded raised bogs still capable of natural regeneration (#7120),Depressions on peat substrates of the Rhynchosporion (#7150) Corliskea/Trien/Cloonfelliv Bog SAC (Site Code: 002110) Distance from Site: 4.2 km Designated features: Active raised bogs (#7110),Degraded raised bogs still capable of natural regeneration (#7120),Depressions on peat substrates of the Rhynchosporion (#7150) Bellanagare Bog SAC (Site Code: 000592) Distance from Site: 4.53 km Designated features: Active raised bogs (#7110),Degraded raised bogs still capable of natural regeneration (#7120),Depressions on peat substrates of the Rhynchosporion (#7150) Drumalough Bog SAC (Site Code: 002338) Distance from Site: 4.59 km Designated features: Active raised bogs (#7110),Degraded raised bogs still capable of natural regeneration (#7120),Depressions on peat substrates of the Rhynchosporion (#7150) Drumalough Bog SAC (Site Code: 002338) Distance from Site: 4.59 km Designated features: Active raised bogs (#7110),Degraded raised bogs still capable of natural regeneration (#7120),Depressions on peat substrates of the Rhynchosporion (#7150) Carrowbehy/Caher Bog SAC (Site Code:	No significant impacts on these Natura Sites are likely
	000597)	

	Distance from Site: 9.64 km Designated features: Active raised bogs (#7110),Degraded raised bogs still capable of natural regeneration (#7120),Depressions on peat substrates of the Rhynchosporion (#7150)	
	Kilsallagh Bog SAC (Site Code: 000285) Distance from Site: 11.57 km Designated features: Active raised bogs (#7110),Degraded raised bogs still capable of natural regeneration (#7120),Depressions on peat substrates of the Rhynchosporion (#7150)	
	<u>Cloonshanville Bog SAC</u> (Site Code: 000614) Distance from Site: 12.86 km Designated features: Active raised bogs (#7110),Degraded raised bogs still capable of natural regeneration (#7120),Depressions on peat substrates of the Rhynchosporion (#7150)	
	<b>Callow Bog SAC</b> (Site Code: 000595) Distance from Site: 14.36 km Designated features: Active raised bogs (#7110),Degraded raised bogs still capable of natural regeneration (#7120),Depressions on peat substrates of the Rhynchosporion (#7150)	
3.	Impacts on Forests Habitats	Likely Effects
	Is the development within a Special Area of Conservation whose qualifying interests include Forests habitats, or within 1km of same?	No
	Sites to consider <u>Corliskea/Trien/Cloonfelliv Bog SAC</u> (Site Code: 002110) Distance from Site: 4.2 km Designated features: Bog woodland (#91D0)	No significant impacts on these Natura Sites are likely
	<u>Cloonshanville Bog SAC</u> (Site Code: 000614) Distance from Site: 12.86 km	

	Designated features: Bog woodland	
4.	Impacts on Grasslands Habitats	Likely Effects
		(direct, indirect or cumulative)
	Is the development within a Special Area of	N/A
	include Grasslands habitats, or within 1km	
	of same?	
	Sites to consider	
	None	
5.	Impacts on Heath and Scrub Habitats	Likely Effects
	Is the development within a Special Area of	(direct, indirect or cumulative)
	Conservation whose qualifying interests	N/A
	include Heath and Scrub habitats, or within	
	1km of same?	
	Sites to consider	
	None	
6.	Impacts on Rocky Habitats	Likely Effects (direct, indirect or cumulative)
6.	Impacts on Rocky Habitats Is the development within a Special Area of	Likely Effects (direct, indirect or cumulative) N/A
6.	Impacts on Rocky Habitats Is the development within a Special Area of Conservation whose qualifying interests include Backy babitate or within 1km of	Likely Effects (direct, indirect or cumulative) N/A
6.	Impacts on Rocky Habitats Is the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?	Likely Effects (direct, indirect or cumulative) N/A
6.	Impacts on Rocky Habitats Is the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?	Likely Effects (direct, indirect or cumulative) N/A
6.	Impacts on Rocky Habitats Is the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?	Likely Effects (direct, indirect or cumulative) N/A
6.	Impacts on Rocky Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?         Sites to consider         None	Likely Effects (direct, indirect or cumulative) N/A
6.	Impacts on Rocky Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?         Sites to consider         None	Likely Effects (direct, indirect or cumulative) N/A
6. 7.	Impacts on Rocky Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?         Sites to consider None         Impacts on Dunes Habitats	Likely Effects (direct, indirect or cumulative) N/A
<ul><li>6.</li><li>7.</li></ul>	Impacts on Rocky Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?         Sites to consider None         Impacts on Dunes Habitats	Likely Effects (direct, indirect or cumulative) N/A Likely Effects (direct, indirect or cumulative)
6.         7.	Impacts on Rocky Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?         Sites to consider None         Impacts on Dunes Habitats         Is the development within a Special Area of Conservation whose qualifying interests	Likely Effects (direct, indirect or cumulative) N/A Likely Effects (direct, indirect or cumulative) N/A
6.         7.	Impacts on Rocky Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?         Sites to consider None         Impacts on Dunes Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Dunes habitats, or within 1km of Special Area of Conservation whose qualifying interests include Dunes habitats, or within 1km of	Likely Effects (direct, indirect or cumulative) N/A Likely Effects (direct, indirect or cumulative) N/A
6.         7.	Impacts on Rocky Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?         Sites to consider None         Impacts on Dunes Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Dunes habitats, or within 1km of same?	Likely Effects (direct, indirect or cumulative) N/A Likely Effects (direct, indirect or cumulative) N/A
6.         7.	Impacts on Rocky HabitatsIs the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?Sites to consider NoneImpacts on Dunes HabitatsIs the development within a Special Area of Conservation whose qualifying interests include Dunes habitats, or within 1km of same?	Likely Effects (direct, indirect or cumulative) N/A Likely Effects (direct, indirect or cumulative) N/A
6. 7.	Impacts on Rocky Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?         Sites to consider None         Impacts on Dunes Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Dunes habitats, or within 1km of same?         Sites to consider	Likely Effects (direct, indirect or cumulative) N/A Likely Effects (direct, indirect or cumulative) N/A
6. 7.	Impacts on Rocky Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?         Sites to consider None         Impacts on Dunes Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Dunes habitats, or within 1km of same?         Sites to consider         Sites to consider         Sites to consider         Sites to consider         None	Likely Effects (direct, indirect or cumulative) N/A Likely Effects (direct, indirect or cumulative) N/A
6. 7.	Impacts on Rocky Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?         Sites to consider None         Impacts on Dunes Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Dunes habitats, or within 1km of same?         Sites to consider None	Likely Effects (direct, indirect or cumulative) N/A Likely Effects (direct, indirect or cumulative) N/A
6.         7.         8.	Impacts on Rocky HabitatsIs the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?Sites to consider NoneImpacts on Dunes HabitatsIs the development within a Special Area of Conservation whose qualifying interests include Dunes habitats, or within 1km of same?Sites to consider NoneIs the development within a Special Area of Conservation whose qualifying interests include Dunes habitats, or within 1km of same?Sites to consider NoneImpacts on Coastal Habitats	Likely Effects (direct, indirect or cumulative) N/A Likely Effects (direct, indirect or cumulative) N/A Likely Effects (direct_indirect or cumulative)
6.         7.         8.	Impacts on Rocky Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Rocky habitats, or within 1km of same?         Sites to consider None         Impacts on Dunes Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Dunes habitats, or within 1km of same?         Sites to consider None         Impacts on Dunes Habitats         Is the development within a Special Area of Conservation whose qualifying interests include Dunes habitats, or within 1km of same?         Sites to consider None         Impacts on Coastal Habitats         Is the development within a Special Area of Conservation Whose qualifying interests include Dunes habitats, or within 1km of same?         Sites to consider None         Impacts on Coastal Habitats         Is the development within a Special Area of Conservation Within Area of Conservating Within Area of Conservation Within Area	Likely Effects (direct, indirect or cumulative) N/A Likely Effects (direct, indirect or cumulative) N/A Likely Effects (direct, indirect or cumulative)

include Coastal habitats, or within 1km of same?	
<b>Sites to consider</b> None	

#### **Impacts on Species**

1.	Impacts on Amphibians	Likely Effects (direct, indirect or cumulative)
	Is the development within a Special Area of Conservation whose qualifying interests include Amphibians, or within 1km of same?	N/A
	<b>Sites to consider</b> None	
2.	Impacts on Anthropods	Likely Effects (direct, indirect or cumulative)
	Is the development within a Special Area of Conservation whose qualifying interests include Anthropods or within 1km of same?	No
	Sites to consider <u>Cloonchambers Bog SAC</u> (Site Code: 000600) Distance from Site: 2.99 km Designated features: Euphydryas aurinia (Marsh Fritillary) (#1065)	No significant impacts on these Natura Sites are likely
	<u>Bellanagare Bog SAC</u> (Site Code: 000592) Distance from Site: 4.53 km Designated features: Euphydryas aurinia (Marsh Fritillary) (#1065)	
	Carrowbehy/Caher Bog SAC (Site Code: 000597) Distance from Site: 9.64 km Designated features: Euphydryas aurinia (Marsh Fritillary) (#1065)	
	<u><b>Callow Bog SAC</b></u> (Site Code: 000595) Distance from Site: 14.36 km Designated features: Euphydryas aurinia (Marsh Fritillary) (#1065)	
3.	Impacts on Fish	Likely Effects (direct_indirect or cumulative)
----	---	---
	Is the development within a Special Area of	
	Conservation whose qualifying interests	
	include Fish, or within 1km of same?	
	Sites to consider	
	None	
4.	Impacts on Mammals	Likely Effects
		(direct, indirect or cumulative)
	Is the development within a Special Area of	N/A
	Conservation whose qualifying interests	
	include Mammals, or within 1km of same?	
	Sites to consider	
	None	
5.	Impacts on Mollucs	Likely Effects
		(direct, indirect or cumulative)
	Is the development within a Special Area of	N/A
	Conservation whose qualitying interests	N/A
	include Mollucs, of within 1km of same?	
	Sites to consider	
	None	
6	Impacts on Non vascular Plants	Likoly Effects
0.		(direct, indirect or cumulative)
	Is the development within a Special Area of	N/A
	Conservation whose qualifying interests	
	include Non-vascular plants, or within 1km	
	of same?	
	Sites to consider	
	None	
7.	Impacts on Reptiles	Likely Effects
		(direct, indirect or cumulative)
	Is the development within a Special Area of	N/A
	Conservation whose qualifying interests	
	include Reptiles, or within 1km of same?	
	Sites to consider	
	None	
8.	Impacts on Vascular Plants	Likely Effects
		(direct, indirect or cumulative)

Is the development within a Special Area of Conservation whose qualifying interests include Vascular Plants, or within 1km of same?	N/A
<b>Sites to consider</b> None	

## Special Protection Areas (SPA):

1.	Impacts on Birds	Likely Effects
		(direct, indirect or cumulative)
	Is the development within a Special Protection Area, or within 1km of same?	No
	Sites to consider <u>Bellanagare Bog SPA</u> (Site Code: 004105) Distance from Site: 4.52 km Designated features: Greenland White- fronted Goose (Anser albifrons flavirostris) (#A395)	No significant impacts on these Natura Sites are likely

All designated sites within a 15km radius of the subject site have been considered in this screening for Appropriate Assessment.

Conclusion Table 2: If the answer to all of these questions is no, significant impacts can be ruled out for Natura 2000 sites. No further assessment is required; proceed to the Habitats Directive Conclusion Statement.

## **Screening for Appropriate Assessment - Conclusion Statement**

Development Consent Type: Part VIII Local Authority Own Development

Development Location: Castlerea & Demesne Townlands, Main Street, Castlerea, Co. Roscommon

**Natura 2000 sites within impact zone:** SAC:002338, SAC:002296, SAC:002110, SAC:000614, SAC:000612, SAC:000607, SAC:000600, SAC:000597, SAC:000595, SAC:000592, SAC:000285, SAC:000255, SAC:000218, SPA:004105

## **Description of the Project:**

Proposed Road Safety Scheme on Patrick St and Main St, Castlerea Co Roscommon. Works include a Junction alteration and improved pedestrian upgrades along route.

Describe how the project or plan (alone or in combination) could affect Natura 2000 site(s):.
There is no likelihood of significant effects and no adverse impacts to site integrity are predicted, due to the nature of the works proposed and the separation distances between the site and Natura 2000 Sites
If there are potential negative impacts, explain whether you consider if these are likely to be significant, and if not, why not:
There is no likelihood of significant effects and no adverse impacts to site integrity are predicted, due to the nature of the works proposed.
Conclusion of Screening Assessment:
Following an assessment of the proposed development and any potential relationships with European Sites, it is concluded that either alone or in combination with other plans or projects, there would be no likely significant effects on any European Sites.
Documentation reviewed for making this statement:
Roscommon County Development Plan 2022-2028
County Roscommon Heritage Plan 2012-2016
Completed by:
Caroline Nally BA BAI CEng MIEI Executive Engineer
Date:

22 May 2022

arde Nally

Signed:

Date:

22<sup>nd</sup> May 2023



SAC (blue) within 15km of Proposed Scheme



SPA (green) within 15km of Proposed Scheme



SAC & SPA within 15km of Proposed Scheme

