

JAMESTOWN ACTIVE TRAVEL SCHEME

Preliminary Design Report

RGW-RP-AL-0002-P02



Client: Roscommon County Council
Date: 04/06/2024

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Issue and revision record

Date	Rev	Change Description	Author	Checker	Approver
12/04/2023	P00	N/A	SF	SC	SC
30/05/2023	P01	Cost Estimation Added	SF	SC	SC
04/06/2024	P02	Cost Estimation Updated	SF	SC	SC

Detailed Change Log

Rev	Change Description
P00	N/A
P01	Cost Estimation Added
P02	Cost Estimation Updated

1. Introduction and Description

This project involves the development of an active travel facility between the Drumsna Bridge and the Jamestown Bridge which follows the existing L1037 local road. The scheme is located in Co. Roscommon. Drumsna and Jamestown are towns which are located in Co. Leitrim.

The length of the proposed scheme is 1.2km and the location of the scheme is shown in Figure 1. A scheme location map is provided in Appendix A.



Figure 1: Jamestown – Scheme Location

It is intended that this scheme will provide connectivity along the L1037 between Jamestown and Drumsna, thereby enhancing mobility and access between the two villages, providing a more permeable and connected place for non-motorised users.

This design report will identify the need for the scheme, review appropriate design guidance, establish design principles and provide a description of the design exercises undertaken. The report also includes a cost estimate and economic assessment and provides a conclusion on the compatibility of the scheme with stated objectives.

2. Identification of Need

This section of the report considered the need for the scheme in the context of the existing conditions.

2.1 Existing Conditions

The proposed scheme is located along the existing L1037 local road between Drumsna Bridge and Jamestown Bridge, both of which cross the River Shannon. The existing road consists of a 5m wide carriageway. On the eastern side of the scheme, the existing road has no road markings, no verge and no active travel facilities. On the western side of the scheme, the existing road has a central road marking, but has no hard shoulder, verge or active travel facilities. The posted speed limit of the existing road is 80 kph. Verges adjacent the carriageway are heavily vegetated. This vegetation, combined with low horizontal curvature in certain locations means that forward visibility along the road is extremely limited in certain instances.

Figure 2 and Figure 3 provide an illustration of the existing road environment on the eastern and western side of the scheme.



Figure 2: Existing L1037 on Eastern Side of Proposed Scheme



Figure 3: Existing L1037 on Western Side of Proposed Scheme

Cross-sections of the existing road are provided in Appendix B.

2.2 Drivers

The primary driver for the scheme is the desire to provide a safe means of walking or cycling between the towns of Jamestown and Drumsna

The town of Drumsna has a population of approximately 182 people, while the area around Jamestown has a population of 220 people. The population of Co. Roscommon in the areas between the towns is 126, albeit some of this population may be remote from the scheme. While services in Jamestown are limited, there are a number of service providers in Drumsna which would serve as trip attractors for the Jamestown population. Services include shops, bars, restaurants and other service providers and community facilities.

2.3 Planning Context

The Roscommon County Council Development Plan 2021-2027 supports and encourages the provision of active travel infrastructure and outlines specific goals in respect of the development of the safe pedestrian facilities. Key relevant extracts from the Roscommon County Develop Plan 2021- 2027 are outlined in Table 1 below.

Table 1: Excerpts from Roscommon County Development Plan 2021-2027 (Draft)

RCCDP 2021 Ref:	Extracted Text
ITC 7.12	Provide a safe and modern road network throughout the county, having regard to national and regional policies and guidelines as well as liaising with national agencies.
ITC 7.25	Promote walking and cycling as efficient, healthy and environmentally friendly modes of transport by securing the development of a network of direct, comfortable, convenient and safe cycle routes and footpaths, particularly in urban areas and in the vicinity of schools
ITC 7.26	Identify and implement a strategic, coherent and high-quality cycling and walking network across the county that is integrated with public transport and interconnected with cultural, recreational, retail, educational and employment destination and attractions.
ITC 7.27	Design pedestrian and cycling infrastructure in accordance with the principles, approaches and standards set out in the National Cycle Manual, the Design Manual for Urban Roads and Streets and any subsequent revisions with a focus on a high level of service and encourage a modal shift from the private car to cycling and walking.
ITC 7.28	Improve the streetscape environment for pedestrians, cyclists and people with special mobility needs by providing facilities to enhance safety and convenience, including separation for pedestrian infrastructure from vehicular traffic.
ITC 7.29	Provide for safer routes to schools within the county and promote walking and cycling as sustainable modes of transport as part of the Green Schools Programme and other local traffic management improvements
ITC 7.30	To support the retrospective provision of walking and cycling infrastructure in existing settlements, where feasible, to achieve growth in sustainable mobility and strengthen and improve the walking and cycling network.

Policy support for the provision of enhanced facilities for cyclists, pedestrians and wheelchair users is also echoed within national government policies, including:

- National Planning Framework
- National Cycle Policy Framework
- Rural Development Policy
- National Physical Activity Plan
- Climate Action Plan

Although there is significant policy context surrounding the provision of active travel schemes generally and specifically to serve schools, the proposed scheme is not identified within NTA’s Cycle Connects proposals.

3. Design Guidance

Design Guidance in respect of active travel facilities in urban areas typically relies upon the contents of the National Cycle Manual (NCM) and the Design Manual for Urban Streets (DMURs). However, this scheme is provided outside of the urban limits of Drumsna and Jamesotwn in a rural environment. The relevant design standards considered to be applicable are therefore TII standards, specifically TII Publication PE-PMG-02045 for National Roads Active Travel Planning. TII Publication PE-PMG-02045 applies to rural national roads where the posted speed limit exceeds 60 kph. Although the road in question is a local road, it is considered that the TII Publication PE-PMG-02045 is more applicable in this instance than DMURs and the National Cycle Manual.

TII Publication PE-PMG-02045 provides guidance on the type of facility to provide and the design standards for that facility. In respect of the type of facility to be provided, it advises:

“Shared use active travel facilities will be provided as the default when new active travel intervention need is identified - in particular where the volumes of pedestrians will be low (less than 100 people per hour per metre width of unsegregated shared facility) and or where spatial constraints constrain provision.

Consideration will be afforded to segregating pedestrian and cyclist flows where flow volumes warrant same (greater than 100 pedestrians per hour per metre width of unsegregated shared facility).

In the case of this scheme, given that that population of both towns and surrounding areas is less than 530 individuals, it is considered that a 3m wide shared use facility, which could cater for up 300 people per hour, is appropriate. Widths, segregation from traffic and other geometric design standards will be discussed in the design section of this report.

4. Options Considered

Prior to progressing with the preliminary design for the scheme it was necessary to consider what options were available. Initially, options were considered that aligned with the NIFTI Hierarchy. Table 2 below provides an assessment of options that were considered and brought forward or discarded.

Table 2: NIFTI Assessment

NIFTI Hierarchy	Examples of Options	Consideration
Maintain	Maintain and Renew Existing Infrastructure	Discarded. On the basis that it would not achieve design goal or providing a safe active travel route between Jamestown and Drumsna.
Optimise	1) Signage, 2) Development of Quiet Routes, 3) Demand Management, 4) Integrate with Other Modes, 5) Minor Accessibility and Permeability Improvements	Discarded. Use of signage along existing road would not achieve design goals. The existing road network is not suitable to adapt to a quiet routes. Demand management is not considered to be possible in the context of the two adjacent towns and the short distance between the town and school make integration with other modes impractical.

NIFTI Hierarchy	Examples of Options	Consideration
Improve	Adding segregated cycling infrastructure to existing roads.	Brought Forward. The distance between the towns and the presence of the existing road make it suitable to be brought forward.
New	Development of new greenway / active travel alignments.	Discarded. Unnecessary to consider the provision of a new facility, which would be less direct than the proposed facility following the existing road.

Once the decision was made to add a segregated facility along the existing road and that this facility would be a shared use facility, it was necessary to consider what cross-sections options were available. Two Options were considered as follows:

- Option 1 – Shared Active Travel Facility on Northern Side
- Option 2 – Shared Active Travel Facility on Southern Side

A description of each option is outlined below and cross-sections associated with each option are illustrated in Appendix B.

- Option 1 – Shared Active Travel Facility on Northern Side
- Option 2– Shared Active Travel Facility on Southern Side

Following consultation with Roscommon County Council, Option 2 was selected as the preferred option. There is limited difference between either option in respect of engineering, environmental or cost impacts. However the southern option would better serve the existing houses along the road as well as the houses along the local roads which connect to the L1037.

On the basis of the above assessment, Option 2, a shared use facility on the south side of the road was selected as the preferred option.

5. Design

Following the selection of a preferred option, designs have been developed for the proposed scheme with a view to determining any landtake requirements for the scheme, developing preliminary cost estimates and to assess environmental impacts of the scheme. The below sections of this report summarise the design exercises completed in respect of the geometry, drainage, pavement and ancillary designs.

5.1 Geometry

The geometry of the proposed shared used facility has been developed in accordance with TII Publication PE-PMG-02045-01 which refers to National Roads Active Travel Planning.

5.1.1 Cross-Section

The typical cross-section which has been applied to the proposed facility is that of a Shared Active Travel Facility, which is defined in the standard as a 'A cycleway or cycle track that is provided for people walking, wheeling and cycling'. The typical cross-section consists of:

- Lateral Clearance from adjacent boundaries;
- The width of the shared use facility; and
- Segregation from the road carriageway.

Table 3 below provides a summary of the minimum and relaxed requirements in respect of lateral clearance, width and segregation as referred to in TII Publication PE-PMG-02045 for locations which have a posted speed limit of 60kph.

Table 3: Minimum Cross-Section Requirements

Criteria	Desirable Minimum Width (m)	Absolute Minimum Width (Relaxation) (m)
Lateral Clearance	0.5	0.5
Width of Shared Use Two Way Cycle Facility with Pedestrians	3.0	2.0
Minimum Horizontal Separation between edge of running lane and active travel facilities – 60 kph zone	1.0	0.5
Minimum Horizontal Separation between edge of running lane and active travel facilities – 100 kph zone	2.0 (excluding any hard shoulder)	1.5 (excluding any hard shoulder)

The proposed cross-section varies to some extent across the scheme, based on the presence of particular pinch points, but will typically allow for the desirable minimum requirements referred to in Table 3. The typical cross-section for the scheme is illustrated in Figure 4 below. General arrangement drawings illustrating the layout are included in Appendix C.

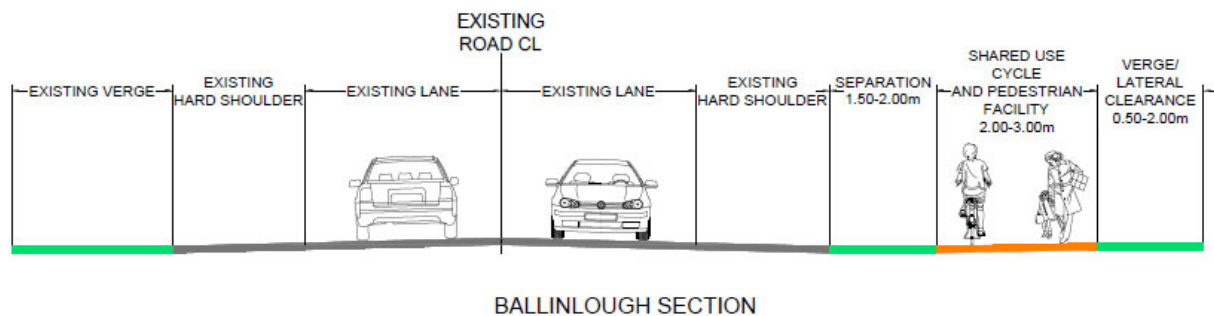


Figure 4: Typical Cross-Section of Existing N60 and Proposed Active Travel Scheme

A visualisation of the proposed scheme is provided in Figure 5 below.



Figure 5: Visualisation of Proposed Active Travel Scheme

5.1.2 Horizontal Alignment

Horizontal design requirements for active travel facilities are addressed in TII Publication PE-PMG-02045. The horizontal alignment of the proposed active travel facility will follow that of the local road, except where it interfaces with junctions. At these locations, bends will be incorporated into the scheme in accordance with the requirements of TII publication DN-GEO-03060. Further details are provided in Section 5.1.5 below.

5.1.3 Vertical Alignment

Vertical design requirements for active travel facilities are addressed in TII Publication PE-PMG-02045. The vertical alignment of the proposed active travel facility will follow that of the local road.

5.1.4 Visibility and Sight Lines

Visibility assessments have been carried out in accordance with TII Publication PE-PMG-02045 and TII publication DN-GEO-03060 and all required visibility lines will be catered for within the lands made available.

5.1.5 Junctions

The proposed scheme will interface with four domestic entrances and one local road. The design applied to the two domestic entrances will conform to Fig 5.13 of DN-GEO-03060 for Direct Access Bend-In Crossings.

There is one local road crossing on the scheme and the design of this access has been developed to comply with a bend-out crossing for minor roads with AADT < 4,000. Figure 6 below, extracted from DN-GEO-03060 provide an illustration of the typical layout.

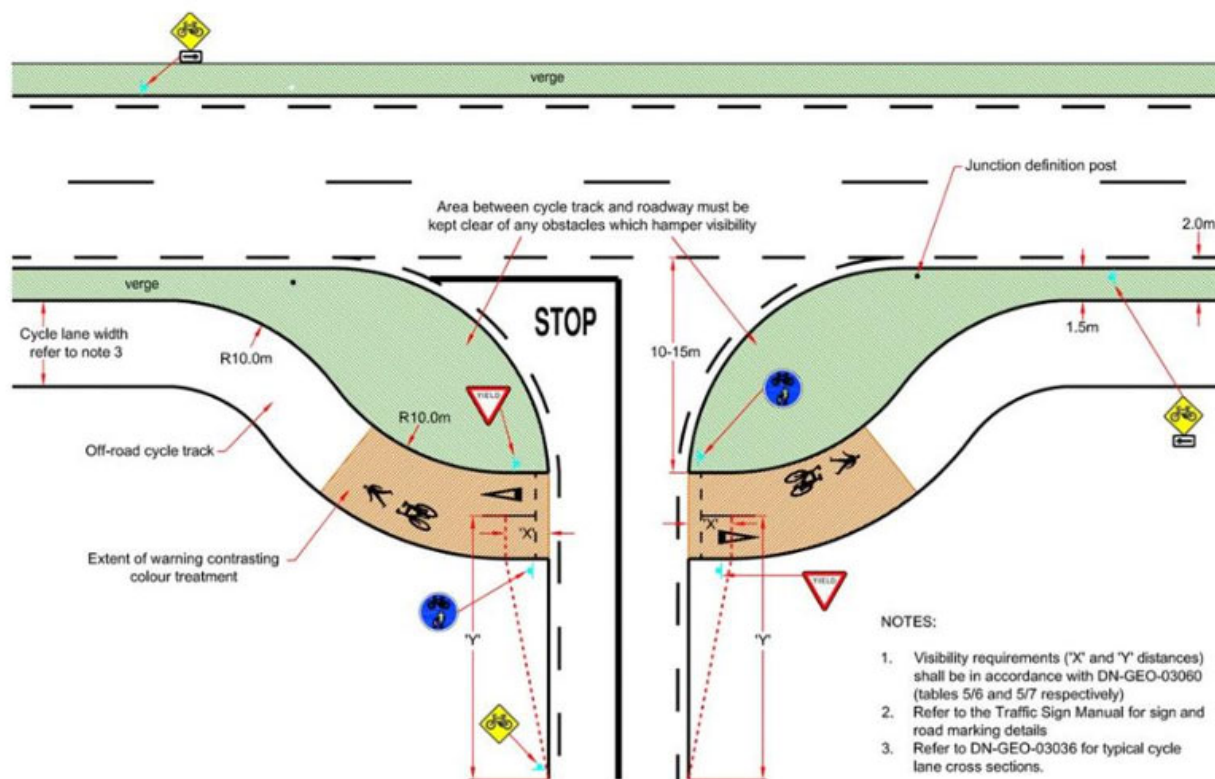


Figure 6: Bend Out Crossing for minor road with AADT <4,000 (Figure 5.7 of DN GEO03060)

5.2 Drainage

The existing L1037 drains to the verge and there are limited positive drainage features aside from a ditch which runs parallel to the southern verge of the road. The proposed drainage for the scheme will consist predominantly of grass surface water channels which will be located in the grass verge that separates the traffic lanes from the shared use active travel facility. Grass surface water channels consist of a V-shaped grass channel at the edge of the road pavement, which collect and convey surface water runoff to outlets. They are a nature-based drainage solution/SUDS system. In addition to their core function of draining the road and shared surface facility, the grass surface water channels facilitate treatment and attenuation of surface water runoff at source. The use of grass channels in the design will also soften the appearance of the road, relative to the use of concrete systems, kerb systems or filter drains and they will provide habitat for flora and fauna.

Where the grass surface water channels meet private accesses, which need to be crossed, the channel will be terminated. Collected water will drain to catchpit chambers located at the end of each channel, which will be connected to the existing ditch via carrier drains which cross the road. In certain instances, where the revised road alignment impacts on the existing ditch, the ditch will be moved and regraded.

5.3 Geotechnical and Pavement

The pavement design of the shared used facility will consist of 50mm of pavement on a foundation of 150mm of Cl.804 subbase material, as per TII Publication CC-SCD-01104, which will be provided on a competent sub-formation.

No site investigation work has been undertaken based on the scale of the project in question and the loading which will apply to the scheme. A floating road, consisting of the make-up referred to above on top of a geotextile layer will be used where ground conditions are deemed to merit such an approach. A cross-section of the proposed make-up is included in Appendix E.

5.4 Utilities

Utility providers have been contacted to provide layouts of existing services in the study area. Known services have been mapped on the drawings in Appendix G and consist of watermains, foul sewers, overhead ESB lines and underground EIR communication infrastructure. It is not envisaged that are service diversions will be required, however, chamber covers may be impacted in certain instances.

5.5 Accommodation Works

As the proposed scheme involved the purchase of private land, accommodation works will need to be provided for impacted landowners. Accommodation works will typically involve the provision or replacement of boundaries and felid accesses. Details of proposed accommodation works are illustrated on the fencing and boundary treatment drawings.

5.6 Road Safety Audit

A Stage 2 road safety audit has been carried out by ORS on the proposed scheme. The design drawings have been updated to take account of the proposed mitigation for the scheme. The completed road safety audit is included in Appendix D of this report.

6. Land Use

This project will involve the use of private land. It is understood that landowners who may be impacted have been contacted and are amenable to providing or selling the land to facilitate the development.

Drawings showing the proposed landtake are provided in Appendix H.

7. Cost Estimation

A preliminary cost estimate has been completed in respect of the design. Estimated construction costs are illustrated in Table 4 below.

Table 4: Estimate Construction Costs

Discipline	Total
Preliminaries	€139,756.85
Site Clearance	€11,467.68
Fencing	€42,220.19
Drainage and Utilities	€49,019.66
Earthworks	€153,696.00

Discipline	Total
Pavement	€108,756.17
Ancillaries and Other	€193,867.70
Total	€698,784.26

Total construction costs associated with the project, including remaining consultancy services costs, land costs and risk are illustrated in Table 5 below.

Table 5: Total Remaining Scheme Costs

Estimate Summary	
Cost	
A Detailed Design, Procurement and Construction Supervision	80,000
B Land and Property	30,000
C Construction	€698,784.26
E Risk @ 32%	€249,210.96
Total	€1,057,995.22

8. Conclusions and Recommendations

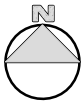
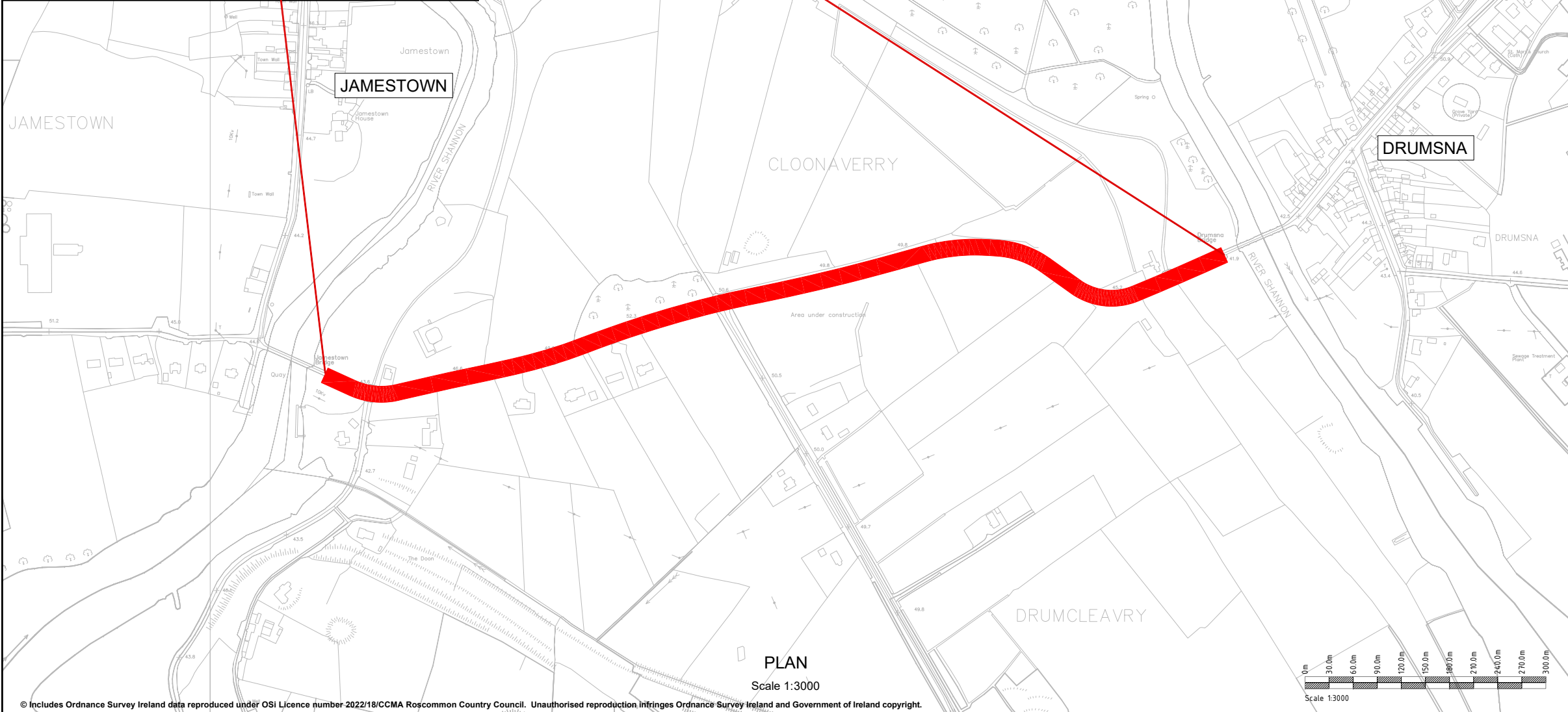
The proposed active travel scheme has been assessed and it is concluded that the project will be of benefit to the surrounding community and will facilitate active travel journeys between Jamestown and Drumsna and improve safety of all road users.

In order to facilitate planning applications, it is recommended that environmental screenings be conducted.

APPENDIX A - SCHEME LOCATION MAP



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NOTES

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LEGEND

 PROPOSED ACTIVE TRAVEL SCHEME

REV	DATE	DESCRIPTION	BY	CHK	APD
P00	17/05/2023	PRELIMINARY DESIGN	KK	SF	SF
100	12/04/2023	FOR INFORMATION	ZM	SF	SF

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DESIGNER



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PROJECT

INTERURBAN GREYWAY
CONNECTION BUNDLE

DRAWING TITLE

JAMESTOWN LOCATION MAP

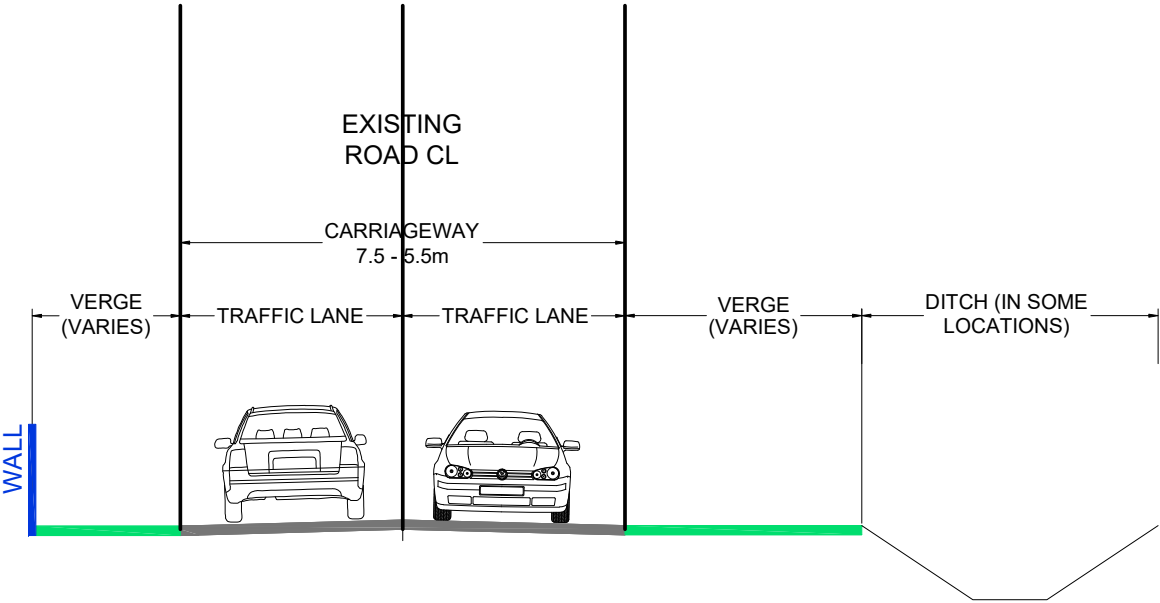
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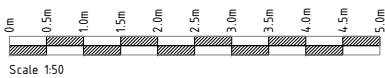
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APPENDIX B - EXISTING CROSS-SECTION





EXISTING CROSS SECTION
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LEGEND

KEY PLAN

P00	22/05/2023	PRELIMINARY DESIGN		KK	SF
REV	DATE	DESCRIPTION	BY	CHK	APD

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PROJECT

INTERURBAN GREYWAY
CONNECTION BUNDLE

DRAWING TITLE

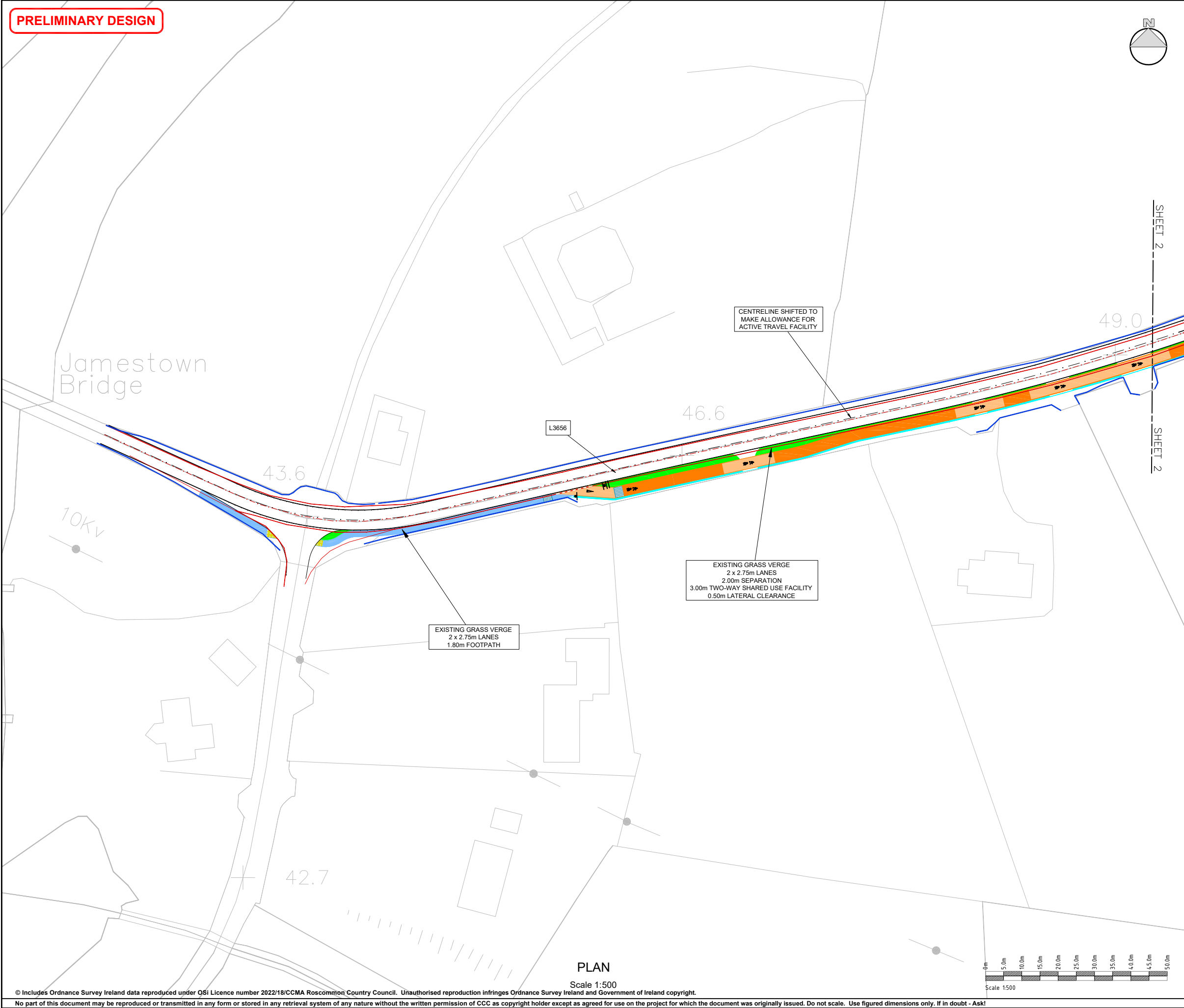
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APPENDIX C - GENERAL ARRANGEMENT DRAWINGS





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LEGEND

- EXISTING ROAD CENTRELINE
- EXISTING ROAD EDGE
- PROPOSED ROAD CENTRELINE
- PROPOSED ROAD EDGE
- LATERAL CLEARANCE
- PROPOSED SHARED FACILITY (3m WIDE UNLESS OTHERWISE STATED)
- EXISTING WALL
- PROPOSED CONTRASTING SURFACE AT ROAD CROSSING APPROACH
- GRASSED VERGE
- PROPOSED FOOTWAY

KEY PLAN

JAMESTOWN BRIDGE

0001

0002

0003

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L-1037

DRUMSNA BRIDGE

REV	DATE	DESCRIPTION	BY	CHK	APD	
P02	22/05/2023	PRELIMINARY DESIGN		KK	SF	SF
P01	26/04/2023	ALIGNMENT UPDATED		MM	MM	SF
P00	07/04/2022	FOR DISCUSSION		MV	RB	SF

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PROJECT

**INTERURBAN GREYWAY
CONNECTION BUNDLE**

DRAWING TITLE

**GENERAL ARRANGEMENT
JAMESTOWN
SHEET 1 OF 4**

DESIGNED	DRAWN	CHECKED/APPVED
RB	MV	SF

DATE	SCALE	SHEET SIZE
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DRAWING NUMBER	REVISION
RCW-DR-GA-0001	P02

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	EXISTING ROAD CENTRELINE
	EXISTING ROAD EDGE
	PROPOSED ROAD CENTRELINE
	PROPOSED ROAD EDGE
	LATERAL CLEARANCE
	PROPOSED SHARED FACILITY (3m WIDE UNLESS OTHERWISE STATED)
	EXISTING WALL
	PROPOSED CONTRASTING SURFACE AT ROAD CROSSING APPROACH
	GRASSED VERGE
	PROPOSED FOOTWAY

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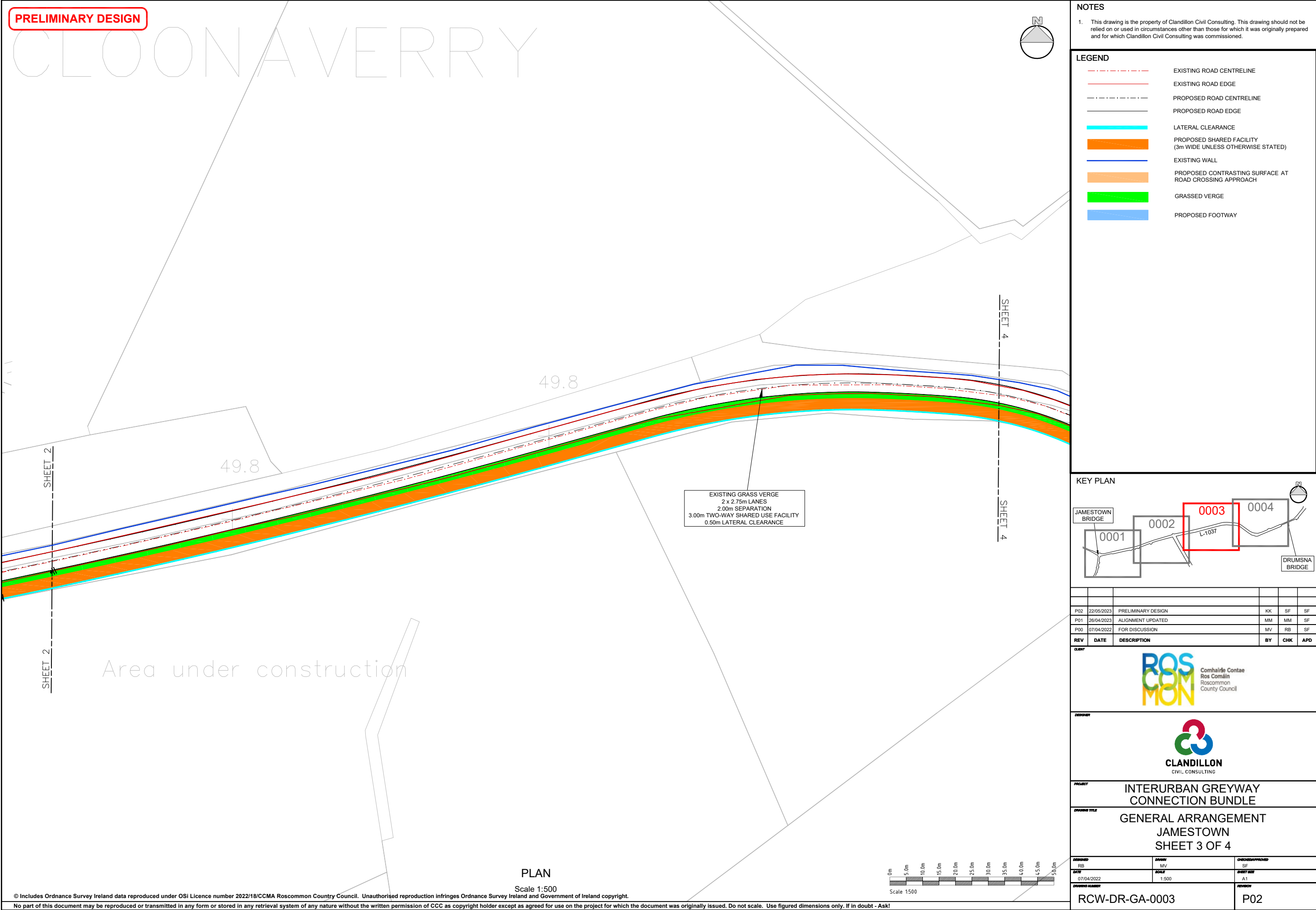
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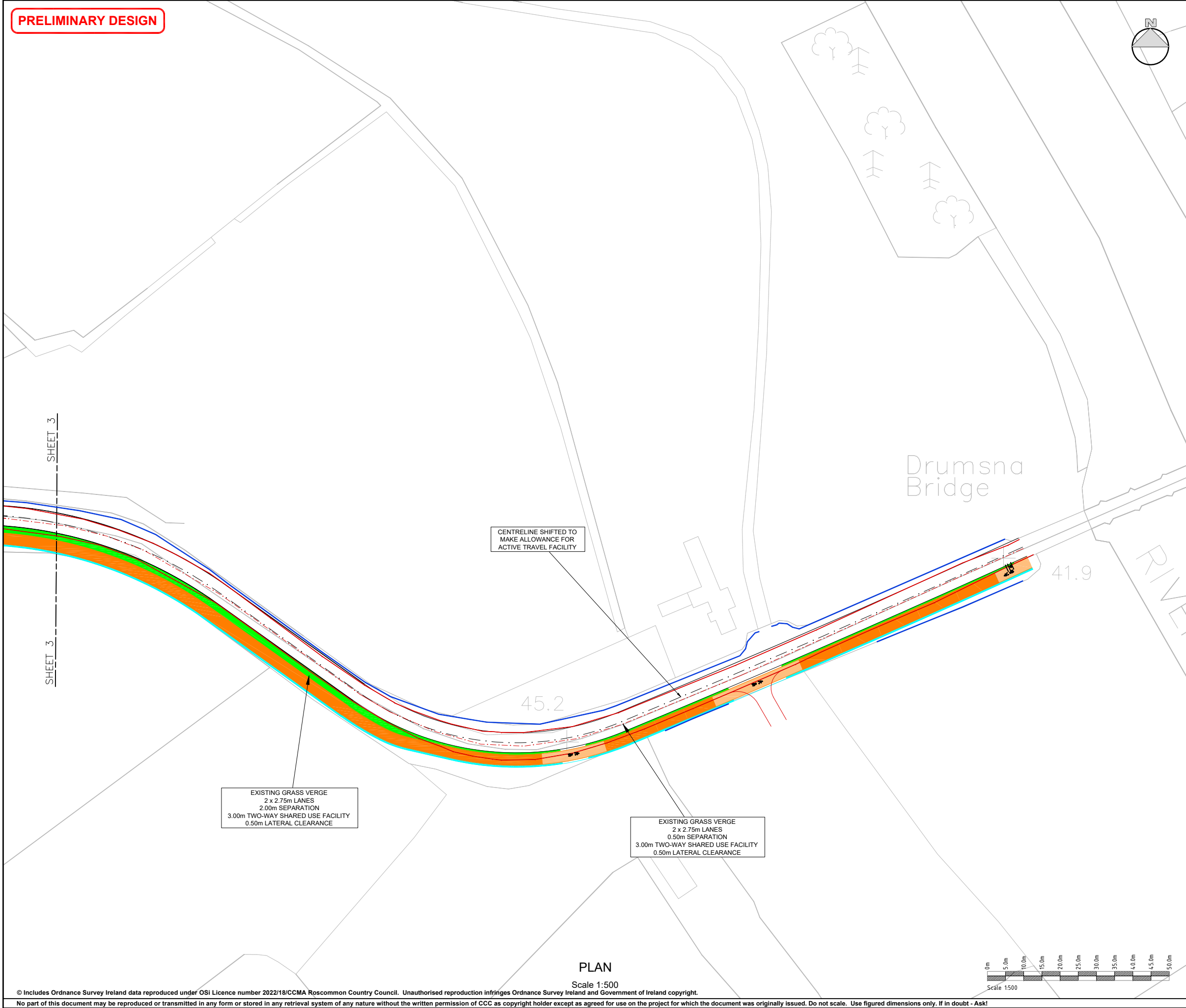


PROJECT	INTERURBAN GREYWAY CONNECTION BUNDLE
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 GENERAL ARRANGEMENT
 JAMESTOWN
 SHEET 2 OF 4

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OVERVIEW ALLEGORY		REVISION
RCW-DR-GA-0002		P02





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LEGEND

- EXISTING ROAD CENTRELINE
- EXISTING ROAD EDGE
- PROPOSED ROAD CENTRELINE
- PROPOSED ROAD EDGE
- LATERAL CLEARANCE
- PROPOSED SHARED FACILITY (3m WIDE UNLESS OTHERWISE STATED)
- EXISTING WALL
- PROPOSED CONTRASTING SURFACE AT ROAD CROSSING APPROACH
- GRASSED VERGE
- PROPOSED FOOTWAY

KEY PLAN

JAMESTOWN BRIDGE

0001

0002

0003

0004

L-1037

DRUMSNA BRIDGE

REV	DATE	DESCRIPTION	BY	CHK	APD
P02	22/05/2023	PRELIMINARY DESIGN			
P01	26/04/2023	ALIGNMENT UPDATED	MM	MM	SF
P00	07/04/2022	FOR DISCUSSION	MV	RB	SF

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Roscommon County Council

DESIGNER

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PROJECT

INTERURBAN GREYWAY CONNECTION BUNDLE

DRAWING TITLE

GENERAL ARRANGEMENT JAMESTOWN SHEET 4 OF 4

DESIGNED	DRAWN	CHECKED/APPVED
RB	MV	SF

DATE	SCALE	SHEET SIZE
07/04/2022	1:500	A1

DRAWING NUMBER

RCW-DR-GA-0004

REVISION

P02

APPENDIX D - ROAD SAFETY AUDIT





Contact us
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2023

**Stage 1/2 Road Safety Audit
Proposed Active Travel Scheme,
Jamestown, Co. Roscommon**

Stage 1/2 Road Safety Audit
Proposed Active Travel Scheme, Jamestown, Co. Roscommon

Document Control Sheet

Client:	Clandillon Civil Consulting
Document No:	221187-ORS-XX-XX-RP-TR-13g-001

Revision	Status	Author:	Reviewed by:	Approved By:	Issue Date
P01	S2	AK	AP	DMC	31/07/2023

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1 Introduction

This report documents the findings of a Stage 1/2 Road Safety Audit (RSA) carried out with respect to a Proposed Active Travel Scheme along the L3656 local road in Jamestown, Co. Roscommon.

The audit team conducted the site visit on Friday the 21st of July 2023. The audit was carried out in the offices of ORS on Wednesday the 26th of July 2023.

The audit team comprised of the following people:

Audit Team Leader:

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

Audit Team Member:

Adam Price BEng (Hons), CEng, MIEI

Audit Team Observer:

Angeliki Kalatha MEng, MSc, MIEI

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

Previous Road Safety Audits were not available for review. The audit team reviewed the following documents and drawings provided by Clandillon Civil Consulting.

Documents:

- (1) RCW-SOQ-AL-0201-P00 (SOQ)
- (2) RGW-RP-AL-0002-P01 (Preliminary Design Report).

Drawings:

- (1) RCW-DR-GA-0001-P02 to RCW-DR-GA-0004-P02 (General Arrangement)
- (2) RCW-DR-GA-0202-P00 (Location Plan)
- (3) RCW-DR-KB-0005-P00 (Typical Pavement Build Up)
- (4) RCW-DR-LA-0001-P01 to RCW-DR-LA-0004-P01 (Additional Land Requirement)
- (5) RCW-DR-XS-0002-P00 (Existing Cross Section).

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 Clandillon Civil Consulting. **Section 3** of this report presents the findings of the Stage 1/2 Road Safety Audit of the proposed Active Travel Scheme.

2 Description of the Proposed Development

This report details the findings of a Stage 1/2 Road Safety Audit carried out on a proposed Active Travel Scheme in Jamestown, Co Roscommon. This Audit was requested by Clandillon Civil Consulting, on behalf of Roscommon County Council.

The proposal involves the development of an active travel facility along the L3656 local road, connecting Drumsna Bridge to Jamestown Bridge in Co. Roscommon. Drumsna and Jamestown are towns situated in Co. Roscommon, and this project seeks to foster connectivity between these two communities (see **Figure 2.1**).

The envisioned Scheme spans a length of 1.2 km, aiming to enhance mobility and accessibility between Jamestown and Drumsna by providing a seamless and safe pathway for non-motorised users. By establishing this active travel facility, the project aims to create a more permeable and well-connected environment, encouraging pedestrians and cyclists to embrace sustainable transportation options for their daily commute and leisure activities.

On the eastern side of the scheme, the existing road has no road markings, verges, and no active travel facilities. On the western side of the scheme, the existing road has a central road marking, but has no hard shoulder, verge, or active travel facilities. The posted speed limit of the existing road is 80 kph. Please refer to **Figure 2.2** overleaf for the scheme's location plan and **Figure 2.3** to the proposed cross section.

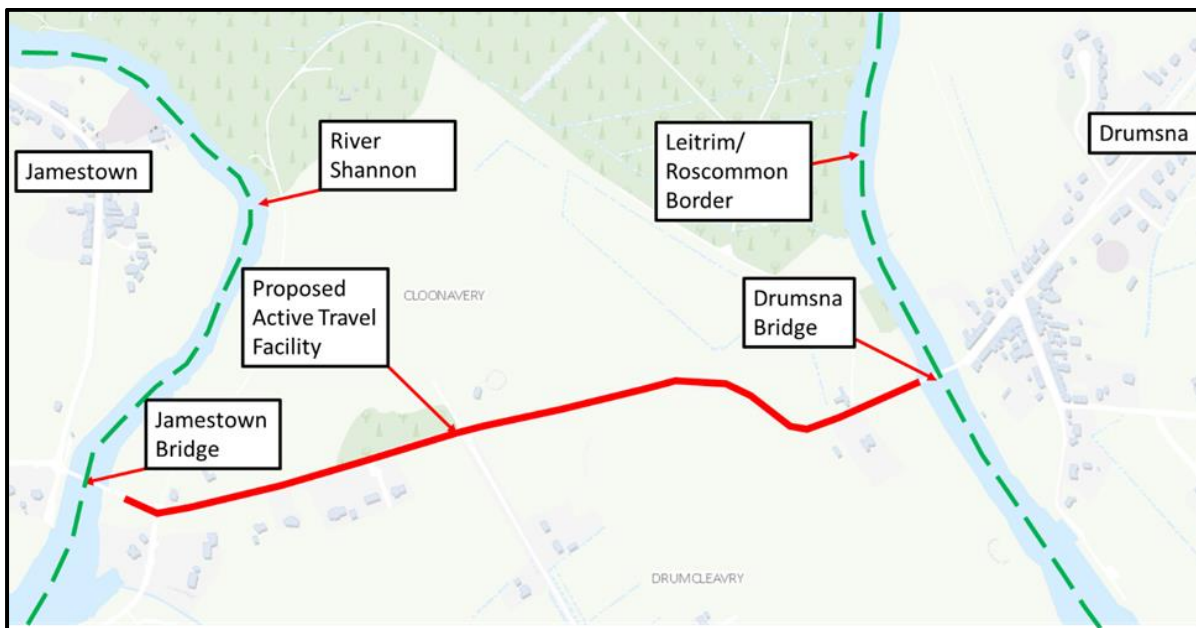


Figure 2.1: Location Map (Source: Clandillon Civil Consulting)

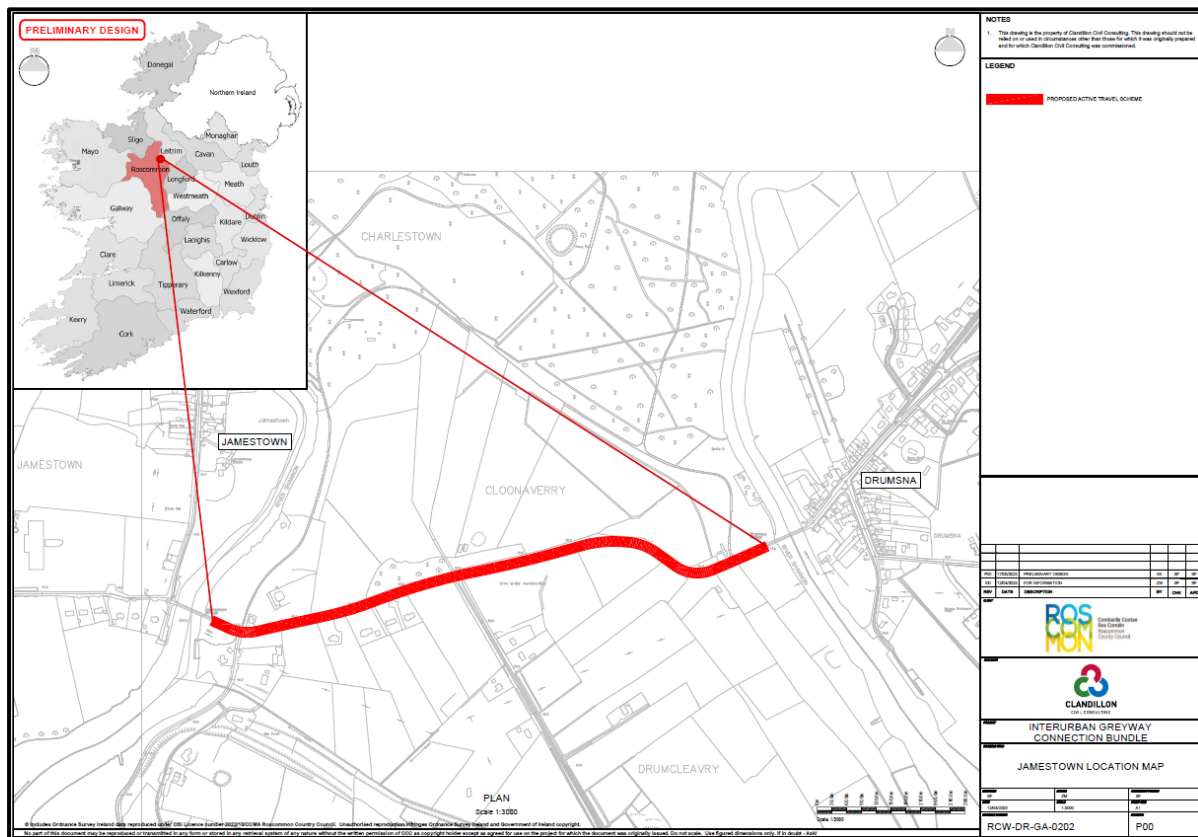


Figure 2.2: Proposed Development location (Source: Clandillon Civil Consulting)

3 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.

Due to ongoing review of road traffic collision data by the Road Safety Authority website, no traffic collision data could be obtained for the vicinity of the proposed development site.

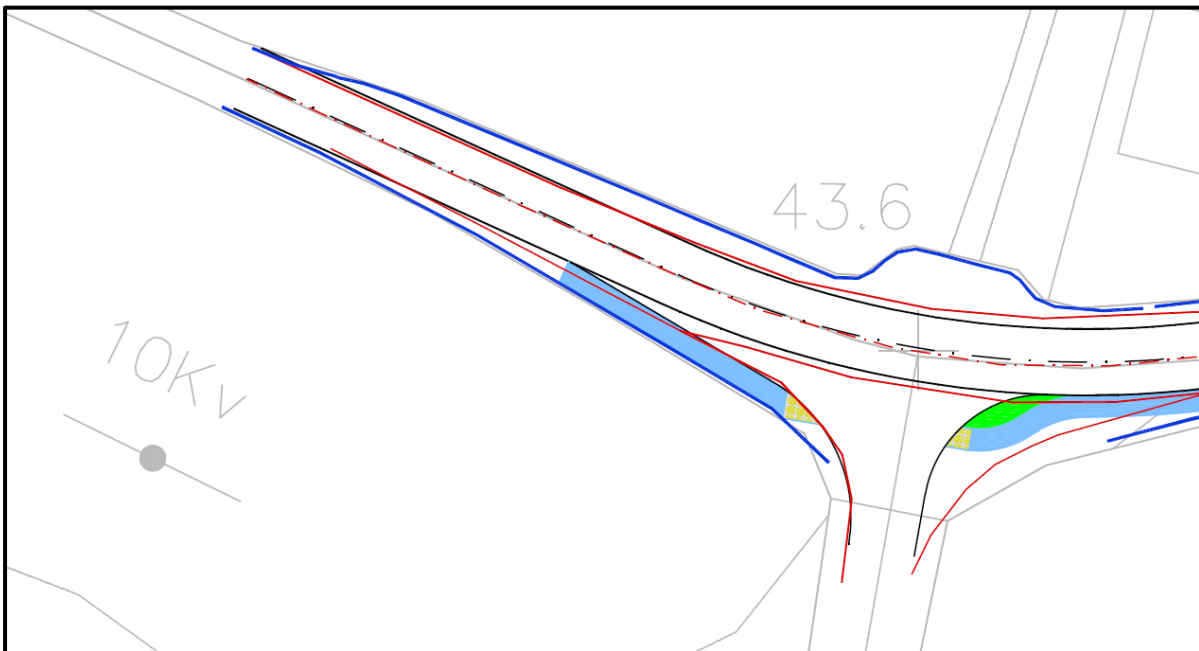
3.1 Potential Problems Identified

Problem No.01: Pedestrian Permeability

Location: L3656 Junction (Drawing No. RCW-DR-GA-0001)

The audit team has observed from the provided drawings that the proposed pedestrian path appears to terminate abruptly at the western side of the junction, with no clear connection to an existing pedestrian footpath network. This lack of continuity and insufficient pedestrian permeability may pose significant risks to vulnerable users who are forced to transition directly into the roadway at these termination points.

The absence of a seamless connection between the proposed pedestrian paths and an existing footpath network raises concerns for pedestrian safety. Without a smooth transition, pedestrians may encounter difficulties navigating the area and be exposed to potential hazards while crossing the road. This situation increases the likelihood of conflicts with vehicular traffic and heightens the risk of accidents and injuries, particularly for vulnerable road users.



Recommendation:

The design team should review the footpath layout in this area to ensure interconnectivity with surrounding footpaths.

Problem No.02: Tie into Existing Infrastructure**Location: Eastern Side of Proposed Scheme - Drumsna (Drawing No. RCW-DR-GA-0004)**

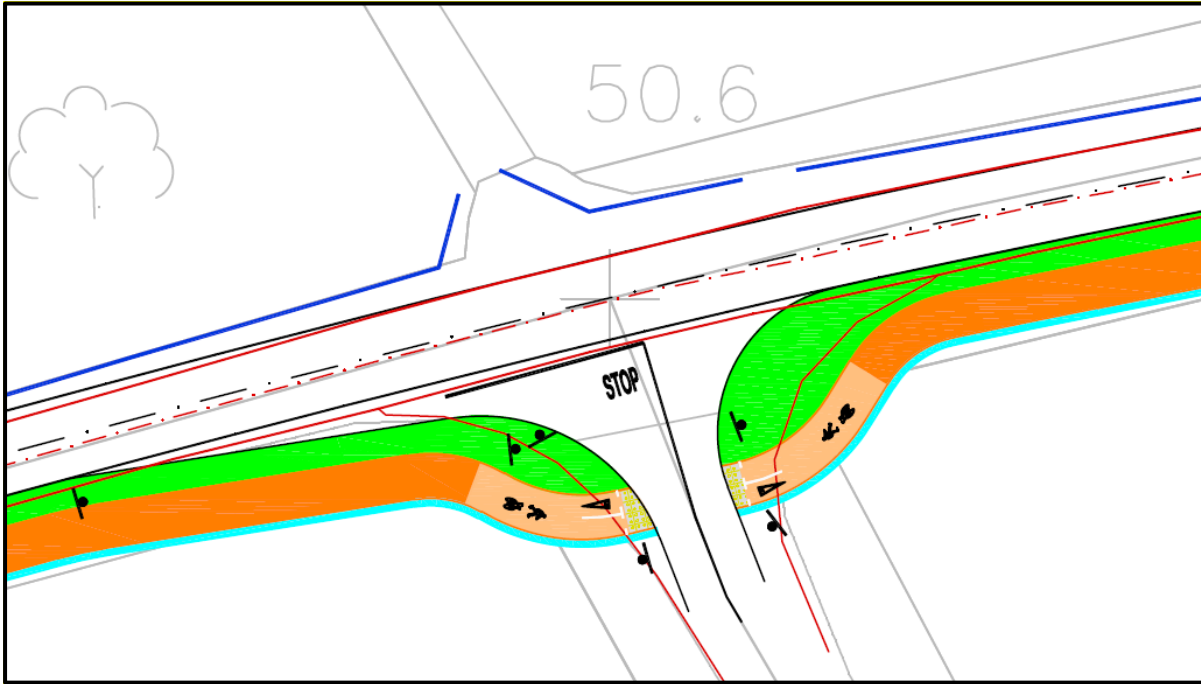
The audit team note that the proposed active travel route at Drumsna appears to stop abruptly at the connection point with the existing infrastructure. This sudden termination of the shared surface raises concerns about potential trip hazards and difficulties for pedestrians and cyclists transitioning between the two surfaces. Without proper alignment and continuity, there is an increased risk of slips, trips, and falls for vulnerable road users at this location.

**Recommendation:**

The design team must carefully consider the transition point where the shared surface meets the existing infrastructure at Drumsna and throughout the proposed scheme. It is essential to provide a seamless connection that ensures a safe and smooth passage for pedestrians and cyclists.

Problem No.03: Vulnerable User Sightlines**Location: Bend-Out Crossing Point (Drawing No. RCW-DR-GA-0002)**

The audit team has observed that there is a bend-out crossing point proposed along the shared route. However, the team also note that there are no detailed sightlines provided at this new crossing arrangement at the junction. This lack of sightline provision for vulnerable users may lead to unsafe manoeuvres when users are departing from these locations, potentially resulting in vehicle/bicycle/pedestrian collisions causing injuries.

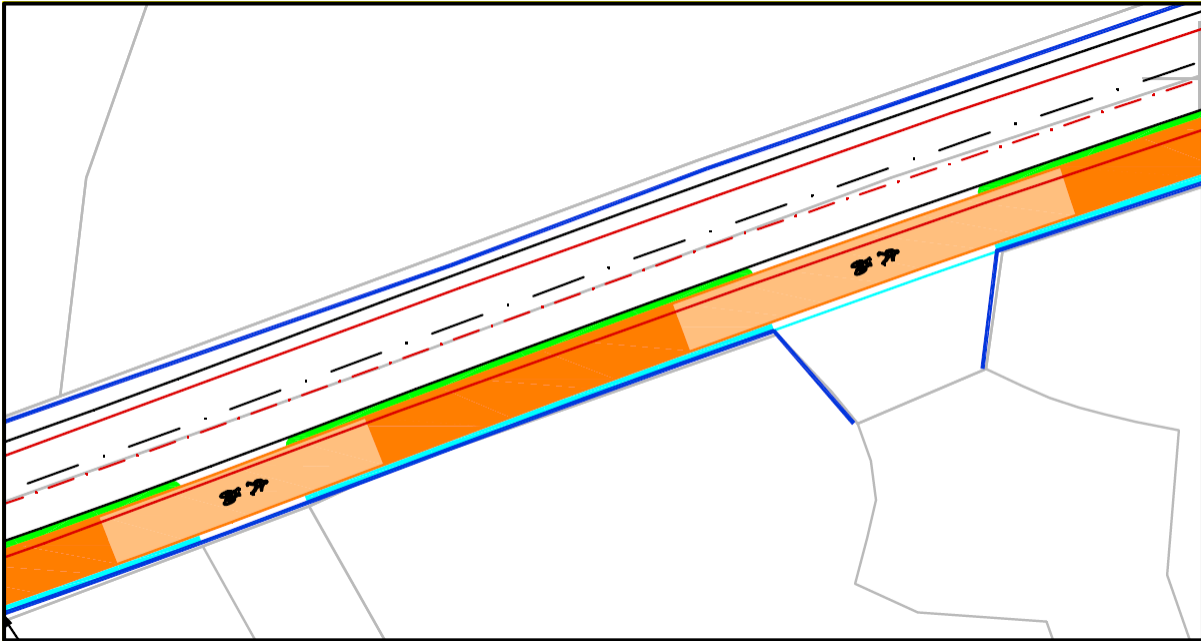
**Recommendation:**

The design team should ensure the adequate sightlines are achievable at the junction and that the entire extents of sightline availability is detailed on the proposed plans.

Problem No.04: Vehicle Permeability/Access onto Shared Surface

Location: Throughout Scheme

The audit team note from the design drawings that the grass verge that runs along the shared surface has a number of gaps at different points on the route. It appears to be related to access points to properties along the route. However, it is unclear as to how these access points interact with the shared facility and how they will safely tie into one another. There is an inherent safety risk to all road users should the infrastructure not safely link up.

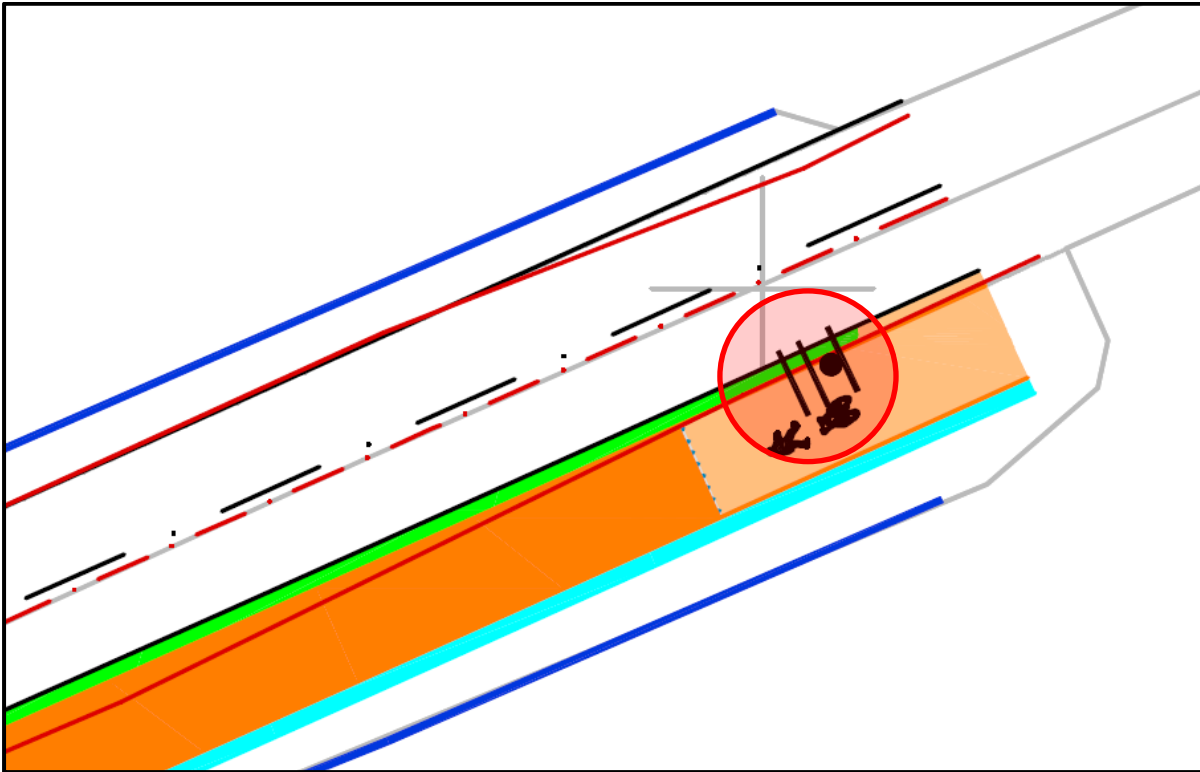


Recommendation:

The design team should ensure that the appropriate provisions are provided at these locations to allow vehicles to access these entrances and to ensure that details are provided to highlight how these access points tie into the new scheme. The design team should also provide measures such as kerbing around grass verges at these access points to mitigate the risk of grass edges growing into access points which could result in dirty/slippery road surfaces.

Problem No.05: Signage Positioning**Location: Eastern Side of Proposed Scheme (Drawing No. RCW-DR-GA-0004)**

The audit team has observed from the drawings that the proposed sign location appears to be within the shared facility. This positioning could significantly hinder the smooth and safe movement of vulnerable road users along the route, particularly for visually impaired and wheelchair users, potentially causing injuries and conflicts with other users.

**Recommendation:**

The design team must carefully review the proposed sign locations and ensure that they are strategically placed outside the shared facility, where they do not obstruct the path of vulnerable road users.

Problem No.06: Sightlines**Location: Along L3656 on Eastern Side of Proposed Scheme**

The audit team note from the site visit that sightlines may be impaired at junctions due to unmaintained vegetation and road features. The audit team could not confirm whether sufficient visibility splays are achievable at all junctions since there is no visibility splay detailed at the junctions. Inadequate sightlines and stopping sight distances could lead to sideswipe, side impact or collisions resulting in injury to all road users.

**Recommendation:**

The design team should ensure the adequate sightlines are achievable at all junctions along the proposed widened shared route.

Problem No.07: Signage & Road Markings

Location: L3656 on Eastern Side of Proposed Scheme

The audit team note that there is a lack of signage and markings for the scheme on the drawings provided. Signage and markings aid in informing road users of the direction of travel and presence of vulnerable road users, cyclists, and stop/yield locations. Inadequate signage and road markings may lead road users not being alerted to the presence of oncoming hazards which may result in vehicle-vehicle or vehicle-pedestrians/cyclist conflicts causing injury.



Recommendation:

The design team should ensure that signage and road markings are provided throughout the proposed scheme in line with National Cycle manual guidelines and the applicable Road Traffic Sign Manual.

Problem No.08: Traffic Management Signage and Markings**Location: Throughout Scheme**

The audit team note that there is no proposed traffic management signage for the scheme. The audit team note that there will be an increased volume of vulnerable road users along the scheme once implemented which increases the risk of a potential conflict with motorists if appropriate measures such as traffic signage and road markings are not provided.

Recommendation:

The design team should ensure that traffic management signage and road markings are provided throughout the scheme such as 'Slow' road markings and signage including signage indicating the presence of vulnerable users.

Problem No.09: Drainage**Location: Proposed Scheme**

The audit team have not received drawings detailing the surface drainage strategy. Surface water can pose a significant trip hazard in various weather conditions, including warm and cold weather. Additionally, it can adversely affect the skid resistance of bicycles and motorised vehicles, potentially leading to safety concerns. Additionally, inadequate gully positioning may lead to issues of ponding which poses a risk of slips, trips or falls to vulnerable road users.

Recommendation:

The design team should ensure that details and precise locations of all drainage gullies and related infrastructure are provided across the site. Strategic placement of drainage elements is essential to avoid the risk of ponding and water accumulation during wet weather conditions. Additionally, special attention should be given to the access route leading to and from the subject site to ensure it has adequate surface water drainage.

Problem No.10: Lack of Details**Location: Throughout Scheme**

The audit team note from the drawings package provided to the audit that there is a lack of dimensions throughout the scheme. It is unclear from the drawings where street furniture is positioned if it is within a safe distance between them and the shared surface.

Recommendation:

The design team should ensure that all relevant dimensions and details are displayed in the plans and that any existing infrastructure/street furniture is clearly detailed on the proposed plans.

Problem No.11: Lighting**Location: Throughout Scheme**

The audit team note from the plans provided that there are no proposed upgrades to the existing public lighting within the scheme. It is unclear from the drawings and site visit if the route will be appropriately lit, especially at junctions. This creates an issue in low light conditions where drivers may be unable to vulnerable users using the route. This has the potential to lead to pedestrian-vehicle collisions which poses a risk of injury.

Recommendation:

The design team should ensure that appropriate public lighting provision is provided within the scheme.

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

ORS

Signed: 

Date: 26th July 2023

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

ORS

Signed: 

Date: 26th July 2023

Audit Team Observer: Angeliki Kalatha: MEng, MSc, MIEI

ORS

Date: 26th July 2023

Appendix A – Inspected Documents

The audit team reviewed the following drawings and documents provided by Clandillon Civil Consulting:

Documents:

- (1) RCW-SOQ-AL-0201-P00 (SOQ)
- (2) RGW-RP-AL-0002-P01 (Preliminary Design Report).

Drawings:

- (1) RCW-DR-GA-0001-P02 to RCW-DR-GA-0004-P02 (General Arrangement)
- (2) RCW-DR-GA-0202-P00 (Location Plan)
- (3) RCW-DR-KB-0005-P00 (Typical Pavement Build Up)
- (4) RCW-DR-LA-0001-P01 to RCW-DR-LA-0004-P01 (Additional Land Requirement)
- (5) RCW-DR-XS-0002-P00 (Existing Cross Section).

Appendix B – Designer Response Form

Road Safety Audit Feedback Form

Job: 221187 – Proposed Active Travel Scheme, Jamestown, Co. Roscommon

Stage of Audit: Stage 1/2

Date Audit Completed: 26/07/2023

Problem Reference in Safety Audit Report	To Be Completed by the Designer			To be Completed Audit Team Leader
	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				
P2				
P3				
P4				
P5				
P6				
P7				
P8				
P9				
P10				
P11				

Signed:..... Designer

Date:.....

Signed:.....Audit Team Leader

Date:.....

Signed:..... Employer

Date:.....

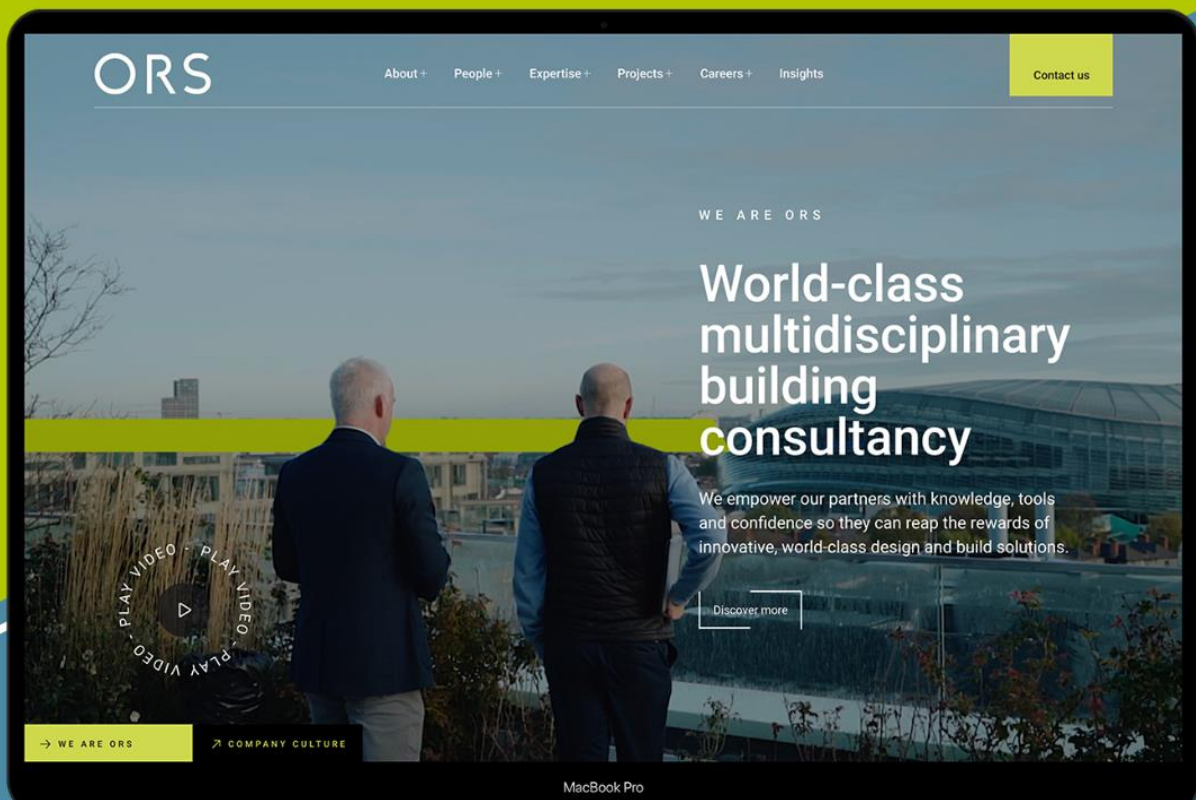
ORS

Multidisciplinary Building Consultancy



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and expertise by visiting our brand-new
website.

Click here



Find Us Nationwide, on LinkedIn or on Youtube  

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Marlinstown Business Park,
Mullingar, Co. Westmeath,
Ireland, N91 W5NN

 Suite: G04, Iconic Offices,
Harmony Row,
Dublin 2, Co. Dublin,
Ireland, D02 H270

 Level One, Block B,
Galway Technology Park,
Parkmore, Co. Galway,
Ireland, H91 A2WD

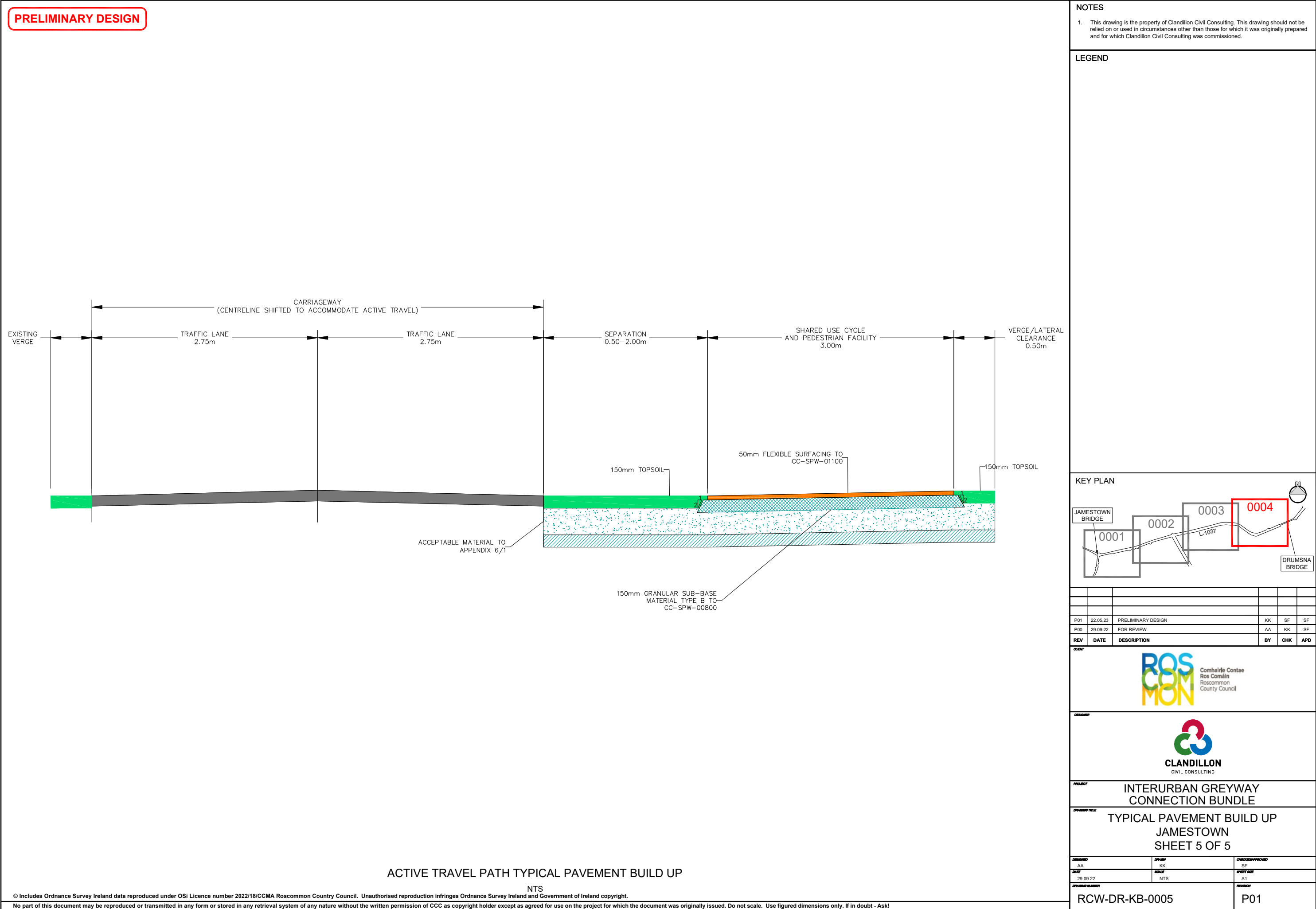
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Enterprise Centre, Lurganboy,
Donegal Town, Co. Donegal,
Ireland, F94 KT35

 Office 4, Spencer House,
High Road, Letterkenny,
Co. Donegal,
Ireland, F92 PX8N

 NSQ2,
Navigation Square,
Albert Quay, Cork
Ireland, T12 W351

APPENDIX E - PAVEMENT CROSS-SECTION



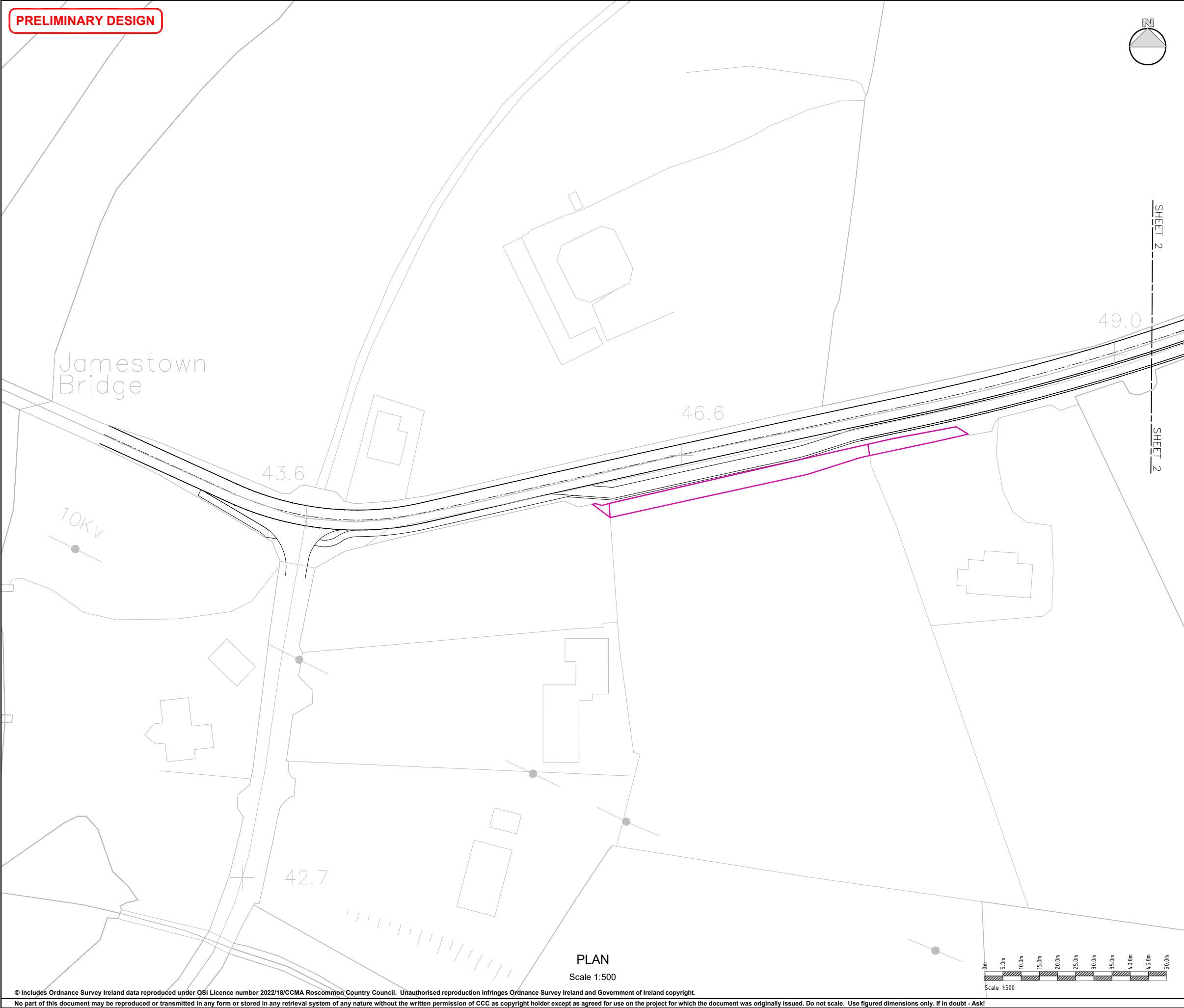




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APPENDIX F - LANDTAKE DRAWINGS





NOTES

1. This drawing is the property of Clandillon Civil Consulting. This drawing should not be relied on or used in circumstances other than those for which it was originally prepared and for which Clandillon Civil Consulting was commissioned.

LEGEND

ADDITIONAL LAND TAKE

KEY PLAN

P01	22/05/2023	PRELIMINARY DESIGN		KK	SF
P00	13/05/2022	FOR DISCUSSION		MV	RB
REV	DATE	DESCRIPTION		BY	CHK
APD					

CLIENT

ROS COM MON
Comhairle Contae Ros Comáin
Roscommon County Council

DESIGNER

CLANDILLON
CIVIL CONSULTING

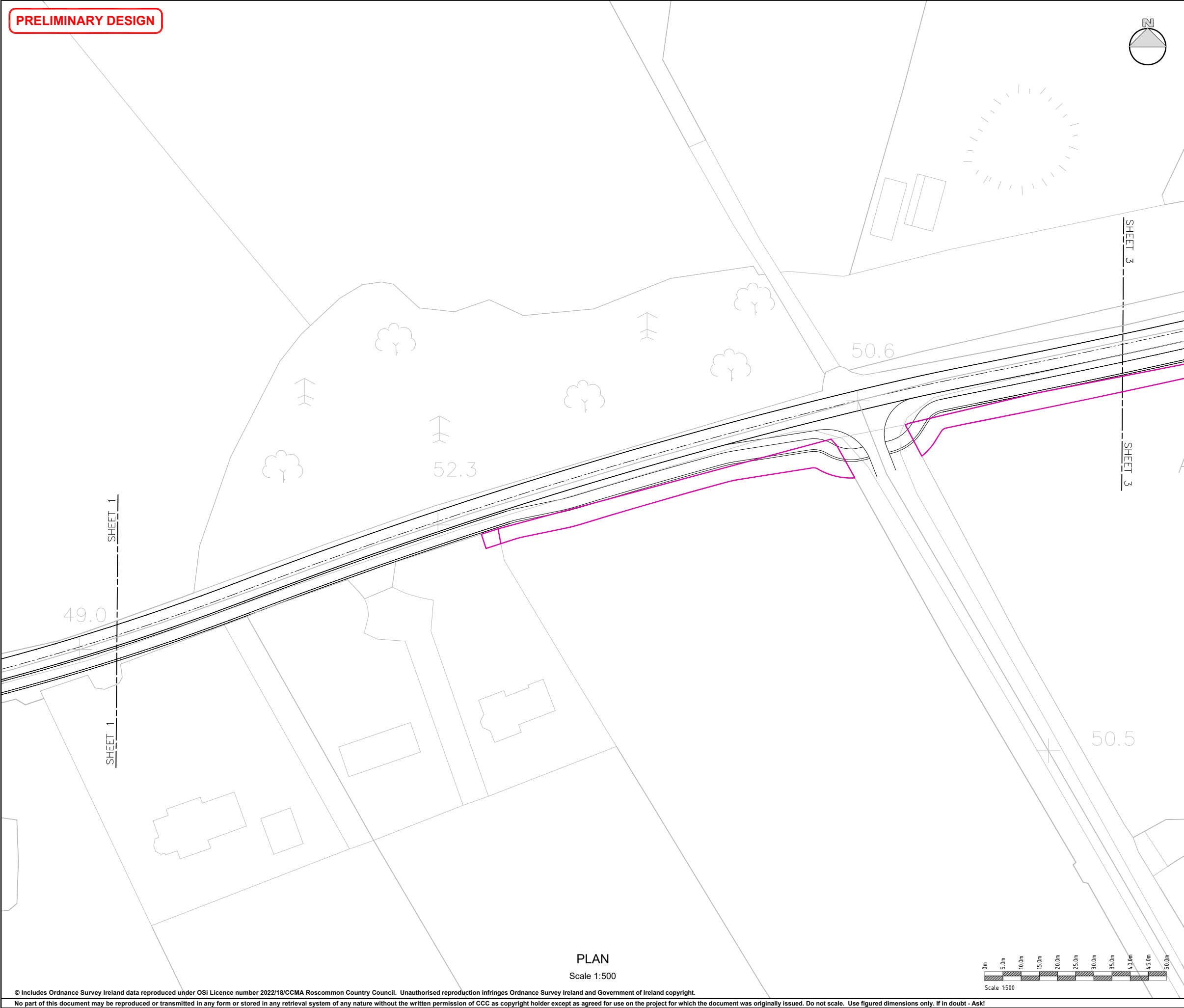
PROJECT

INTERURBAN GREYWAY CONNECTION BUNDLE

DRAWING TITLE

ADDITIONAL LAND REQUIREMENT
JAMESTOWN
SHEET 1 OF 4

DESIGNED	RB	DRAWN	MV	CHECKED/APPVED	SF
DATE	13/05/2022	SCALE	1:500	SHEET SIZE	A1
DRAWING NUMBER	RCW-DR-LA-0001			REVISION	P01



NOTES

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LEGEND

ADDITIONAL LAND TAKE

KEY PLAN

P01	22/05/2023	PRELIMINARY DESIGN		KK	SF	SF
P00	13/05/2022	FOR DISCUSSION		MV	RB	SF
REV	DATE	DESCRIPTION		BY	CHK	APD

CLIENT

ROS COM MON
Comhairle Contae
Ros Comáin
Roscommon
County Council

DESIGNER

CLANDILLON
CIVIL CONSULTING

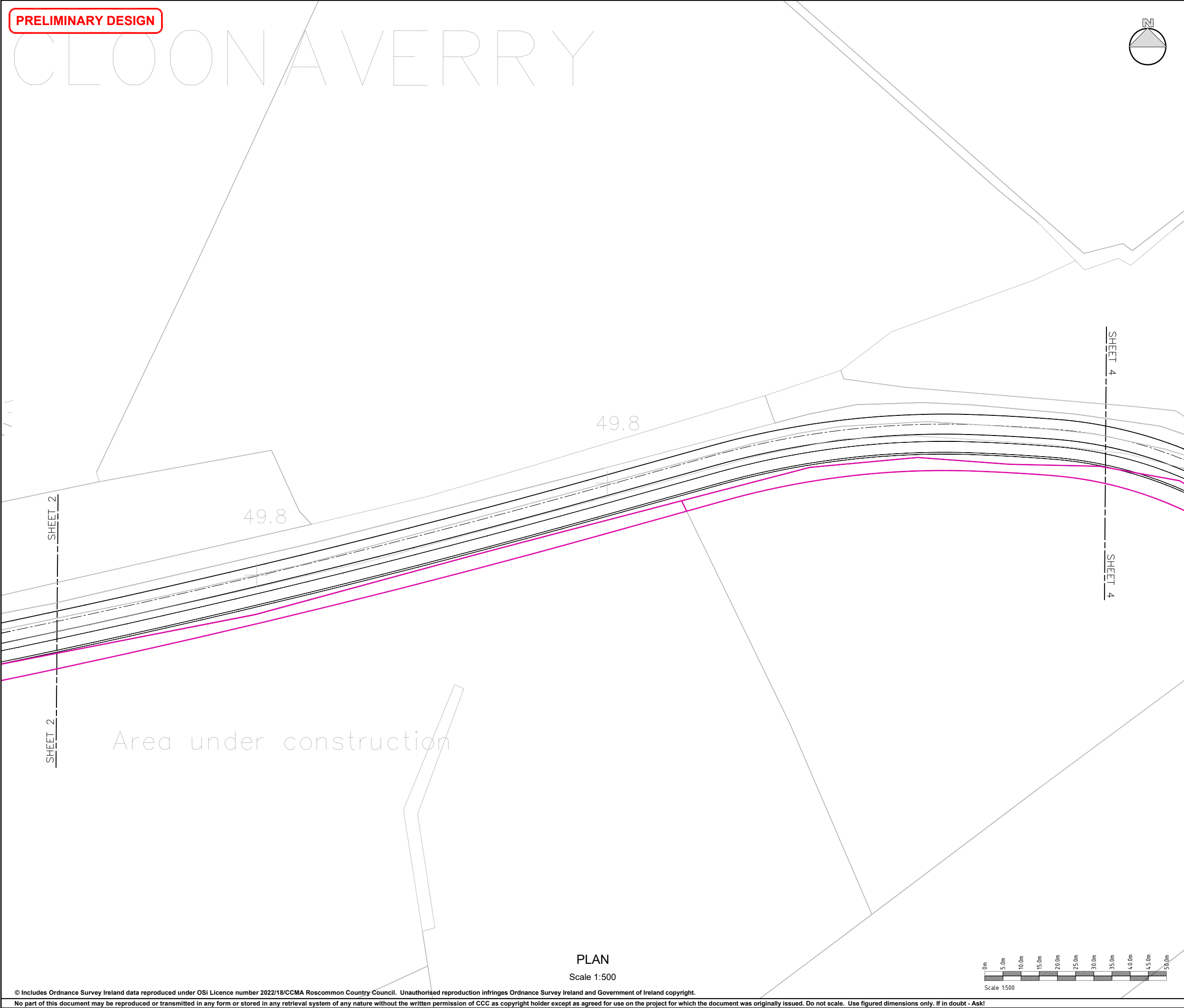
PROJECT

**INTERURBAN GREYWAY
CONNECTION BUNDLE**

DRAWING TITLE

**ADDITIONAL LAND REQUIREMENT
JAMESTOWN
SHEET 2 OF 4**

DESIGNED	RB	DRAWN	MV	CHECKED/APPVED	SF
DATE	13/05/2022	SCALE	1:500	SHEET SIZE	A1
DRAWING NUMBER	RCW-DR-LA-0002			REVISION	P01



NOTES

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LEGEND

ADDITIONAL LAND TAKE

KEY PLAN

REV	DATE	DESCRIPTION	BY	CHK	APD
P01	22/05/2023	PRELIMINARY DESIGN	KK	SF	SF
P00	13/05/2022	FOR DISCUSSION	MV	RB	SF

CLIENT

ROSCOMMON
Comhairle Contae
Ros Comáin
Roscommon
County Council

DESIGNER

CLANDILLON
CIVIL CONSULTING

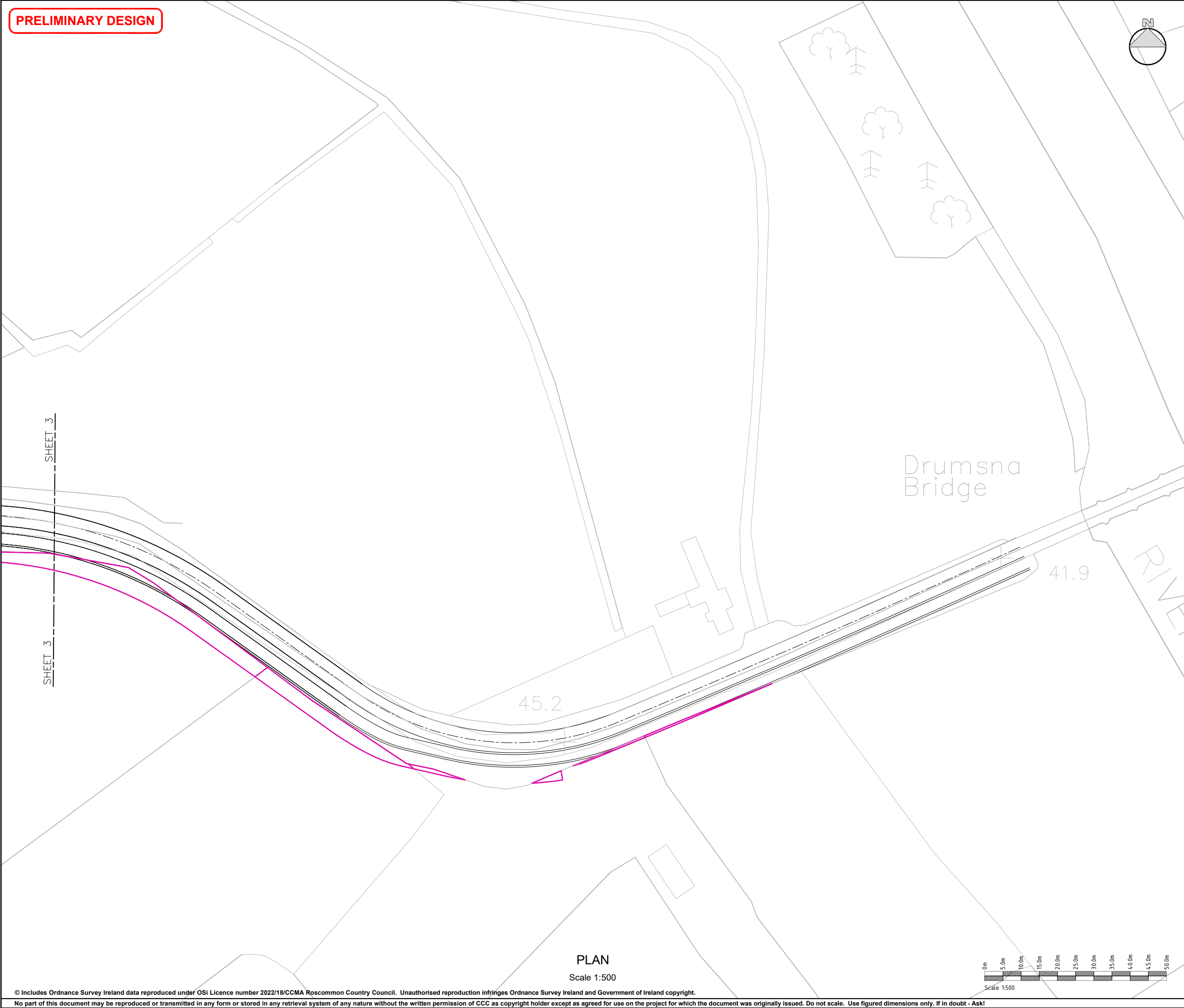
PROJECT

INTERURBAN GREYWAY
CONNECTION BUNDLE

DRAWING TITLE

ADDITIONAL LAND REQUIREMENT
JAMESTOWN
SHEET 3 OF 4

DESIGNED	DRAWN	CHECKED/APPVED
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RCW-DR-LA-0003		P01



NOTES

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LEGEND

ADDITIONAL LAND TAKE

KEY PLAN

REV	DATE	DESCRIPTION	BY	CHK	APD
P01	22/05/2023	PRELIMINARY DESIGN			
P00	13/05/2022	FOR DISCUSSION			

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County Council

DESIGNER

CLANDILLON
CIVIL CONSULTING

PROJECT

**INTERURBAN GREYWAY
CONNECTION BUNDLE**

DRAWING TITLE

**ADDITIONAL LAND REQUIREMENT
JAMESTOWN
SHEET 4 OF 4**

DESIGNED	DRAWN	CHECKED/APPROVED
RB	MV	SF
DATE	SCALE	SHEET SIZE
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DRAWING NUMBER		REVISION
RCW-DR-LA-0004		P01