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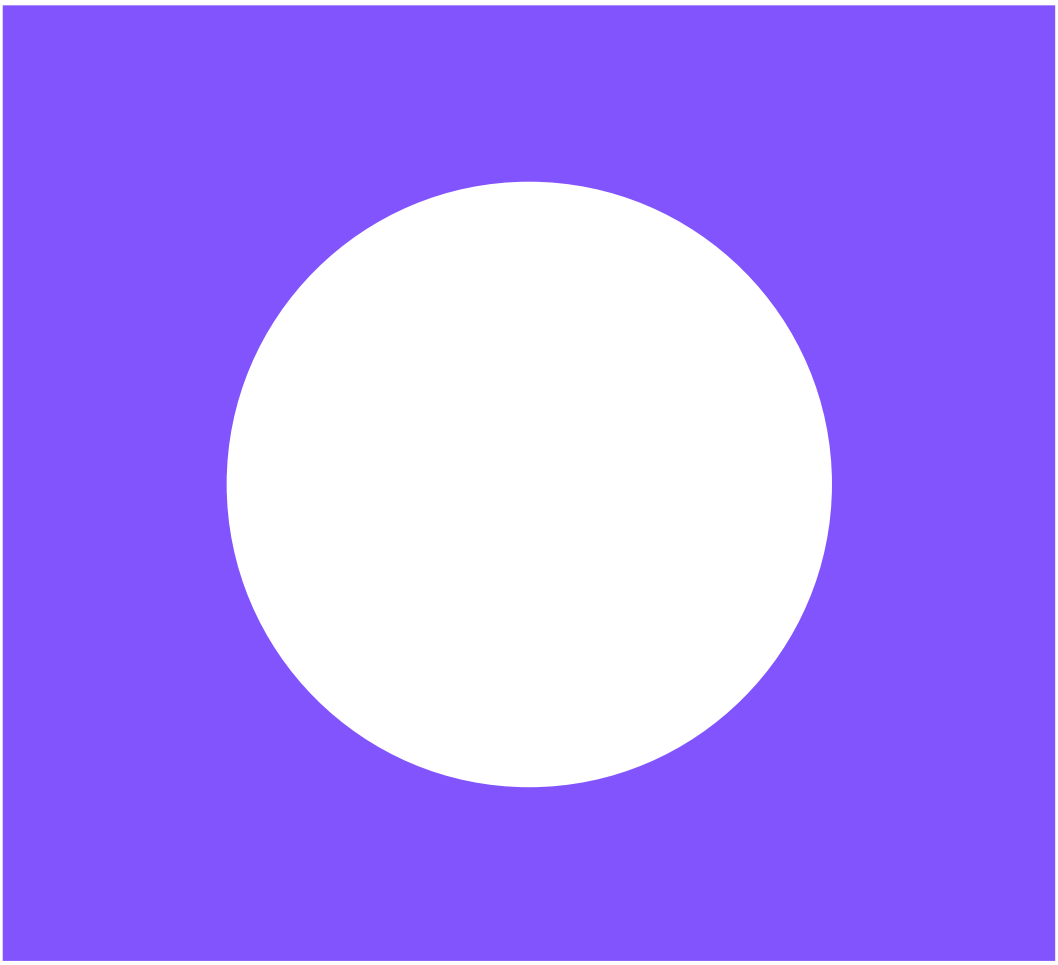

R610 St. Patricks Junction Improvement Scheme

Stage 1 Quality Audit

July 2026

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R610 St. Patricks Junction Improvement Scheme

Stage 1 Quality Audit

July 2026

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	23/07/26	T J Blaney	R Collins	J Pearson	First Issue
					
B	18/08/26	T J Blaney	R Collins	J Pearson	Address Client's comments
					

Document reference: 100287864-MMD-REP-RSA-2026-030 | B

Contents

1 Introduction

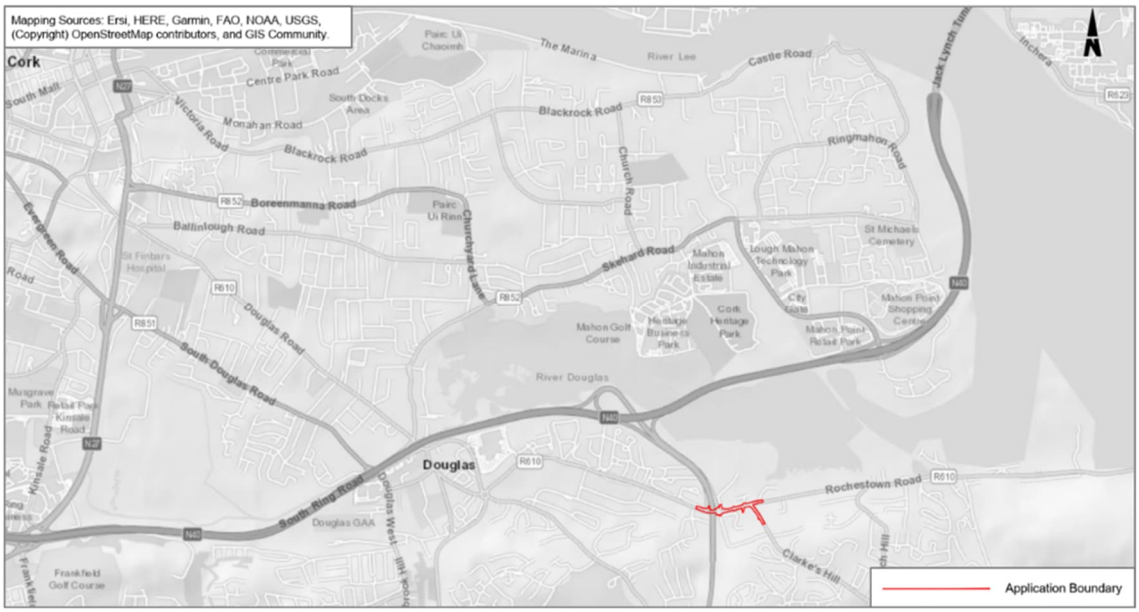
This report describes a Stage 1 Quality Audit carried out on the proposed R610 St. Patricks Junction Improvement scheme. The section in question is within Rochestown and extends along Rochestown Road from the eastern side of its junction with Rochestown Rise to the eastern side of its junction with Riverside. An element of the scheme also extends south along Clarkes Hill to a point immediately north of its junction with Mount Ovel.

1.1 Scheme Overview

Mott MacDonald Ireland has been appointed by Cork City Council to prepare and lodge a planning application under Part 8 of the Planning and Development Act 2000 (as amended) for the construction and delivery of the R610 St. Patricks Junction Improvement scheme in Cork City. This proposed scheme will compromise of a 3.15km cycling network from Douglas Village to the 'Cork City to Passage West' Greenway, encompassing 'component' routes CSE-U20 and CSE-U21 outlined within the Cork Cycle Network Plan (CCNP).

The scheme is located approximately 3km southeast of Cork city centre within the suburban areas of Rochestown and Douglas, traversing the townlands of Douglas, Maryborough, Monfieldstown, Mounthovel and Rochestown. It is located between the Rochestown and Douglas areas of Cork and will assist in providing continuous cycling and pedestrian facilities from the junction where Monastery Road (L2472) meets Rochestown Road (R610), to the Fingerpost Roundabout (see **Figure 1.1**).

Figure 1.1: Location of Proposed Development



Source: Mott MacDonald Ireland Drawing 229101186-MMD-0000-XX-DR-C-0202

The element of the scheme considered as part of this Stage 1 Quality Audit comprises only a short section of the overall scheme and consists of the following elements:

- Provision of unsegregated shared use footway / cycleway along the southern side of Rochestown Road between Rochestown Rise and Ashley.
- Modifications to the highway layout on Rochestown Road at its junction with the N28 northbound slip road to tie-in with the proposed M28 scheme.
- Replacement of the Rochestown Road roundabout junction with the N28 southbound slip road with a signalised crossroad junction.
- Side road raised table crossing point treatment to Ashley, The Ovals and Brookfield.
- Signalisation of the junction between Rochestown Road and Clarkes Hill incorporating controlled pedestrian and cycle crossings.
- Provision of a bi-directional cycle lane on the southern side of Rochestown Road between The Ovals and Clarkes Hill.
- Provision of bi-directional cycle lane on the western side of Clarkes Hill.

1.2 Scheme Objectives

The objective of the R610 St. Patricks Junction Improvement scheme is to improve the cycling and pedestrian facilities between Douglas Village and the 'Cork City to Passage West' Greenway by implementing the following safety improvements:

- Provide a continuous safe (segregated/partially on-line) cycle route from the junction where Monastery Road (L2472) meets Rochestown Road (R610), to the Fingerpost Roundabout.
- Introduce new signalised junctions and improve existing junctions along the route, particularly on the Rochestown Road, to prioritise active travel modes.
- Ensure all crossings are more conspicuous with buildouts and removal of obstructions to improve visibility for motorists and vulnerable road users.
- Increase safety and comfort for vulnerable road users through improved pedestrian infrastructure in line with DMURS principles.

1.3 Report Purpose

This Report presents a Quality Audit carried out by Mott MacDonald Ireland at the request of their client, Cork City Council and follows the guidance set out in Design Manual for Urban Roads and Streets (DMURS) Advice Note No. 4.

A Quality Audit is a defined process that consists of two main parts:

1. Individual Design Audits consisting of a DMURS Street Design Audit and other individual Design Audits considered necessary such as a Road Safety Audit.

2. A Quality Audit Report that summarises the issues raised within the individual Design Audits and identifies potential conflicts between the audits. The Quality Audit Report should present solutions that are measured against the main objectives to the project and make suitable recommendations.

For the purposes of this scheme, it was considered appropriate for the individual Design Audits to consist of the following:

- A Road Safety Audit
- An Accessibility Audit and walking Audit
- A Cycling Audit

A Quality Audit identifies potential issues and opportunities for improvements and makes recommendations for future action as part of the design process. It should be noted that the Design Team are not bound by the recommended solutions but should give careful consideration to them.

A Quality Audit is not considered a design check and, as such, the Quality Audit Team has not examined or verified the compliance of the design in relation to any design standards.

The Quality Audit took place at the Manchester and Cork offices of Mott MacDonald and consisted of a detailed examination of the submitted documentation and drawings listed in **Appendix A**.

General arrangement drawings of the proposed scheme are provided in **Appendix B** for information.

The Quality Audit Team consisted of:

Rachael Collins	MSc, BA (Hons), MCIHT TII Approved Road Safety Auditor (reference: RC842524) Audit Team Leader, Mott MacDonald
John O'Riordan	BEng (Hons), CEng, MIEI TII Approved Road Safety Auditor (reference: JO3372496) Audit Team Member, Mott MacDonald
Tim Blaney	Tim Blaney BSc (Hons), CMILT, MCIHT, MSoRSA TII Approved Road Safety Auditor (reference: TB148411) Audit Team Member, Mott MacDonald

Rachael Collins and John O'Riordan from the Quality Audit Team undertook a visit to the site on Wednesday 8th July 2026 commencing at 11:15 hrs. During this visit the weather was fine with bright sunshine. The road surface was dry. Traffic flows were moderate and free flowing. Construction works were underway for the N28 upgrade scheme, although they did not affect the operation of the scheme. The N28 off slip was operating as a single lane when previously it was a two-lane entry onto the roundabout. A single pedestrian was observed walking to the bus stop east of Clarkes Hill. Two pedal cyclists were observed, with one riding in each direction.

1.4 Report Structure

- **Section 2** reports this DMURS Street Design Audit
- **Section 3** presents the Road Safety Audit
- **Section 4** details the Additional Audits
- **Section 5** presents the Quality Audit summary
- **Appendix A** lists the documents and drawings reviewed as part of this audit
- **Appendix B** presents an overview of the scheme design

2 DMURS Street Design Audit

Connectivity

Key Issues	Key DMURS Reference	Design Response
Strategic routes/major desire lines been identified and are clearly incorporated into the design.	3.1 – Integrated Street Network 3.2.1 – Movement Function 3.3.1 – Street layouts 3.3.4 - Wayfinding	The main emphasis of the scheme is to provide improved cycle facilities along Rochestown Road. Incorporated improvements include unsegregated shared use footways, segregated cycle lanes, and controlled pedestrian and cyclist crossing points. The major desire lines are considered to have been accommodated.
Multiple points of access are provided to the site/place, in particular for sustainable modes.	3.3.1 – Street Layouts 3.3.3 – Retrofitting	The scheme includes the retrofitting of cycle facilities to the existing highway layout to improve provisions for cyclists. However, the tie-in between the proposed scheme and the existing highway layout at the western extent of the scheme appears limited. No cycle facilities appear to currently be provided west of the tie in and no opportunity for cyclists to move between the carriageway and the unsegregated shared use footway is proposed. It is also unclear how the new footway and bi-directional cycle lane on Clarkes Hill tie-into the existing highway layout at its southern end. **Improved tie-ins between the scheme and the existing highway layout should be provided at the western extent of the scheme and on Clarkes Hill.**
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	Pedestrian provision throughout the scheme is notably improved with the incorporation of controlled pedestrian crossing facilities within the two new signalised junctions. Raised table crossing points on side roads are also proposed. However, there is limited opportunity for cyclists on the northern side of Rochestown Road to join the cycle facilities on the southern side. For example, at the new signalised junction between Rochestown Road / Woodbrook / Mount Ovel, cyclists are only able to cross from south to north. **The scheme would benefit from the provision of facilities that enable cyclists on-carriageway or approaching from side roads to join the new off-carriageway cycle facilities.**
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	The installation of two new signalised junctions incorporating controlled pedestrian and / or cycle crossings is likely to intermittently slow vehicle speeds along Rochestown Road. The provision of raised table crossing points on most side roads will also suitably slow turning vehicle speeds. In some places, existing carriageway widths will be narrow which will further encourage lower vehicle speeds. Clarkes Hill approaches Rochestown Road on a downhill gradient. Currently, the highway is bounded by high walls and vegetation and has a narrow footway on its eastern side. The scheme proposes widening the footway on the eastern side and providing a segregated footway and bi-directional cycle lane on its western side. Whilst this will result in some localised reduced carriageway widths, this will create a more ‘open’ highway environment and may encourage higher vehicle speeds.

Connectivity

	Suitable traffic calming features to encourage appropriate vehicle speeds should be considered on Clarkes Hill.

Self-Regulating Street Environment

Key Issues	Key DMURS Reference	Design Response
A suitable range of design speeds have been applied with regard to context and function.	3.2.1 – Movement Function. 3.2.3 – Place Context. 4.1.1 – A Balanced Approach to Speed	Raised table priority crossing points are proposed on all appropriate side roads to slow turning vehicle speeds and prioritise pedestrian and / or cyclist safety.
The street environment will facilitate the creation of a traffic calmed environment via the use of 'softer' or passive measures.	4.2.1 – Building Height and Street Width 4.2.2 – Street Trees 4.2.3 – Active Street Edges 4.2.4 – Signage and Line Marking 4.2.7 – Planting 4.4.2 – Carriageway Surfaces 4.4.9 – On-Street Parking Advice Note 1 – Transitions and Gateways	Side roads and access points with low radii will ensure vehicles entering or leaving the carriageway can only do so at low speed to generate a softer traffic calmed environment. Raised table priority crossing on side roads will further slow turning vehicles. New traffic signals will intermittently slow vehicle movement along Rochestown Road. Hatched central carriageway markings and ghost island right turn lanes will give the impression of narrowed carriageway widths. An existing bus stop layby is to be removed, and the bus stop provided on carriageway which will lead to occasional slowing of traffic through the scheme.
A suitable range of design standards/measures have been applied that are consistent with the applied design speeds.	4.4.1 – Carriageway Widths 4.4.4 – Forward Visibility 4.4.5 – Visibility Splays 4.4.6 – Alignment and curvature 4.4.7 – Horizontal and Vertical Deflections Advice Note 1 – Transitions and Gateways	The proposed scheme significantly alters the highway geometry, removes an existing roundabout junction and introduces two newly signalised junctions. The design is at the preliminary design stage and therefore landscaping and street furniture positioning is not yet finalised. **Through the detailed design process, appropriate forward visibility and visibility splays should be maintained and not obstructed by vegetation or street furniture.** **Visibility at junctions and side roads should be kept clear of obstructions including parked vehicles.**

Pedestrian and Cycling Environment

Key Issues	Key DMURS Reference	Design Response
The built environment contributes to the creation of a safe and comfortable pedestrian environment.	4.2.1 – Building Height and Street Width 4.2.3 – Active Street Edges 4.2.5 – Street Furniture 4.4.9 – On-Street parking	Suitably wide footways are proposed on both sides of Rochestown Road and Clarkes Hill. In some locations, cycle lanes will be present between the footway and the carriageway providing greater separation and an increased sense of safety. Street lighting is currently present but improved provision is also proposed.
Junctions have been designed to ensure the needs of pedestrians and cyclists are prioritised.	4.3.2 - Pedestrian Crossings 4.3.3 – Corner Radii 4.4.3 – Junction Design 4.4.7 – Horizontal and Vertical Deflections	Controlled pedestrian and / or cyclist crossing points have been incorporated into the newly signalised junctions. Raised table priority crossing points are proposed where appropriate across side roads.
Footpaths are continuous and wide enough to cater for the anticipated number of pedestrian movements.	3.2.1 – Movement Function. 3.2.3 – Place Context. 4.2.5 – Street Furniture 4.3.1 – Footways, Verges and Strips 4.3.2 – Pedestrian Crossings	Suitably wide footways are proposed throughout the scheme with appropriately positioned crossing points, along with improved footway provision on Clarkes Hill. Being preliminary design, proposed street furniture is yet to be finalised, and street lighting column positions are indicative. **Any proposed street furniture (including traffic signals) should be positioned to not obstruct the footways and maintain as wide an effective width as possible. Signs should be mounted suitably high to avoid pedestrians striking their heads.**

Pedestrian and Cycling Environment (cont)

Key Issues	Key DMURS Reference	Response
The particular needs of visually and mobility impaired users been identified and incorporated in the design.	4.2.5 – Street Furniture 4.3.1 – Footways, Verges and Strips 4.2.5 – Street Furniture 4.3.2 – Pedestrian Crossings 4.3.4 – Pedestrianised and Shared Surfaces	Red or buff coloured blister tactile paving is proposed at all crossing points to highlight the crossing location and whether it is controlled or uncontrolled. However, some tactile paving arrangements at the newly signalised junction between Rochestown Road / Woodbrook / Mount Ovel appear incorrect with stems missing. Some corduroy tactile paving is proposed at the western extent of the scheme and at the transition between shared and segregated cycle facilities, but there are areas where corduroy tactile paving to warn of the presence of cyclists is missing. An unsegregated shared use footway is proposed at the western end of the scheme however no onward cycle facilities are present to the west. Cyclists may continue along the footway or use the pedestrian crossing to the north. **Blister and corduroy tactile paving should be provided in accordance with current guidelines.** **Improved tie-ins between the scheme and the existing highway layout should be provided at the western extent of the scheme.**
Cycling facilities will cater for cyclists of all ages and abilities.	3.2.1 – Movement Function. 3.2.3 – Place Context. 4.3.5 – Cycle facilities.	The cycle crossing and cycle lane arrangement at the junction between Rochestown Road and Clarkes Hill results in several right angle turns. Less confident cyclists may have difficulty completing such turns. The geometry may also hinder the movement of cargo or adaptive bikes.

Pedestrian and Cycling Environment (cont)

	The angles of the cycle lanes in relation to the cycle signals may make it difficult for cyclists to observe the signals. **Modify the cycle facilities at the junction between Rochestown Road and Clarkes Hill to make it more accommodating to users of non-standard bikes.**

Visual Quality

Key Issues	Key DMURS Reference	Design Response
The landscape plan responds to the street hierarchy and the value of the place.	3.2.1 – Movement Function. 3.2.3 – Place Context. 4.2.2 – Street Trees 4.2.7 – Planting Advice Note 1 – Transitions and Gateways	A small area of landscaping is proposed at the junction between Rochestown Road / Woodbrook / Mount Ovel. As the scheme is currently at preliminary design, details regarding landscaping are limited. **Care should be taken to ensure that any trees proposed do not block visibility splays at junctions or crossing points. Their position should not impede mobility impaired users, and debris or roots should not present a trip hazard to users.**
Street furniture is orderly placed.	3.2.1 – Movement Function. 3.2.3 – Place Context. 4.2.5 – Street Furniture. 4.3.1 – Footways, Verges and Strips	Footways are currently shown to be clear of hazards with indicative positions of lighting columns all shown suitably located at the back of footway. However, design is currently preliminary, and street furniture is yet to be finalised. **Any street furniture should be located so as to not obstruct footways or visibility splays.**
The use of signage and line marking has been minimised.	3.2.1 – Movement Function. 3.2.3 – Place Context. 4.2.4 - Signage and Line Marking.	Design is currently at the preliminary design stage and therefore signs and lines are yet to be finalised, but current provision is suitably minimised.
Materials and finishes used throughout the scheme have been selected from a limited palette and respond to the value of the place?	3.2.1 – Movement Function. 3.2.3 – Place Context. 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 Specifications	The design is currently at preliminary design stage and therefore materials and finishes are not yet finalised.
Additional Comments		

Personnel Information

	Name	Date	Signature
Report Prepared By:	**Tim Blaney**	**22/07/2026**	
Principle Designers			

3 Road Safety Audit

This section describes road safety related issues identified by the Road Safety Audit Team during the Stage 1 Road Safety Audit (*Doc. Ref: 100287864/MMD/REP/RSA/2026-030/A*) which was carried out in accordance with the requirements of Transport Infrastructure Ireland's (TII) publication GE-STY-01024 May 2025 (Road Safety Audit).

3.1 Problem 1.01

Location: Rochestown Road - scheme wide.

Summary: Kerb alignments are being modified, and inadequate swept paths could result in kerbs being struck or turning related collisions.

Kerb alignments are being modified significantly throughout the scheme to accommodate the new cycle tracks. No swept path analysis has been provided to the Road Safety Audit Team to confirm all turning movements can be undertaken unhindered. Should swept paths not be adequate to allow all turning movements it may result in turning related collisions, alternatively vehicles may strike or mount the kerb leading to loss of control incidents.

Recommendation

Undertake swept path analysis to confirm all movements can be undertaken unhindered; if necessary, amend the kerb lines.

3.2 Problem 1.02

Location: Rochestown Road - scheme wide.

Summary: Lack of suitable parking and path for operatives may result in overtaking related collisions or pedestrian trips and falls.

The scheme involves the signalisation of two junctions. Should a maintenance operative be required to visit the traffic signals, it is not clear where they would be expected to park. Should there not be suitable parking, it could result in inappropriate parking which may lead to overtaking related collisions. Additionally, if there is not a suitable path for operatives to walk between the parking and the traffic signals it could put them at greater risk of being struck by motor vehicles.

Recommendation

Provide maintenance operatives with appropriate parking and a suitable path to the traffic signal equipment.

3.3 Problem 1.03

Location: Rochestown Road - scheme wide.

Summary: Street furniture may reduce footway widths leading to pedestrians colliding with the furniture or they will pass within the carriageway at risk of collisions with motor vehicles.

Footways within Typical Cross Section A-A are shown to be 1.8m in width, and whilst pedestrian activity was observed to be low, there was concern that should street furniture such as lighting columns, traffic signal equipment or signing be poorly positioned, the usable footway width would be reduced. Should street furniture be sited so that it reduces the footway width, it could result in pedestrians colliding with the street furniture or they may step into the carriageway in order to pass, leading to collisions with vehicles.

Recommendation

Locate street furniture appropriately to maintain 1.8m footways.

3.4 Problem 1.04

Location: Rochestown Road east of Rochestown Rise.

Summary: Lack of continuation for cyclists could lead to use of the footway increasing the risk of collisions with pedestrians.

A shared use active travel facility is proposed on the southern side of Rochestown Road with the scheme to start/end at the existing signalised crossing east of Rochestown Rise where it is noted to tie in-to the existing. However, there are no existing cycle facilities west of this location and it is not clear how cyclists will continue. Should cyclists continue on the footway or use the pedestrian crossing they will be at greater risk of colliding with pedestrians.

Recommendation

Provide a suitable tie-in and continuation for cyclists; this may require the continuation of the shared use footway or a dropped kerb to allow cyclists to return to the carriageway.

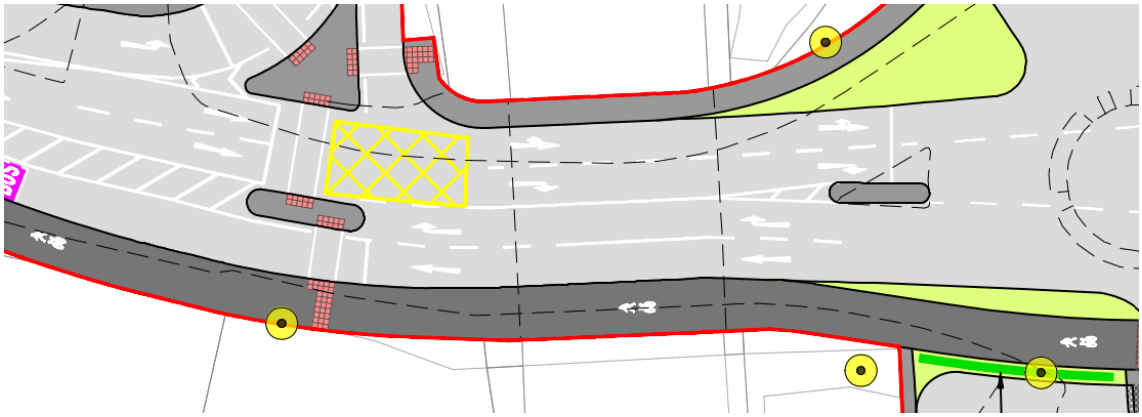
3.5 Problem 1.05

Location: Rochestown Road shared use active travel facility.

Summary: Cycle and pedestrian symbols all in one direction could mislead users into believing it is one-way.

Pedestrian and cycle symbols are shown within the shared use active travel facility however they are all orientated in the same direction. The Road Safety Audit Team is concerned that having all the symbols in one direction could mislead users into believing the active travel facility operates as one-way. Should users not be clear of the intended use they may cross Rochestown Road unnecessarily, increasing the risk of conflict with motor vehicles.

Figure 3.1: Pedestrian and cycle symbols in same direction



Source: Mott MacDonald / Cork City Council

Recommendation

Provide pedestrian and cycle symbols in both directions to indicate the active travel facility operates as two-way.

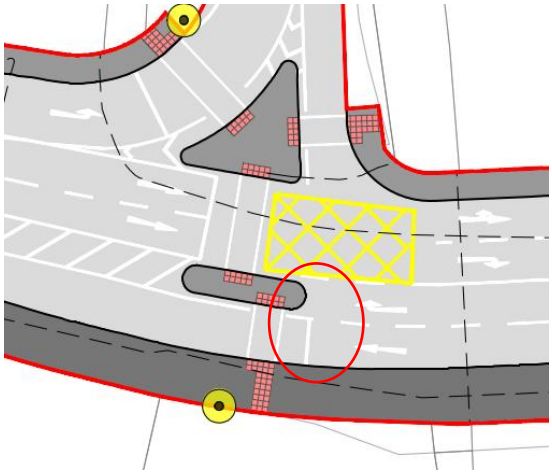
3.6 Problem 1.06

Location: Rochestown Road / N28 on-slip.

Summary: Right turning vehicles may believe they are uncontrolled and turn at the same time as eastbound traffic potentially leading to turning related collisions.

A stop line has been provided for westbound traffic on Rochestown Road, however right turning traffic is to pass in front of the traffic island. The provision of a controlled pedestrian crossing on the N28 on-slip indicates that the Rochestown Road right turn lane will be required to be signal controlled. However, the presence of the traffic island, potential positioning of traffic signals and lack of a stop line may mislead right turning motorists into believing they are not controlled. Vehicles turning right uncontrolled against eastbound traffic could result in vehicles turning across the path of ahead traffic increasing the risk of collisions. In addition, vehicles may fail to stop for the pedestrian crossing leading to an increased risk of collisions with crossing pedestrians.

Figure 3.2: Proposed junction layout



Source: Mott MacDonald / Cork City Council

Recommendation

Modify the signal-controlled crossing arrangement and associated traffic signal equipment and Stop lines so that the highway arrangement and signal control is clear to all users.

3.7 Problem 1.07

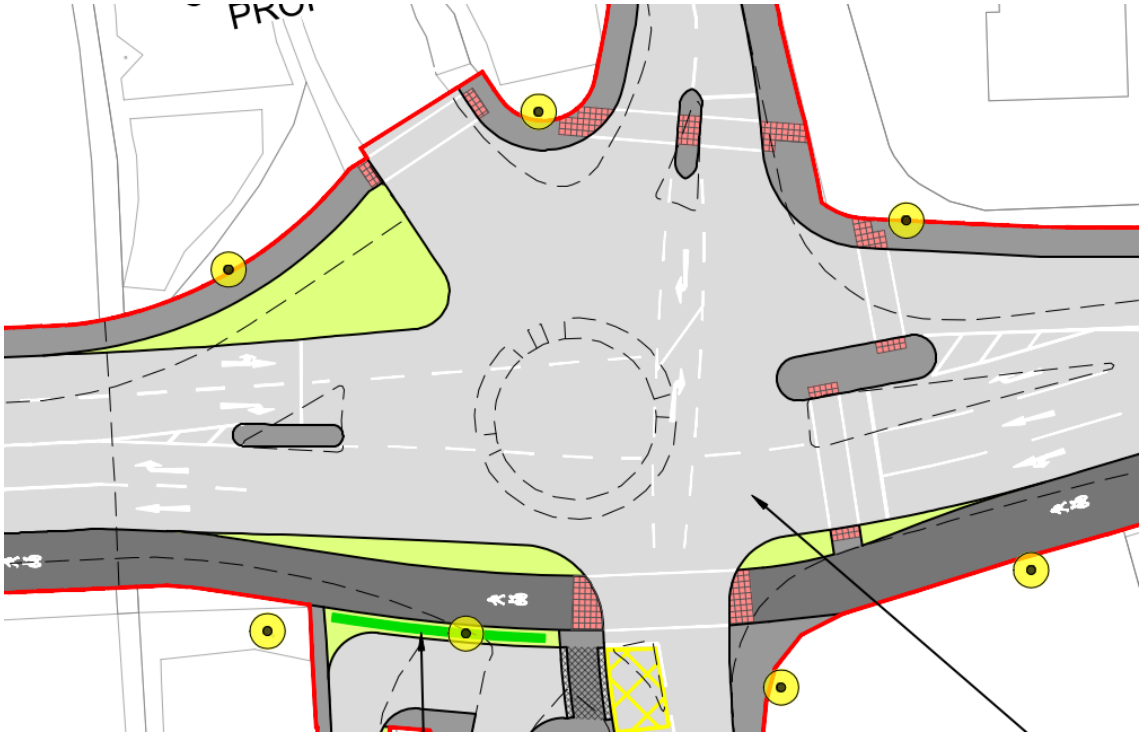
Location: Rochestown Road / N28 off-slip / Woodbrook / Mount Ovel.

Summary: A lack of clear markings for right turn manoeuvres increases the risk of turning related collisions at the junction.

A number of issues have been identified with the markings within the Rochestown Road, N28 off-slip, Woodbrook and Mount Ovel Junction which could lead to turning related collisions.

- Right turn lanes have been marked out for drivers turning from Woodbrook and Mount Ovel, however these are minor arms with low traffic flows. The markings also extend through the Rochestown Road westbound carriageway and therefore the junction layout may not be clear for other motorists using this junction.
- The right turn lane from Woodbrook guides right turning motorists towards the stop line for eastbound traffic on Rochestown Road.
- No right turn arrow(s) has been shown within the wide right turn lane for Rochestown Road traffic and with the other markings it may not be clear where traffic, particularly from the east, is to wait and turn.

Figure 3.3: Proposed markings within the junction.



Source: Mott MacDonald / Cork City Council

Recommendation

Modify the right turn lanes so that the highway layout is clearly understandable to road users.

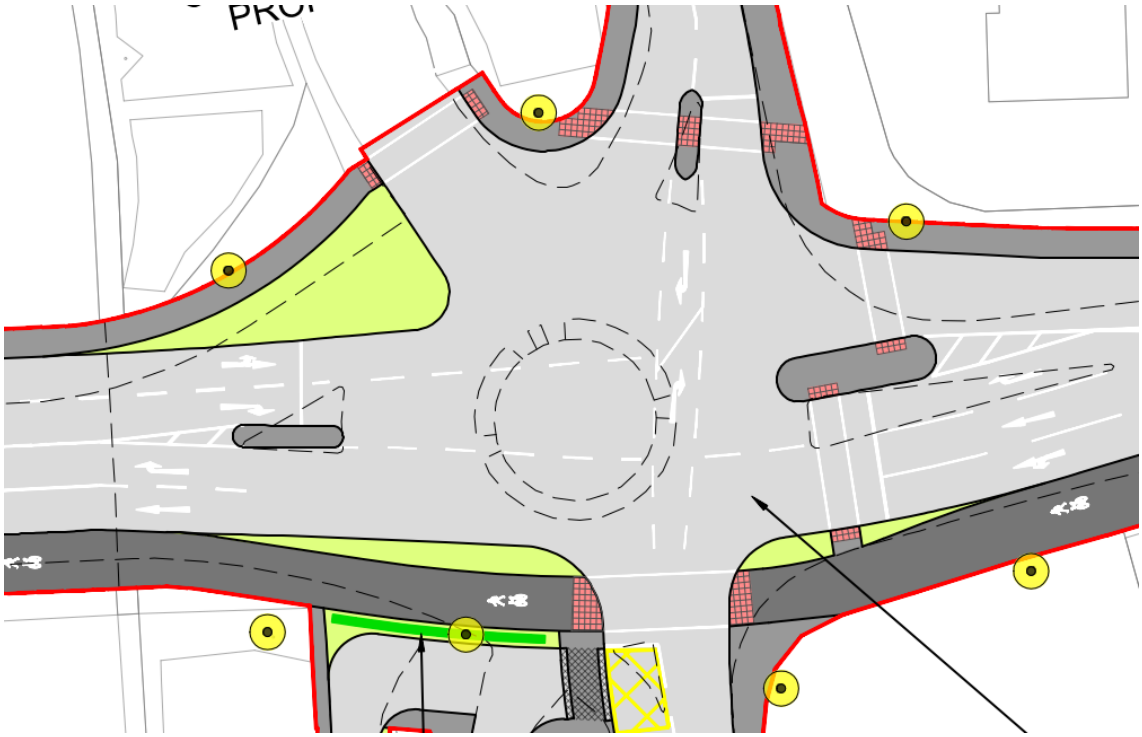
3.8 Problem 1.08

Location: Rochestown Road / Woodbrook / Mount Ovel junction.

Summary: Incorrect tactile paving may mis-lead sight impaired pedestrians increasing their vulnerability to being struck.

Controlled crossings are proposed over Westbrook, Rochestown Road and Mount Ovel. The tactile paving however is shown in multiple places without the stem which indicates to blind and sight impaired pedestrians that it is a controlled crossing. The lack of a stem may mislead users who may believe it to be an uncontrolled crossing, increasing their vulnerability to being struck by passing motorists.

Figure 3.4: Proposed pedestrian crossing layout.



Source: Mott MacDonald / Cork City Council

Recommendation

Provide the correct tactile paving in line with relevant guidelines to reflect they are controlled crossings.

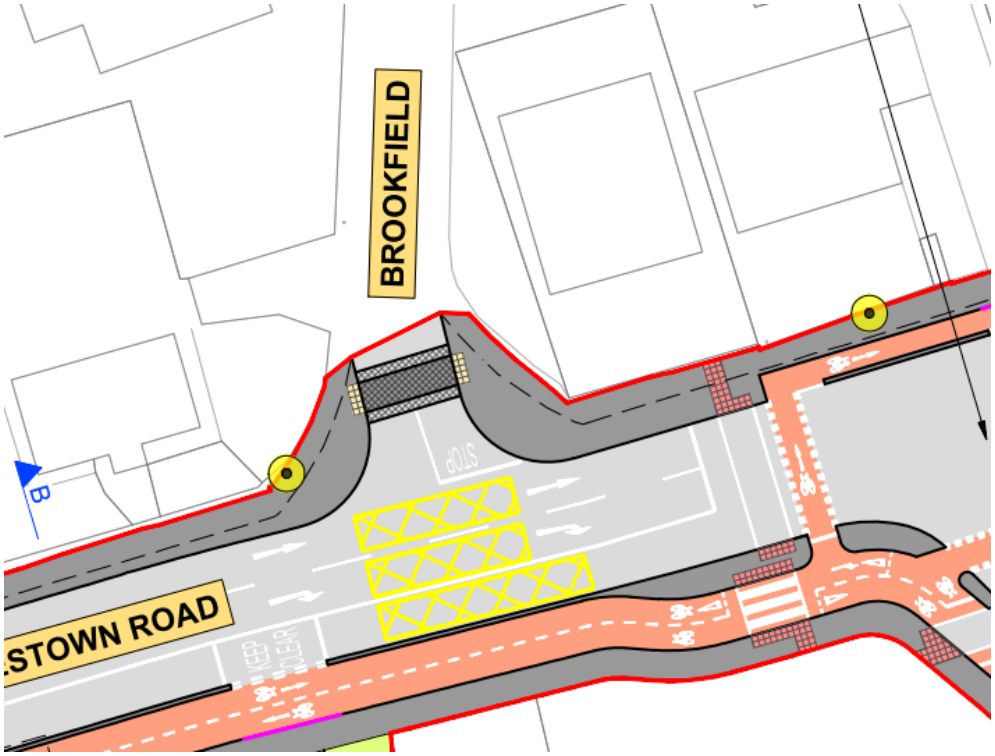
3.9 Problem 1.09

Location: Brookfield / Rochestown Road.

Summary: Lack of cycle provision for cyclists on the northern side of Rochestown Road to access the cycle track may lead to use of the pedestrian or unidirectional cycle crossing potentially resulting in conflict.

Should cyclists from Brookfield on the northern side of Rochestown Road wish to join the segregated cycle track on the southern side of Rochestown Road, they will be required to cross three lanes of traffic and be vulnerable to colliding with motorists. Alternatively, they may use the signalised pedestrian or unidirectional cycle crossing at Clarkes Hill and be at risk of colliding with pedestrians or cyclists.

Figure 3.5: Proposed layout at Brookfield.



Source: Mott MacDonald / Cork City Council

Recommendation

Provide appropriate links between the northern and southern sides of Rochestown Road, this may involve providing a bi-directional cycle track across Rochestown Road.

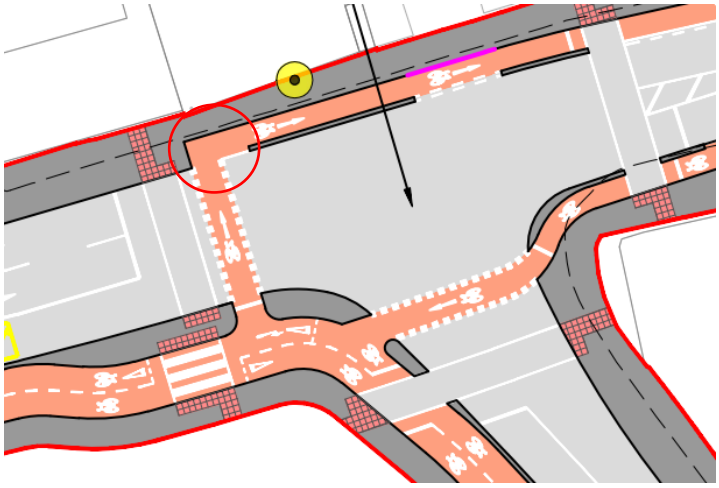
3.10 Problem 1.10

Location: Rochestown Road / Clarkes Hill northern arm.

Summary: Sharp turn for cyclists may result in the kerb being clipped or overridden leading to falls from bikes.

Cyclists from the southern side of Rochestown Road crossing to the northern side and heading east are expected to make a 90-degree turn. This sharp turn could be a difficult manoeuvre for some bikes to undertake which could result in the kerb being clipped or overridden. Should bikes strike the kerb, it increases the risk of cyclists being unseated which may result in cyclists falling from their bikes leading to personal injury.

Figure 3.6: Proposed cycle track layout at Clarkes Hill.



Source: Mott MacDonald / Cork City Council

Recommendation

Relax the angle of the cycle track so that it is more gentle and easier for cyclists to turn.

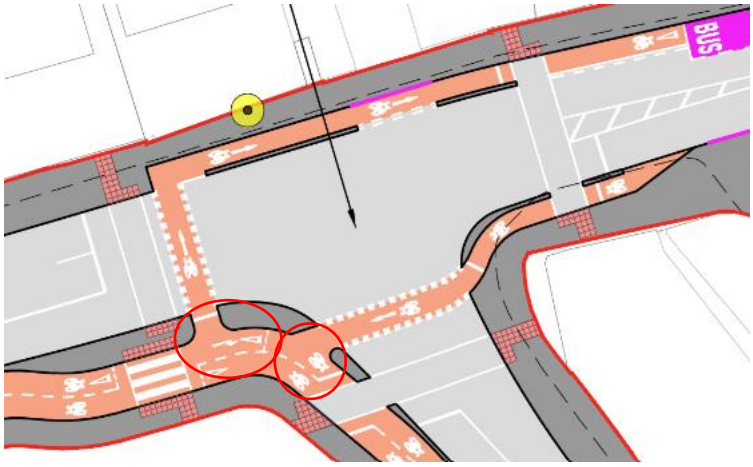
3.11 Problem 1.11

Location: Rochestown Road / Clarkes Hill northern arm.

Summary: Insufficient length of cycle track may lead to conflict with other cyclists.

The layout proposes locations where cyclists are to stop or give-way to other cyclists. The Road Safety Audit Team is concerned that cyclists waiting at these Stop and Give-way lines may block the path for other cyclists continuing on a different route potentially leading to conflict between cyclists.

Figure 3.7: Proposed cycle track layout at Clarkes Hill.



Source: Mott MacDonald / Cork City Council

Recommendation

Provide a sufficient length of cycle track for cyclists to wait without hindering other cyclists travelling in a different direction.

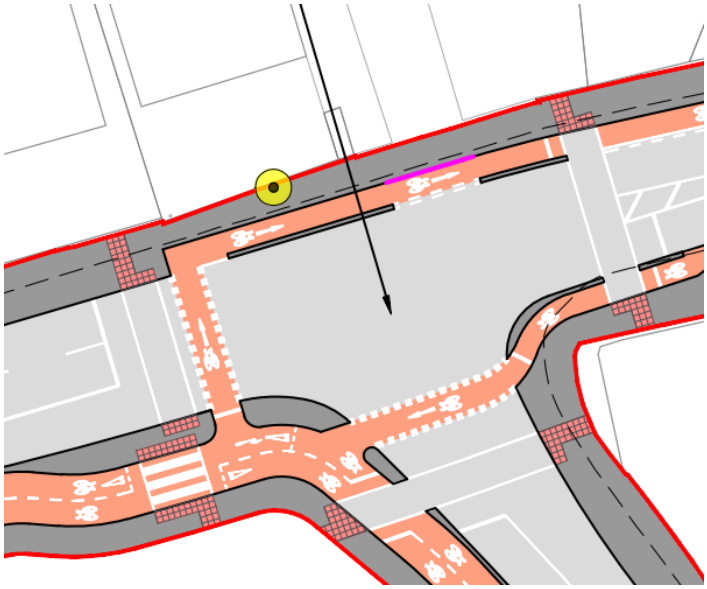
3.12 Problem 1.12

Location: Rochestown Road / Clarkes Hill northern arm.

Summary: Lack of control for those properties entering / exiting within the signalised junction could result in rear end shunt and turning related collisions.

Access to several properties is proposed within the signalised junction which do not appear to be controlled. The lack of control could result in motorists exiting the properties into the path of other traffic flows that have a green traffic signal which could result in conflict. Furthermore, through traffic may not expect vehicles to be slowing to turn within the junction leading to rear end shunt related collisions.

Figure 3.8: Proposed arrangement at Clarkes Hill.



Source: Mott MacDonald / Cork City Council

Recommendation

Provide signal control for those exiting from Clarkes Hill northern arm. The junction may need formalising and potentially narrowing

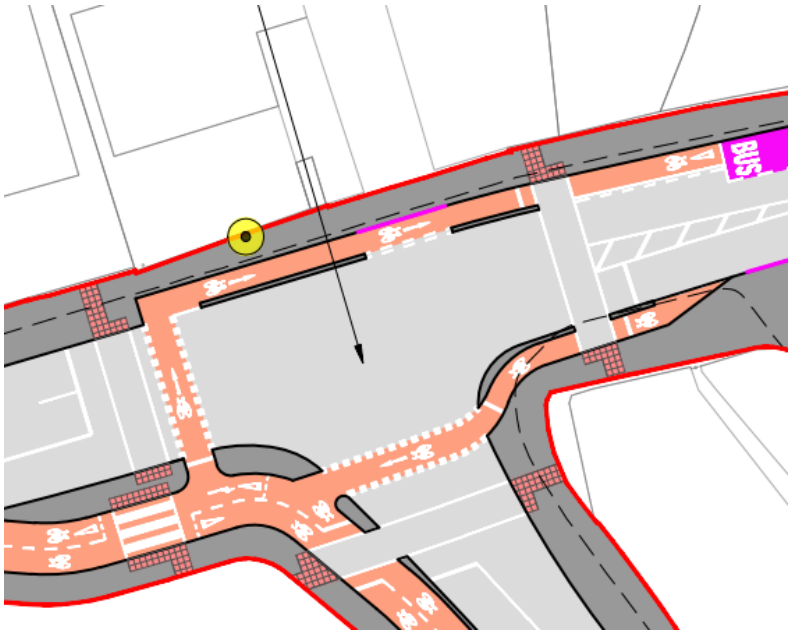
3.13 Problem 1.13

Location: Rochestown Road / Clarkes Hill.

Summary: Lack of appropriate green times for length of crossing may result in pedestrian collisions with motorists and cyclists.

The crossing widths, particularly on Rochestown Road eastern arm and Clarkes Hill are wide taking into account crossing of the cycle track. Should the pedestrian green times not be sufficient in length for pedestrians to complete their crossing movement, it could result in conflict with motorists or cyclists who may commence their movement before a pedestrian has completed their crossing.

Figure 3.9: Proposed Crossings at Clarkes Hill.



Source: Mott MacDonald / Cork City Council

Recommendation

Provide sufficient pedestrian green times to allow a pedestrian to fully cross the carriageway and cycle track prior to other signal stages receiving a green light.

3.14 Problem 1.14

Location: Clarkes Hill southern arm.

Summary: Lack of clearly conspicuous traffic signals combined with high vehicle speeds may lead to drivers failing to stop appropriately on approach to the traffic signals leading to turning related collisions or collisions with pedestrians on the crossing.

Clarkes Hill is proposed to become signalised however the Road Safety Audit Team is concerned that vehicles on Clarkes Hill may not anticipate the traffic signals and fail to stop in time. Clarkes Hill is currently heavily vegetated with branches over hanging the carriageway, and whilst the drawings show some vegetation is to be cleared, it is not clear to what extent. There is an existing kink in the alignment on the approach to Rochestown Road which hides the nearside kerbline, and whilst the kerb alignment is changing, the introduction of the segregated cycle track will likely place the nearside traffic signal equipment further from motorists' view. Furthermore, Clarkes Hill is on a downhill gradient which, if the traffic signals are not clear to approaching motorists either because they are hidden by vegetation or the alignment, could result in motorists approaching the junction at too high a speed leading to sudden braking or red-light infringements which may result in turning related collisions. In addition, should vehicles fail to appropriately stop at the signals it may lead to collisions with pedestrians or cyclists.

Figure 3.10: Existing layout on Clarkes Hill.

Source: Mott MacDonald

Recommendation

Site the traffic signals so that they are clearly conspicuous on the Clarkes Hill northbound approach to Rochestown Road and undertake appropriate vegetation clearance/removal. It may also be appropriate to provide high friction surfacing on the approach to the signal Stop line.

3.15 Problem 1.15

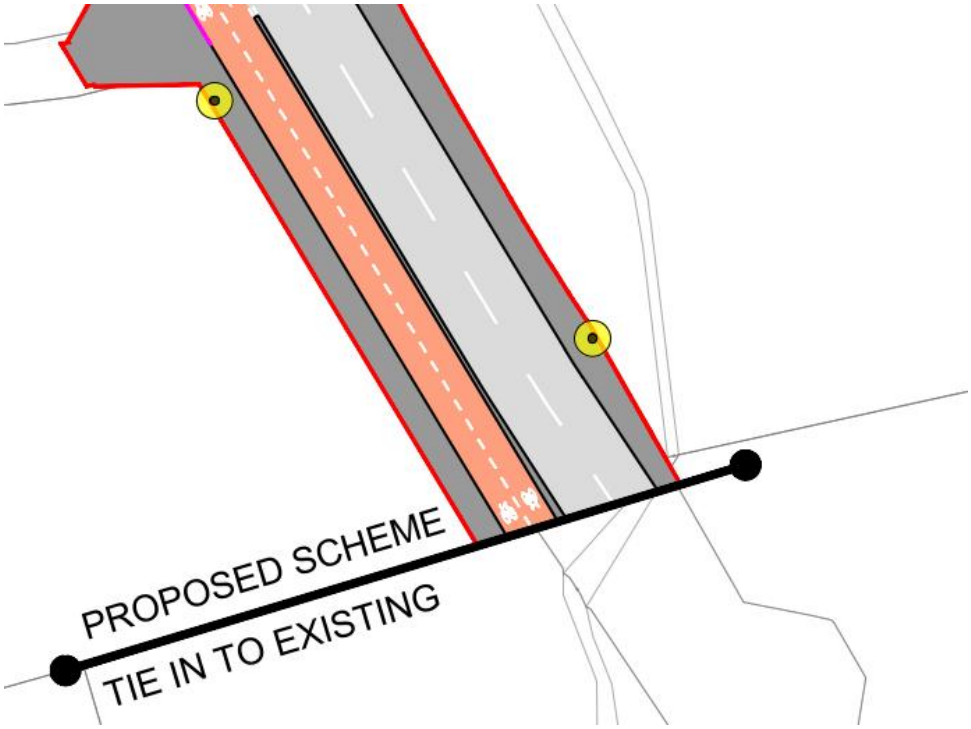
Location: Clarkes Hill southern arm.

Summary: Lack of appropriate tie-in could result in cyclists being vulnerable.

A bi-directional cycle track is proposed on the western side of Clarkes Hill for approximately 100m, with the lane being widened to accommodate this. At the southern-most start/end of the segregated cycle track on Clarkes Hill there is no tie-in with the existing carriageway, and it is not clear how cyclists are to join or leave the cycle track. The lack of a suitable tie-in with the existing carriageway increases cyclists' vulnerability and potential for conflict.

Likewise, it is not clear how the widened footway on the eastern side of Clarkes Hill ties into the existing footway provision. Should the proposed and existing footway not tie up it could result in pedestrians tripping over the kerb edge at risk of personal injury, or they may walk in the road at risk of collisions with motorists.

Figure 3.11: Proposed start/end of cycle track on Clarkes Hill.



Source: Mott MacDonald / Cork City Council

Recommendation

Provide an appropriate tie-in with the existing carriageway enabling cyclists to join/leave the bi-directional cycle track and suitably tie in the proposed and existing footways.

3.16 Problem 1.16

Location: Rochestown Road / Riverside.

Summary: High vehicle speeds, and wide crossing distance may make crossing pedestrians vulnerable to being struck. A lack of give-way markings may result in turning related collisions.

Riverside is a wide junction with pedestrians proposed to cross at its widest point in line with the footway. Unlike the other junctions it is not proposed to become a raised table crossing and there is concern that vehicle turning speeds could be high. Given the wide crossing distance and potential for higher vehicle speeds, crossing pedestrians could be vulnerable to being struck by turning motorists.

Furthermore, there are no markings indicating to motorists exiting Riverside of the need to give-way, and whilst there aren't currently give-way markings, should motorists not recognise the need to give-way it could lead to turning related collisions.

Figure 3.12: Existing Riverside junction.

Source: Mott MacDonald

Recommendation

Provide a raised table crossing over Riverside and where possible reduce the junction radii to reduce vehicle speeds. Provide give-way markings to indicate the need for traffic on Riverside to give-way to traffic on Rochestown Road.

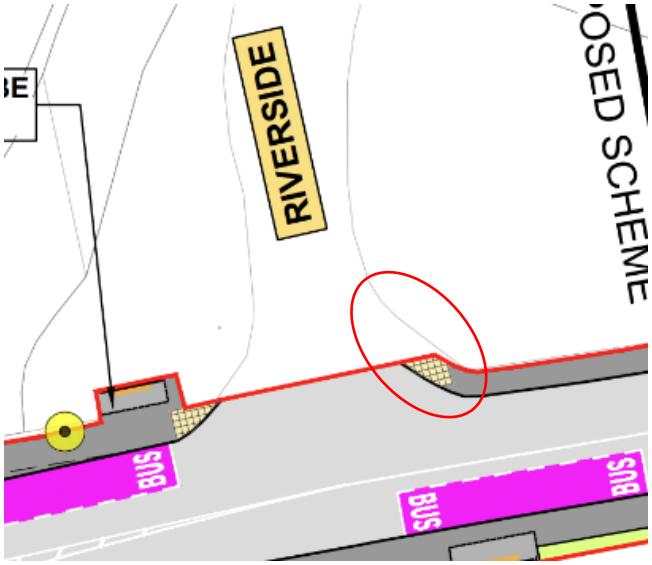
3.17 Problem 1.17

Location: Rochestown Road / Riverside.

Summary: Inappropriate tie in on Riverside could result in pedestrians walking within the carriageway at risk of conflict with motor vehicles.

The kerb alignment is to be amended, however it is not clear how the kerb is being modified and connecting with the existing provision on Riverside. Should the proposed footway fail to connect with the existing footway provision it could result in pedestrians being within the carriageway at risk of conflict with motorists.

Figure 3.13: Proposed layout at Riverside junction.



Source: Mott MacDonald / Cork City Council

Recommendation

Continue the footway from Rochestown Road into Riverside.

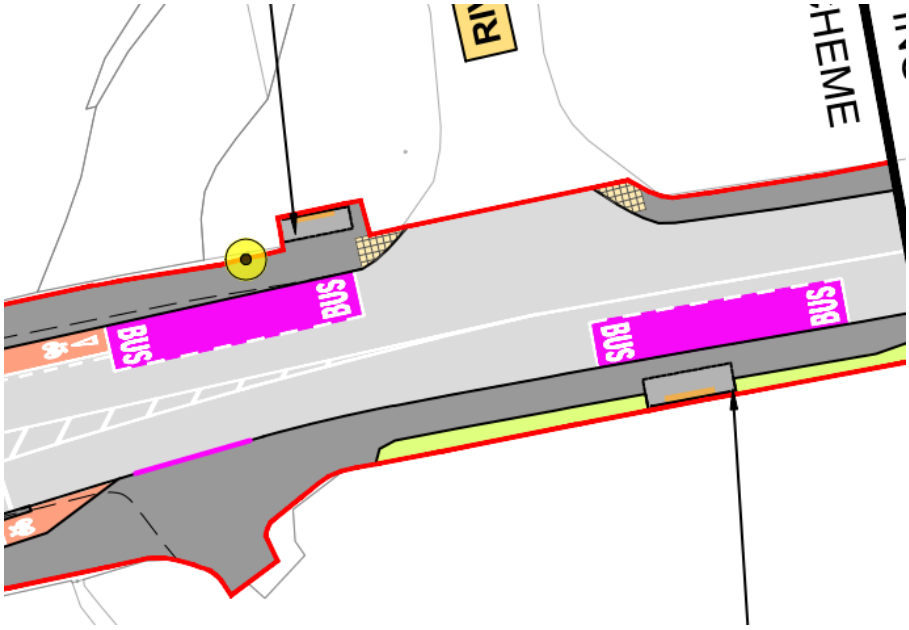
3.18 Problem 1.18

Location: Rochestown Road / Riverside.

Summary: Bus stop opposite junction may lead to vehicles overtaking a bus at the same time a vehicle exits Riverside leading to turning related collisions.

The bus stop on the southern side of Rochestown Road is proposed almost opposite Riverside. There is concern that a westbound vehicle on Rochestown Road may attempt to overtake a stationary bus at the same time a vehicle pulls out of Riverside, increasing the risk of turning related collisions.

Figure 3.14: Proposed bus stop opposite Riverside.



Source: Mott MacDonald / Cork City Council

Recommendation

Relocate the bus stop further away from the junction.

4 Additional Audits

4.1 Accessibility and Walking Audit

As outlined in **Section 1.2**, the primary objective of the scheme is to provide continuous, high quality Active Travel facilities along the route, and this is just one section of the overall scheme to link Rochestown and Douglas.

The scheme introduces two signalised junctions which will provide controlled pedestrian crossing facilities which the route is currently lacking. Converting Rochestown Road roundabout junction to a signalised junction will greatly improve crossing movements for pedestrians.

Side road raised table crossings are being provided across the side roads which should slow vehicular traffic turning into and out of the side roads and improve crossing movements for pedestrians.

Whilst there are currently footways along much of Rochestown Road, there is no footway on the southern side of Rochestown Road between The Ovals and Clarkes Hill, and there is only a footway on the eastern side of Clarkes Hill. The existing width of the footway varies and for much of the route was considered to be narrow. The scheme will provide a continuous footway on both sides of the Rochestown Road and on Clarkes Hill and will provide a minimum 1.8m in width which will be a significant improvement to the existing.

The current route generally lacks uncontrolled crossings, whilst there are some dropped kerbs, they are generally not flush and only the dropped kerbing opposite The Ovals has tactile paving.

There are currently three bus stops within this scheme, two on the westbound carriageway and one on the eastbound carriageway. All three of these stops are remaining although the bus stop on the westbound carriageway east of Clarkes Hill is proposed to be relocated a short distance to the east (away from Clarkes Hill). Whilst the Road Safety Audit highlights the concern with the bus stop being sited opposite a junction, there is concern should it be relocated too much further away, it could be away from the desire line. It is not clear whether any new bus infrastructure is to be provided as only basic furniture is present; the two bus stops east of Clarkes Hill have a shelter and the stop east of Rochestown Rise only has a bus stop sign.

Given the extents of the works, full re-surfacing of the carriageway and footway will be required, therefore it is expected that a good quality surface will be provided for pedestrians. Materials will be confirmed at the detail design stage.

Whilst no drainage drawings have been reviewed at this stage, the Preliminary Design Report (*Doc Ref: 229101186-MMD-0000-XX-RP-C-0003*) states that improvements to the drainage of the footways is proposed through the provision of dished channels taking water to the existing road drainage system. Existing surface water channels will be supplemented by additional channels where the footway drainage is known to be inadequate. These works should ensure surface water does not remain on the footway, particularly in prime locations such as at crossing points. Drainage will be confirmed at the detail design stage.

Street lighting is present along the route, and the Preliminary Design Report proposes upgrades, with consideration given to pedestrian crossings, in accordance with TII Publication DN-LHT-03038 Design of Road Lighting for the National Road Network. Whilst the Quality Audit Team has not reviewed the night-time light conditions on site or lighting drawings, the proposal to provide columns at approximately 30m spacing is felt appropriate at this stage. The

only potential concern is under the N28, where it could potentially feel a little dark for some users and may benefit from additional lighting units. Lighting will be confirmed at the detail design stage.

Any walking or accessibility related issues identified along the route are listed in this section.

4.1.1 Problem 4.1.1

Location: Rochestown Road / Clarkes Hill.

Summary: Lack of suitable parking and path for operatives may result in overtaking related collisions or pedestrian trips and falls.

It is not clear where traffic signal operatives will park should they be required to visit the traffic signals. The lack of appropriate parking and footpath leading to/from the traffic signals may increase operatives' vulnerability to being struck by passing vehicles, particularly if they walk within the carriageway or should they walk on uneven ground it could lead to trips and falls.

Recommendation

Provide maintenance operatives with appropriate parking and a suitable path to the traffic signal equipment.

4.1.2 Problem 4.1.2

Location: Rochestown Road / Clarkes Hill.

Summary: Lack of appropriate tie-in for pedestrians may result in trips and falls or use of the carriageway.

This scheme is a small part of a larger scheme to provide a 3.15km cycling network from Douglas Village to the 'Cork City to Passage West' Greenway. This element is being undertaken separately to tie-in with the N28 Upgrade scheme which is currently under construction. Whilst the drawings state that the proposed scheme will tie-into the existing network it is not clear how this will be achieved. Should the scheme fail to appropriately tie into the existing network, even if only as a temporary layout until the wider scheme is complete, it could result in inappropriate footway usage leading to cyclists remaining on the footway, increasing pedestrians' vulnerability to being struck by cyclists. Furthermore, if the new and existing kerb lines do not align, it could result in trips hazards leading to personal injury.

Recommendation

Provide a suitable tie-in and continuation for pedestrians.

4.1.3 Problem 4.1.3

Location: Rochestown Road / Clarkes Hill.

Summary: Street furniture may reduce footway widths leading to pedestrians colliding with the furniture or they will pass within the carriageway at risk of collisions with motor vehicles.

Within some sections of the scheme, the footway is proposed to be 1.8m in width. At this stage the positioning of street furniture such as traffic signs and traffic signal equipment is not known, however should it be poorly positioned, it could reduce the usable footway width. A narrowed footway could result in pedestrians colliding with the street furniture or they may step into the carriageway in order to pass, leading to collisions with vehicles.

Recommendation

Site street furniture appropriately to maintain 1.8m footways.

4.1.4 Problem 4.1.4

Location: Rochestown Road shared use active travel facility.

Summary: Pedestrian symbols all in one direction could mislead users into believing it is one-way.

Pedestrian symbols on Rochestown Road are shown within the shared use active travel facility however they are all orientated in the same direction. Having all the symbols in one direction could mislead users into believing the active travel facility operates as one-way which may lead to unnecessary road crossings, increasing the risk of conflict with motor vehicles.

Recommendation

Provide pedestrian symbols in both directions to indicate the active travel facility operates as two-way.

4.1.5 Problem 4.1.5

Location: Rochestown Road.

Summary: Incorrect tactile paving could mis-lead sight impaired pedestrians.

Tactile paving at the proposed controlled crossings is shown in multiple places without the stem which indicates to blind and sight impaired pedestrians that it is a controlled crossing. The lack of a stem, may mislead users who may believe it to be an uncontrolled crossing, increasing their vulnerability to being struck by passing motorists.

Recommendation

Provide the correct tactile paving in line with relevant guidelines to reflect they are controlled crossings.

4.1.6 Problem 4.1.6

Location: Rochestown Road / Clarkes Hill.

Summary: Lack of appropriate green times for length of crossing may result in pedestrian collisions with motorists and cyclists.

Whilst the pedestrian crossings will be signalised, the highway widths are being widened to accommodate the cycle track, and pedestrians will be within the carriageway for longer. Should the pedestrian green times not be sufficient in length for pedestrians to complete their crossing movement, it could result in conflict with motorists or cyclists who may start to cross before a pedestrian has completed their movement.

Recommendation

Provide sufficient pedestrian green times to allow a pedestrian to fully cross the carriageway and cycle track prior to other stages receiving a green light.

4.1.7 Problem 4.1.7

Location: Rochestown Road / Riverside.

Summary: High vehicle speeds, and wide crossing distance may make crossing pedestrians vulnerable to being struck.

Riverside is a wide junction with pedestrians proposed to cross at its widest point in line with the footway. Unlike the other junctions it is not proposed to become a raised table crossing and there is concern that vehicle turning speeds could be high. Given the wide crossing distance and potential for high speeds, crossing pedestrians could be vulnerable to being struck by turning motorists.

Recommendation

Provide a raised table crossing over Riverside and, where possible, reduce the junction radii to reduce vehicle speeds.

4.1.8 Problem 4.1.8

Location: Rochestown Road.

Summary: Lack of appropriately positioned corduroy tactile paving to indicate presence of cyclists.

The scheme introduces new cycle provisions along the southern side of Rochestown Road. Some instances of corduroy tactile paving are proposed at the western extent at the scheme and at the transition between the unsegregated and segregated cycle facilities, however corduroy tactile paving is not proposed at all appropriate locations. As such, visibility impaired pedestrians may be unaware of the possible presence of cyclists leading to an increased risk of collisions.

Recommendation

Provide the correct corduroy tactile paving in line with relevant guidelines to reflect the presence of cyclists at various locations.

4.2 Cycling Audit

There are currently no cycle facilities along this route however, the primary objective of the scheme is to provide continuous, high quality Active Travel facilities along the route. The scheme involves the introduction of dedicated cycle facilities including an unsegregated shared use footway / cycleway along the southern side of Rochestown Road between Rochestown Rise and Ashley, a bi-directional cycle lane on the southern side of Rochestown Road between The Ovals and Clarkes Hill and a bi-directional cycle lane on the western side of Clarkes Hill.

Whilst the scheme introduces two signalised junctions that incorporate controlled crossing facilities, these are primarily for pedestrians and provision for controlled cyclist crossings is limited. Opportunity for cyclists on the northern side of Rochestown Road to join the cycle facilities that are proposed on the southern side are limited and may result in cyclists using the carriageway.

The proposed scheme is a small section of a wider project to provide Active Travel facilities between Rochestown and Douglas. As such, the scheme is intended to tie-in with the existing highway layout. At the western extent of the scheme and on Clarkes Hill, the tie-in fails to suitably address onward travel for cyclists and may encourage the inappropriate use of the footways.

The extent of the proposed highway works will require re-surfacing of the carriageway and footway to be undertaken therefore it is expected that a good quality surface will be provided for pedestrians. Materials will be confirmed at the detail design stage.

The proposals to improve the drainage, particularly where it is known to be inadequate, should ensure surface water does not collect in prime locations such as within the cycleway. Drainage will be confirmed at the detail design stage.

Additionally, the proposals to include the installation of either new or relocated lighting along the route, with columns approximately 30m apart should improve lighting levels at times of low light.

In order to accommodate the cycleway on Clarkes Hill, it will require the removal of vegetation, although the exact extents are unknown. Removing this vegetation will help enhance the lighting along this stretch.

Any cycling related issues identified along the route are provided in the following section.

4.2.1 Problem 4.2.1

Location: Rochestown Road / Clarkes Hill.

Summary: Lack of appropriate tie-in for cyclists may result in trips and falls or use of the carriageway.

This scheme is a small part of a larger scheme to provide a 3.15km cycling network from Douglas Village to the 'Cork City to Passage West' Greenway. This part is being done to tie-in with the N28 Upgrade scheme which is currently under construction. Whilst the drawings state that the proposed scheme will tie-into the existing network, it is not clear how this will be achieved. Should the scheme fail to appropriately tie into the existing network, even if only as temporary layout until the wider scheme is complete, it may hinder the onward progress of cyclists. Cyclist may continue to use pedestrian only facilities increasing the risk of collisions between cyclists and pedestrians. Alternatively, cyclists may attempt to transition between the footway and the carriageway at inappropriate locations leading to an increased risk of loss of control or being struck by passing vehicles.

Recommendation

Provide suitable tie-ins for cyclists.

4.2.2 Problem 4.2.2

Location: Rochestown Road shared use active travel facility.

Summary: Cycle symbols all in one direction could mislead users into believing it is one-way.

Cycle symbols on Rochestown Road are shown within the shared use active travel facility however they are all orientated in the same direction. Having all the symbols in one direction could mislead users into believing the active travel facility operates as one-way which may lead to unnecessary road crossings, increasing the risk of conflict with motor vehicles.

Recommendation

Provide cycle symbols in both directions to indicate the active travel facility operates as two-way.

4.2.3 Problem 4.2.3

Location: Brookfield / Rochestown Road.

Summary: Lack of cycle provision for cyclists on the northern side of Rochestown Road to access the cycle track may lead to use of the pedestrian or unidirectional cycle crossing potentially resulting in conflict.

Should cyclists from Brookfield on the northern side of Rochestown Road wishing to join the segregated cycle track on the southern side of Rochestown Road, are likely to cross three lanes of traffic and be vulnerable to colliding with motorists. Alternatively, they may use the signalised pedestrian or unidirectional cycle crossing at Clarkes Hill and be at risk of colliding with pedestrians or cyclists.

Recommendation

Provide appropriate links between the northern and southern sides of Rochestown Road, this may involve providing a bi-directional cycle track over Rochestown Road.

4.2.4 Problem 4.2.4

Location: Rochestown Road / Clarkes Hill northern arm.

Summary: Sharp turn for cyclists may result in the kerb being clipped or overridden leading to falls from bikes.

Cyclists from the southern side of Rochestown Road crossing to the northern side and heading east are expected to make a 90-degree turn. This sharp turn could be a difficult manoeuvre for some bikes to undertake which could result in the kerb being clipped or overridden. Should bikes strike the kerb, it increases the risk of cyclists being unseated which may result in cyclists falling from their bikes leading to personal injury.

Furthermore, there is concern that the layout proposes locations where cyclists are to stop or give-way to other cyclists. There is concerned that cyclists waiting at the stop and give-way lines may block the route for other cyclists continuing on a different route potentially leading to conflict between cyclists.

Recommendation

Modify any abrupt angles on the cycle track so that they are easier for cyclists to turn, and provide a sufficient length of cycle track for cyclists to wait without hindering other cyclists travelling in a different direction.

5 Quality Audit

The proposed scheme introduces improved active travel provisions along a section of Rochestown Road and Clarkes Hill. Whilst the emphasis of the scheme is improved cyclist provision with the introduction of a segregated cycle track, pedestrian facilities are greatly improved through the provision of new controlled crossings, additional footways and side road raised table crossing points.

Whilst the individual audits contained within this Quality Audit have identified recommendations for improvements, none of these are deemed to be significant and it is considered that these can all be addressed through the design process.

In terms of conflicts between the differing audits, the Road Safety Audit identified an issue regarding the provision of a bus stop opposite Riverside and potential for conflicts with turning vehicles and recommended this be relocated away from the junction. This recommendation may conflict with pedestrian accessibility and walking should the bus stop be located away from the most desirable location for bus passengers. However, this is a minor conflict where the needs of user accessibility and safety can be balanced out.

It is the Quality Audit Team's opinion that the proposed scheme has been designed in accordance with the principles of DMURS and the other applicable design standards, but that the recommendations made in this document should be considered further as part of the detailed design process.

Appendices

A. Documents and Drawings Referenced

Table A.1: Documents Referenced

Ref.	Title	Rev
P01	Preliminary Design Report	29/11/2022
-	R610 St. Patricks Junction Upgrade Scheme – Description of the Development	-
100287864-MMD-REP-RSA-2026-030	Stage 1 Road Safety Audit	A

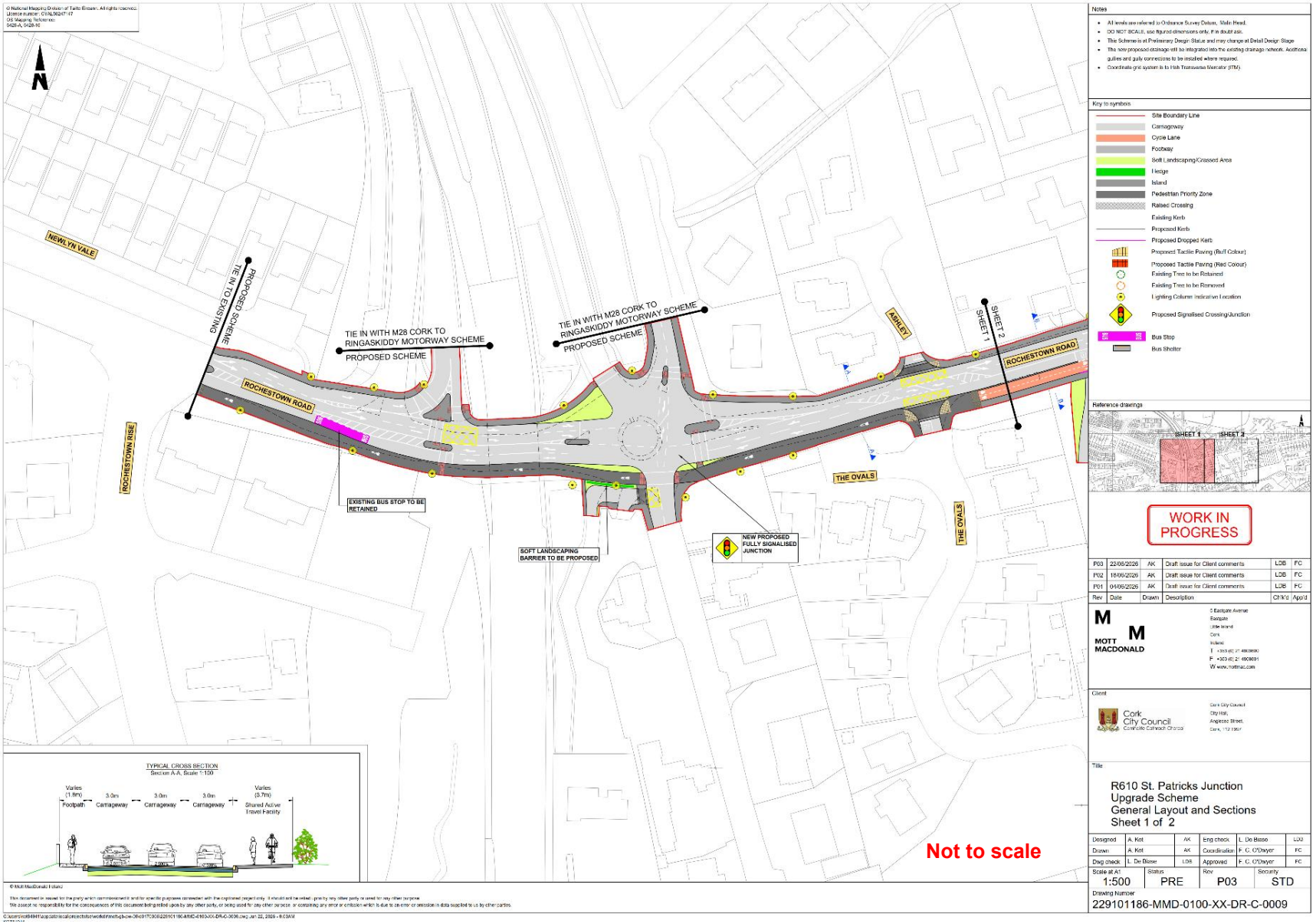
Source: Mott MacDonald

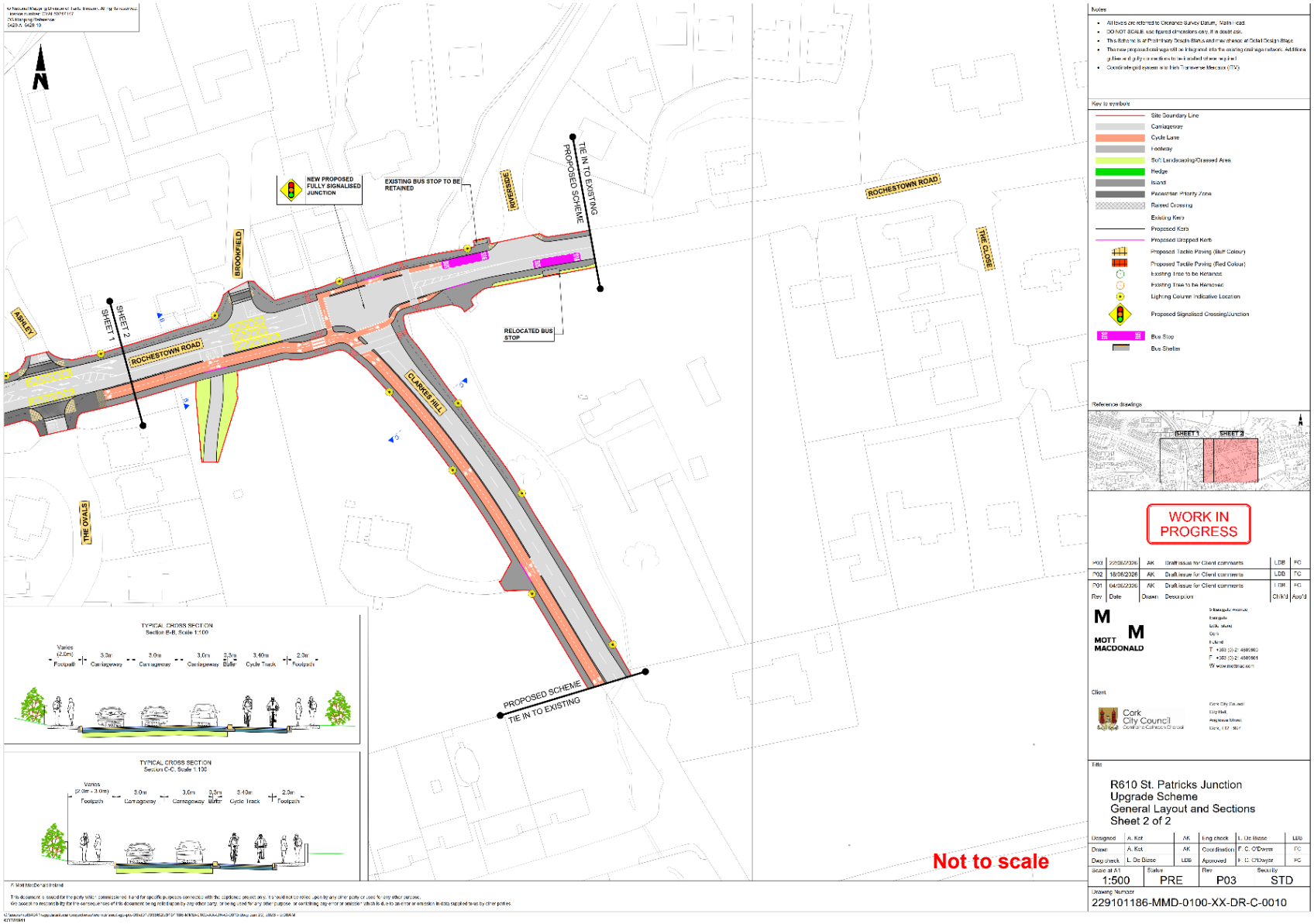
Table A.2: Drawings Referenced

Ref.	Title	Rev
229101186-MMD-0000-XX-DR-C-0202	R610 St. Patricks Junction Upgrade Scheme, Site Location Plan, Sheet 01 of 01	P01
229101186-MMD-0100-XX-DR-C-0009	R610 St. Patricks Junction Upgrade Scheme, General Layout and Sections, Sheet 1 of 2	P03
229101186-MMD-0100-XX-DR-C-0010	R610 St. Patricks Junction Upgrade Scheme, General Layout and Sections, Sheet 2 of 2	P03
229101186-MMD-0100-XX-DR-C-0009-with_trees	R610 St. Patricks Junction Upgrade Scheme, General Layout and Sections with trees, Sheet 1 of 2	P03
229101186-MMD-0100-XX-DR-C-0010-with_trees	R610 St. Patricks Junction Upgrade Scheme, General Layout and Sections with trees, Sheet 2 of 2	P03

Source: Mott MacDonald / Cork City Council

B. St. Patricks Junction Scheme Upgrade Design Overview




NEW PROPOSED FULLY SIGNALISED JUNCTION
EXISTING BUS STOP TO BE RETAINED
TIE IN TO EXISTING PROPOSED SCHEME
RELOCATED BUS STOP
PROPOSED SCHEME TIE IN TO EXISTING
ROCHESTOWN ROAD
CLARKES HILL
BROOKFIELD
ASHLEY
THE OVALS
THE CLOSE
SHEET 1
SHEET 2
TYPICAL CROSS SECTION
Section B-B, Scale 1:100
TYPICAL CROSS SECTION
Section C-C, Scale 1:100
Not to scale
WORK IN PROGRESS
R610 St. Patricks Junction
Upgrade Scheme
General Layout and Sections
Sheet 2 of 2
1:500
PRE
P03
STD
229101186-MMD-0100-XX-DR-C-0010

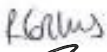
Quality Audit Feedback Form

Scheme: R610 St. Patricks Junction Improvement Scheme		
Audit Stage: 1	Route No. R610	Date of Audit 08th July 2026

To be Completed by Designer				To be Completed by Audit Team Leader
Paragraph No. in Safety Audit Report	Problem accepted (yes/no only)	Recommended measure accepted (yes/no only)	Describe alternative measure(s). Give reasons for not accepting recommended measure. **Only complete if recommended measure is not accepted.**	Alternative measures or reasons accepted by auditors (yes/no)
Problem 4.1.1	No	No	Adequate parking provision for maintenance operatives is available on the surrounding minor/access roads, including Rochestown Rise, Woodbrook, The Ovals, Brookfield and Riverside. These locations are situated within close proximity to the signalised junction and provide suitable pedestrian access to the traffic signal equipment for routine maintenance purposes.	The Audit Team accept the Design Teams response.
Problem 4.1.2	Yes	Yes	A dropped kerb will be proposed to facilitate cyclists rejoining the carriageway, with the design details to be developed during the detailed design stage.	The Audit Team accept the Design Teams response.
Problem 4.1.3	Yes	Yes		
Problem 4.1.4	Yes	Yes		
Problem 4.1.5	Yes	Yes		

Problem 4.1.6	Yes	No	As part of the detailed design stage, traffic modelling and signal timing assessments will be undertaken to ensure adequate pedestrian green and clearance periods are provided. The signal staging will be designed to allow pedestrians sufficient time to safely complete the crossing of both the carriageway and cycle track prior to the commencement of any conflicting traffic movements.	The Audit Team accept that this issue will be considered in the next design stage.
Problem 4.1.7	No	No	The proposed scheme retains the existing connection to the Riverside carriageway and adjacent footpath network. As such, continuity of access for all users will be maintained.	The Audit Team accept the Design Teams response.
Problem 4.1.8	Yes	Yes		
Problem 4.2.1	Yes	Yes	A dropped kerb will be proposed to facilitate cyclists rejoining the carriageway, with the design details to be developed during the detailed design stage.	The Audit Team accept the Design Teams response.
Problem 4.2.2	Yes	Yes		
Problem 4.2.3	Yes	Yes	A southbound cycle crossing has been incorporated to the east of the junction to facilitate westbound cyclist movements from Brookfield. In addition, the northern footpath has been upgraded to a shared pedestrian and cyclist facility to accommodate this connection.	The Audit Team accept the Design Teams response.
Problem 4.2.4	Yes	No	The start of the kerb line is proposed to be set back from the cycle crossing to provide sufficient	The Audit Team accept the kerb line has been set back.

			space for cyclists to safely manoeuvre through the junction.	

Signed:		Designer:	Felipe Cardona O'Dwyer	Date:	18/08/2026
Signed:		Audit Team Leader	Rachael Collins	Date:	05/08/2026
Signed:		Client:	Brian Deasy (CCC)	Date:	19/08/2026