

Large Scale Residential Development at Ratoath, Co. Meath

Stage 1 Road Safety Audit

Marshall Yards Development Company Ltd.

May 2024

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Notice

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Document History

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1. Introduction

1.1 Report Context

This report describes the findings of a Stage 1 Road Safety Audit associated with the Large Scale Residential Development at Ratoath, Co. Meath.

The Audit has been completed by Traffico Ltd. on behalf of Marshall Yards Development Company Ltd.

1.2 Details of Site Inspections

Date	Daylight / Darkness	Weather & Road Conditions
Wednesday 8 th May 2024	Daylight	Sunny with dry road pavements.

Table 1.1 – Site Inspection Details

1.3 The Road Safety Audit Team

The members of the Road Safety Audit Team have been listed following:

Status	Name / Qualifications	TII Auditor Reference No:
Audit Team Leader (ATL)	Martin Deegan BEng(Hons) MSc CEng MIEI	MD101312
Audit Team Member (ATM)	Colin Prendeville BEng(Hons) CEng MIEI CIHT	CP3369500
Audit Trainee (AT)	-	-

Table 1.2 – Audit Team Details

1.4 Design Drawings Examined as Part of the Audit Process

The following drawing(s) were examined as part of the Road Safety Audit (RSA) process:

Table 1.3 – Designers Drawing List

Drawing No.	Drawing Title	Revision
2334-DOB-XX-SI-DR-C-500	Proposed Site Layout	P06
2334-DOB-XX-SI-DR-C-501	Proposed Site Layout Sheet 1	P06
2334-DOB-XX-SI-DR-C-502	Proposed Site Layout Sheet 2	P06

1.5 Road Safety Audit Compliance

Procedure and Scope

This Road Safety Audit has been carried out in accordance with the procedures and scope set out in TII publication number GE-STY-01024 - Road Safety Audit.

As part of the road safety audit process, the Audit Team have examined only those issues within the design which relate directly to road safety.

Compliance with Design Standards

The road safety audit process is not a design check, therefore verification or compliance with design standards has not formed part of the audit process.

Minimizing Risk of Collision Occurrence

All problems described in this report are considered by the Audit Team to require action in order to improve the safety of the scheme and minimise the risk of collision occurrence.

2. Road Safety Issues Identified

2.1 Problem: Facilitating Need for Pedestrians to Cross

Location: Internal Street T-Junction Near Main Access

Failing to cater for this key pedestrian desire line connecting the main access to the site could result in slips, trips and progression issues for mobility impaired road users.

Figure 2.1 – Key Desire Line for People Walking to / from the Main Access



Recommendation

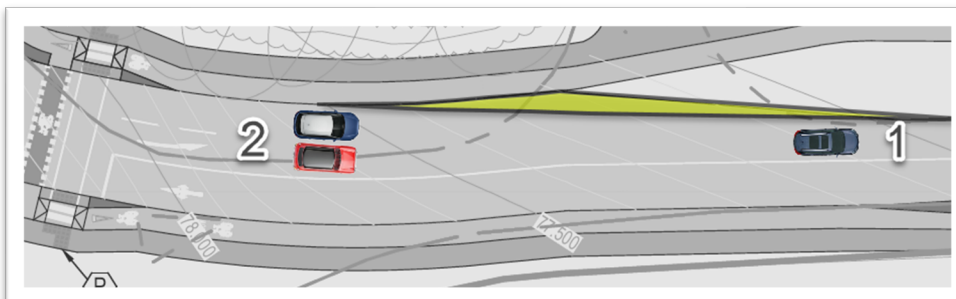
An appropriate pedestrian crossing should be provided at the location described above.

2.2 Problem: Guidance for Drivers at Lane Drop / Merge Point

Location: Eastbound Exit from New Signal Controlled Junction

Drivers in Lane 1 approaching the merge from dual to single lanes will take guidance from the nearside kerb line, which appears faceted (or changes direction in a sharp angular manner). This could increase the risk of side swipe type collisions here, particularly in free-flow conditions.

Figure 2.2 – Angular Directional Change in Nearside Kerb Line



Recommendation

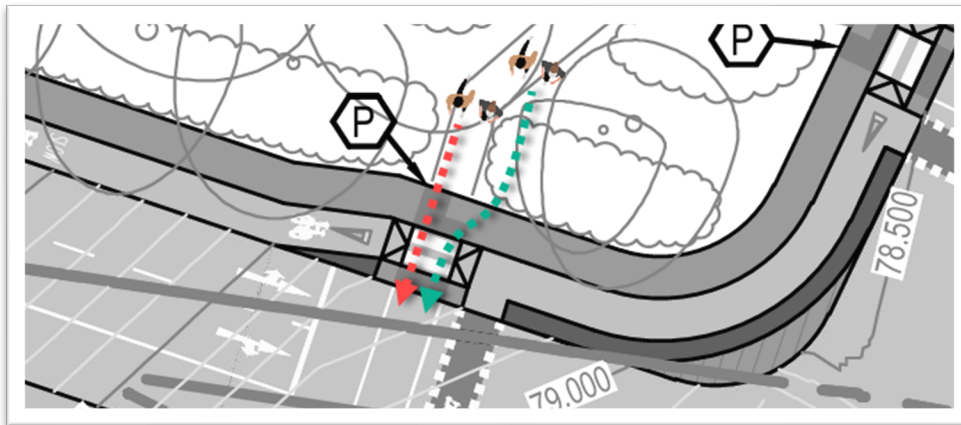
The alignment of the nearside kerb line should be adjusted to provide a smooth and predictable transition from dual lanes to a single lane.

2.3 Problem: Conflicts for Pedestrians Joining the Public Footpath

Location: Internal Footpath Connection to South-East Corner of Main Site

Pedestrians approaching a green pedestrian crossing light may cross the footpath and cycle track without checking for approaching walkers and cyclists. This could increase the risk of conflict between pedestrians and cyclist at this location.

Figure 2.3 – Pedestrian Approaching the Crossing from Internal Footpath (Red Arrow)



Recommendation

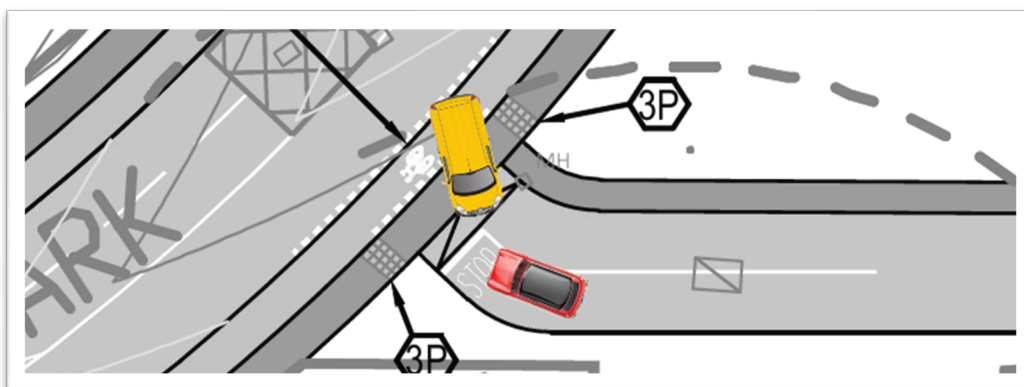
The internal footpath connection point should be offset to the right (see green arrow above), to encourage pedestrians to look towards the footpath and cycle track they are about to cross.

2.4 Problem: Access Approach Geometry & Opposition Conflicts

Location: Private Access - Southbound Exit from New Signal Controlled Junction

The low radius horizontal curve immediately in advance of the stop line could lead to Stop line 'overshoots' and opposition type conflicts between vehicles entering and exiting the access simultaneously.

Figure 2.4 – Possible Opposition Conflict Scenario at Access Connection Point to Public Road



Recommendation

The radius of the horizontal curve immediately in advance of the stop line should be increased to mitigate the risk described.

3. Team Statement

3.1 Certification & Purpose

We certify that we have examined the drawing(s) listed in Chapter 1 of this Report.

Sole Purpose of the Road Safety Audit

The Road Safety Audit has been carried out with the sole purpose of identifying any features of the design which could be removed or modified to improve the road safety aspects of the scheme.

3.2 Implementation of RSA Recommendations

The problems identified herein have been noted in the Report together with their associated recommendations for road safety improvements.

We (the Audit Team) propose that these recommendations should be studied with a view to implementation.

Audit Team’s Independence to the Design Process

No member of the Audit Team has been otherwise involved with the design of the measures audited.

3.3 Road Safety Audit Team Sign-Off

Martin Deegan

Audit Team Leader
Road Safety Engineering Team



Signed:

Date:

23rd May 2024

Colin Prendiville

Audit Team Member
Road Safety Engineering Team



Signed:

Date:

23rd May 2024

4. Designers Response

4.1 How the Designer Should Respond to the Road Safety Audit

The Designer should prepare an Audit Response for each of the recommendations using the Road Safety Audit Feedback Form attached in Appendix A.

When completed, this form should be signed by the Designer and returned to the Audit Team for consideration. See flow-chart following for further description.



Figure 4.1 – Road Safety Audit Sign-Off and Completion Process

4.2 Returning the Completed Feedback Form

The Designer should return the completed Road Safety Audit Feedback Form attached in Appendix A of this report to the following email address:

- Email address: martin@traffico.ie

The Audit Team will consider the Designer’s response and reply indicating acceptance or otherwise of the Designers response to each recommendation.

Triggering the Need for an Exception Report

Where the Designer and the Audit Team cannot agree on an appropriate means of addressing an underlying safety issue identified as part of the audit process, an Exception Report must be prepared by the Designer on each disputed item listed in the audit report.

Appendix A

A.1 Road Safety Audit Feedback Form

Road Safety Audit Feedback Form

Scheme: Large Scale Residential Development at Ratoath, Co. Meath

Audit Stage: Stage 1 Road Safety Audit

Audit Date: 23rd May 2024

Problem Reference (Section 3)	Designer Response Section			Audit Team Response Section
	Problem Accepted (yes / no)	Recommended Measure Accepted (yes / no)	Alternative Measures or Comments	Alternative Measures Accepted (yes / no)
3.1	Yes	Yes	A pedestrian crossing point has been added at the subject location. Please refer to the updated DOBA Drawing 2334-DOB-XX-SI-DR-C-0500-0502.	Comment noted with thanks.
3.2	Yes	Yes	The alignment of the road has been changed at a location immediately east of the proposed new junction and the pinch point has been removed. Please refer to the updated DOBA Drawing 2334-DOB-XX-SI-DR-C-0500-0502.	Comment noted with thanks.
3.3	Yes	Yes	The alignment of the footpath has been changed to be off-center from the crossing point at this junction. Please refer to the updated DOBA Drawing 2334-DOB-XX-SI-DR-C-0500-0502.	Comment noted with thanks.
3.4	Yes	Yes	The kerb radii immediately east of the Stop Sign have been increased to flatten out the approach angle and mitigate any possible conflicts. Please refer to the updated DOBA Drawing 2334-DOB-XX-SI-DR-C-0500-0502.	Comment noted with thanks.


**The Designer should complete the Designer Response Section above, then fill out the designer details below and return the completed form to the Road Safety Audit Team for consideration and signing.*

Designer's Name: Andy Kotze

Designer's Signature: 

Date: 28/05/2024

Employer's Name: Justin Farrelly

Employer's Signature: 

Date: 28/05/2024

Audit Team's Name: Martin Deegan

Audit Team's Signature: 

Date: 31 May 2024



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