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Road Safety Audit Stage 1 / 2

# July 2022



MHL & Associates Ltd. Consulting Engineers





### **Document Control Sheet**

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С	Client Issue	J. Daly	J. Daly	B. Loughrey	15th- July -2022
D	Final Report	J. Daly	J. Daly	B. Loughrey	15th- July -2022

# M.H.L. & Associates Ltd.

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# Abbreviations

Road Safety Audit	RSA
Strategic Housing Development	SHD



### **1 NON TECHNICAL SUMMARY**

M.H.L. & Associates Ltd. Consulting Engineers have been engaged by McCutcheon Halley Planning Consultants on behalf of Bellmount Development Ltd. to prepare a Road Safety Audit Stage 1 / 2 (RSA) to supplement a SHD planning application for a proposed student accommodation complex, located adjacent to Wilton Road/ Orchard Road. A vacant building currently occupies the site.

This Road Safety Audit assesses the proposed development access onto the local road and the layout of the scheme.

The purpose of the audit is to highlight road safety issues that exist or may be created by the proposal and should be addressed to mitigate against possible future accidents in the area. The intent is to improve the operational safety of the scheme for the benefit of all road users.

### 1.1 Audit Team

MHL's Road Safety Auditors carried out the Audit. The Audit Team members were as follows:

Team Leader Brian Loughrey (TII Ref No. BL68284) BE CEng MIEI.

Team Member James Daly, BEng CEng MIEI.

### **1.2 Site Location**

The site description is as follows:

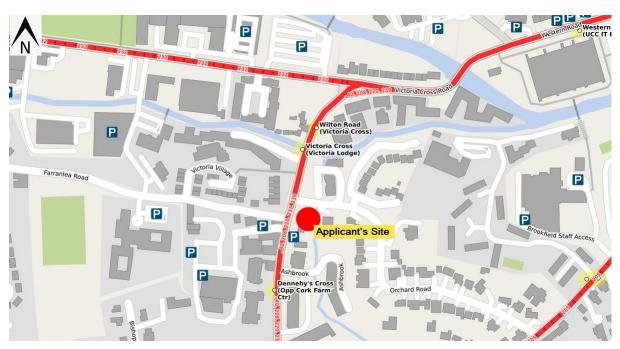


Figure 1.1 Site Location

The site location and proposed site layout is shown in the following figures. See the Site Layout Plan drawing accompanying the application, produced by Butler / Cammoranesi Architects. In accordance with TII Publications GE-STY-01024, the audit considers that the new entrance junctions, onto the public road, "results in a change to the road or roadside layout that is initiated and/or executed for commercial or private development", thereby necessitating the completion of a Road Safety Audit.



Figure 1.2 Proposed Development site

A site visit was undertaken by audit team on Friday 08/07/2022. The weather at the time of the audit was dry.

Information provided to assist the audit consists of the drawings and documents listed in Appendix B. The information provided was considered adequate in terms of detail for the purpose of carrying out a Stage 1/2 Road Safety Audit.

No previous Road Safety Audit reports were provided in relation to the development.

No specific Road Collision data was provided to the audit team. The auditors reviewed the RSA Road Collision Statistics, in the vicinity of the applicant site.

The Audit has been carried out in accordance with the relevant sections of TII Publication GE-STY-01024 (formerly NRA HD 19/15), "Road Safety Audit". The scheme has not been examined or verified for compliance with any other standards or criteria. The team drove the local road network and walked the road along the site road boundaries and compiled a list of road safety problems and associated recommendations which are presented in this report. Appendix A contains some photographs of the site.

An Audit Team Statement is included at the end of the Report. Appendix D contains the Safety Audit Feedback Form.



Figure 1.3 Proposed Development site (Butler/ Cammoranesi Architects )



### **2 AUDIT ISSUES**

### 2.1 PROBLEM 1: PUBLIC LIGHTING

No public lighting design for the site has not been provided to the audit team. The development proposes changes to the roadside footpath, amended boundary lines and new internal amenity space. Poor lighting of the carriageway, surrounding footpaths and internally within the development could result in collisions between vehicles, or vehicles and pedestrians, due to poor illuminance.

### **Recommendation 1**

Ensure that the public lighting design proposals for the development access and in the vicinity of the development's emergency access with Orchard Road are designed and installed in accordance with recommended lighting standards. Existing on street lanterns should be considered in the design.

### 2.2 PROBLEM 2: WILTON ROAD JUNCTION VISIBILITY SIGHTLINES

No junction sightline layouts for the change in nearby junction, with reference to proposed streetscape planting provided to the audit team. Failure to provide adequate sightlines could result in collisions between vehicles, or vehicles and pedestrians, due to poor forward visibility. See Appendix A.

### **Recommendation 2**

Ensure appropriate sightlines for the design speed of the Wilton Road are provided.

### 2.3 PROBLEM 3: PEDESTRIAN CROSSING VISIBILITY SIGHTLINES

It is proposed to realign the existing pedestrian crossing on Orchard Road, parallel to Wilton Road, as part of the junction realignment works. Failure to provide adequate intervisibility for and to pedestrians at the crossing could result in collisions between vehicles and pedestrians, due to poor visibility. See Appendix A.

### **Recommendation 3**

Ensure appropriate intervisibility is provided to and from the pedestrian crossing, appropriate to the road design speed.

### 2.4 PROBLEM 4: LARGE VEHICLE ACCESS

No swept path analyses of service vehicles entering the development from Orchard Road are shown. Failure to provide adequate turning junction widths could result in collisions between vehicles, or vehicles and pedestrians, due to inadequate carriageway space or entry radii at a junction.

### **Recommendation 4**

Carry out appropriate swept path analysis for all expected vehicle types entering/exiting the site. Appropriate signage is required at the exit location onto the local road.

### 2.5 PROBLEM 5: ROAD DRAINAGE

The road drainage layouts do not show detail of gulley locations to capture surface water. No drainage details are provided for the emergency service road. Failure to provide adequate drainage infrastructure could result in aquaplaning and unsafe driving conditions, leading to collisions between vehicles, or vehicles and pedestrians.

### **Recommendation 5**



Ensure appropriate drainage infrastructure along adjacent road carriageway, access laneways are provided, accounting for the raised table proposed.

### 2.6 PROBLEM 6: EMERGENCY LANE/ ADJACENT RIVER EMBANKMENT

The road layouts do not show detail of emergency access/ laneway interface with the adjoining river side/ embankments. Failure to provide adequate boundary treatment/ riverside protection could result in unsafe driving conditions, leading to vehicles and pedestrians accidentally entering the watercourse.

### **Recommendation 6**

Ensure appropriate vehicle / boundary protection along adjacent riverside is provided, accounting for emergency vehicle design requirement/ fire access standards.

### 2.7 PROBLEM 7: PEDESTRIAN PROTECTION/ TACTILE PAVING

The road layouts do not show detail of emergency access proposals for pedestrian protection/ tactile paving. Failure to provide adequate tactile paving /bollard protection could result in unsafe driving conditions, leading to potential conflict movement between vehicles and pedestrians.

### **Recommendation 7**

Ensure appropriate pedestrian protection and tactile paving is provided, designed to relevant standards.



### **3 AUDIT TEAM STATEMENT**

We certify that we have examined the drawings and documents listed in the Appendix to this Report. The examination has been carried out with the sole purpose of identifying any features of the design that could be removed or modified in order to improve the safety of the scheme. The problems identified have been noted in this report, together with associated safety improvement suggestions, which we recommend should be studied for implementation. The Auditors have not been involved with the scheme design.

Mr Brian Loughrey BE CEng MIEI

Signed: Bran Longhey

Date: 08/07/2022

Mr James Daly, BE CEng MIEI

hames July ...... Signed: ....

Date: 08/07/2022







# **5** APPENDIX A – PHOTOGRAPHS



Figure 5.1 Existing Applicant's site proximity with Wilton Road



Figure 5.2 Existing site access with Orchard Road





Figure 5.3 Existing Site Access - Orchard Road



Figure 5.4 Existing Site Access – Proximity to Wilton Road/ Orchard Road Junction



### Road Safety Audit Stage 1 / 2



Figure 5.5 Existing junction with Wilton Road/ Orchard Road



## 6 APPENDIX B - DRAWINGS & DOCUMENTS SUBMITTED FOR INFORMATION

DRAWINGS BY: Butler / Cammoranesi Architects				
Ref.	Rev.	Drawing Title	Scale	
Layout Drawings				
A01-10		Proposed Site Plan	1:500	
A01-00		Ground Floor Plan	1:200	

DRAWINGS BY: JODA Consulting Engineers Ltd.				
Ref.	Rev.	Drawing Title	Scale	
Layout Drawings				
4539-004		Proposed Storm Sewer Layout	1:250	

DRAWINGS BY: Cathal O'Meara Landscape Architects				
Ref. Rev. Drawing Title Scale				
Layout Drawings				
2130-LA-P001		Landscape Layout	1:200	

DRAWINGS BY: MHL & Associates			
Ref.	Rev.	Drawing Title	Scale
Layout Drawings			
MHL-WTR-ATC-P00		Proposed Site Access and Bus Connects Corridor offset	1:250
MHL-WTR-ATC-P01		Adjusted Access Geometry	1:100



### 7 APPENDIX C – RSA COLLISION STATISTICS

The Road Safety Authority is in the process of reviewing its road traffic collision (RTC) data sharing policies and procedures. Record-level RTC data cannot be shared until this review is complete. At that point, RSA will have new policies and procedures in place for access to RTC information and data. A previous RSA map from the area was reviewed for the purposes of this audit. It is not published in this report, in accordance with the Road Safety Authority concerns, as outlined.



### 8 APPENDIX D – RSA FEEDBACK FORM

# Scheme: Proposed Residential Development, Wilton Road Audit Stage: 1/2 Date Audit Completed: 08/07/2022

4	To be co	To be Completed by Audit Team Leader		
Paragraph No. in Safety Audit Report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	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)
2.1	Y	Y	÷	
2.2	Y	Y		
2.3	Y	Y		
2.4	Y	Y		
2.5	Y	Y		
2.6	Y	Y		
2.7	Y	Y		

DESIGNER			
Signed:	Turner	Date:	19.07.22
AUDIT TEAM			
Signed:	Bran Loughery	Date:	21/07/2022
EMPLOYER			
Signed:	Hogy Volle	Date:	1910762
	SAR		19/07/22

Bellmount Development Ltd.

Proposed Residential Development



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