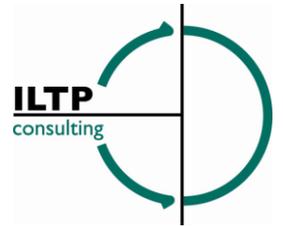


Proposed SHD – Lands at Central Mental Hospital, Dundrum, Dublin 14

Client: Land Development Agency

Stage 1 Road Safety Audit





PROPOSED SHD – CMH DUNDRUM

Description:

Stage 1 Road Safety Audit

Author:

Mark Andrews

Ludmila Santos

Audit Brief Submitted By:

Peter O'Dwyer BMCE

Distribution:

Peter O'Dwyer BMCE



1 AUDIT INFORMATION

1.1	Title	CMH DUNDRUM RSA1
1.2	Audit Reference Number	CMH DUNDRUM RSA1 MA 327
1.3	Project Code	CMHDUNDRUM
1.4	Date Audit Completed	21st January 2022
1.5	Audit Attended By	Ludmila Santos Mark Andrews
1.6	Audit Team	
	Team Leader	Mark Andrews, ILTP
	Team Member	Ludmila Santos, ILTP

1.7 Information Received

ITEM		Supplied	Comments
A	Plans	Yes	<ul style="list-style-type: none"> • DSRM-ACM-00-ST-DR-L-0900-C • DSRM-ACM-00-ST-DR-L-1000-D • DSRM-ACM-00-ST-DR-L-1001-C • DSRM-ACM-00-ST-DR-L-1002-C • DSRM-ACM-00-ST-DR-L-1003-C • DSRM-ACM-00-ST-DR-L-1004-C • DSRM-ACM-00-ST-DR-L-7000-A • DSRM-ACM-00-ST-DR-L-7001-A • DSRM-ACM-00-ST-DR-L-7002-A • DCD-BMD-00-00-DR-C-1000 Roads Layout & Levels • DCD-BMD-00-00-DR-C-1002 Dundrum Road Access Junction (South) • DCD-BMD-00-00-DR-C-1020 Buried Surface Water Drainage Layout • DCD-BMD-00-00-DR-C-1021 Buried Foul Water Drainage Layout • DCD-BMD-00-00-DR-C-1025 Surface Water Overland Flow Routes • DCD-BMD-00-00-DR-C-1030 SuDS Layout • DCD-BMD-00-00-DR-C-1039 Existing Buried Drainage Layout • DCD-BMD-00-00-DR-C-1040 Buried Watermain Layout • DCD-BMD-00-00-DR-C-1100 Roads Long Sections (Sheet 1 of 2) • DCD-BMD-00-00-DR-C-1101 Roads Long Sections (Sheet 2 of 2) • DCD-BMD-00-00-DR-C-1200 Road & Hardstanding Details (1 of 2) • DCD-BMD-00-00-DR-C-1201 Road & Hardstanding Details (2 of 2) • DCD-BMD-00-00-DR-C-1206 SuDS Details. Permeable Paving Details • DCD-BMD-00-00-DR-C-1225 Standard Surface Water Drainage Details
B	Traffic Count Data	No	
C	Speed Count Data	No	
D	Accident Data	No	
E	Design Standards	No	
F	Design Brief	No	
G	Other Data	Yes	<ul style="list-style-type: none"> • 211217 DMURS Compatibility Statement - for Legal Review - Draft

2 INTRODUCTION

- 2.1.1 This is a Stage 1 Road Safety Audit which examines the road safety implications of a proposed development of no. 977 residential units and ancillary non-residential units with associated public open space. The site is located to the east of Dundrum Road in Dublin 14 within the grounds of the former Central Mental Hospital.
- 2.1.2 The audit includes two new access junctions along with dedicated cycle and pedestrian access points and the internal road/footway/cycleway arrangements.
- 2.1.3 The Feedback Form for this Stage 1 Road Safety Audit is included in **Appendix A** of this report.
- 2.1.4 This Stage 1 Road Safety Audit is based upon the information within the TTA document and drawings provided to the design team, as included under paragraph 1.7.
- 2.1.5 This Stage 1 Road Safety Audit has been conducted generally in accordance with the Transport Infrastructure Ireland publication entitled *Road Safety Audit*, ref. GE-STY-01024, March 2015.
- 2.1.6 A site visit was carried out on 24th June 2021 in daylight conditions. The weather was fine and dry.
- 2.1.7 This Stage 1 Road Safety Audit specifically examines the road safety aspects of the proposed development. It is not an appraisal of policy or strategic issues associated with the planning of the development and it does not examine or verify the compliance of the design to any other design criteria or guidelines. The designer and all concerned stakeholders must therefore defend all actions taken on the basis that such care was taken, as was in all circumstances reasonably required, to ensure that the roadway was not unsafe for road users. It is important, therefore that where possible the recommendations in this report are acted upon.

3 ITEMS RESULTING FROM PREVIOUS ROAD SAFETY AUDITS

ILTP completed a Stage 1 RSA of the site proposals dated 28th July 2021 reference RSA 1 CMH DUNDRUM MA 317

3.1 Relocated bus stop causes visibility issues

Problem

The information provided for audit shows that in order to improve visibility at the northern site access a bus stop is to be moved. However, the proposed location of the stop places directly in front of the signals for the pedestrian crossing at the junction of St. Columbanus Road. Without clear visibility to the signal heads vehicles following a stopping bus may attempt to pass and collide with pedestrians crossing the facility.

Recommendation

It is recommended that the design team relocate the bus stop to a location that does not impede visibility at the proposed access junction or the existing pedestrian crossing.

Further comments at this stage

No further comments at this stage, although the recommendation remains.

3.2 Vegetation withing sight lines

Problem

The information provided for audit shows that a row of proposed trees is to be planted between the two traffic access points to the site. These trees appear to be within the visibility requirements for vehicles emerging from the site. Should visibility be compromised by vegetation, landscaping or other roadside features and plant, traffic may emerge from the site into the path of conflicting vehicles resulting in T-bone type collisions.

Recommendation

It is recommended that the design team ensures that all visibility requirements are clear of landscaping, planting, and other roadside features.

Further comments at this stage

No further comments at this stage, although the recommendation remains.

3.3 Drainage details do not indicate low spots

Problem

The information provided for audit shows standard details of gullies and offlets to drain the paved areas of both carriageway and footway. However, there are no details of where these facilities will be placed or details of levels to indicate where low spots that need draining will be. Without appropriate drainage the paved areas may pond resulting in slip and skid incidents (particularly in cold weather), or road users (both motorised and non-motorised) taking an alternative and inappropriate path to avoid the ponding resulting in collisions with other road users.

Recommendation

It is recommended that the design team ensures that the road network is appropriately drained with a full detailed drainage design completed.

Further comments at this stage

Details have been supplied of the location of drainage facilities and locations. However, level details have not been supplied to confirm these are located appropriately. The design team must ensure that the locations are located appropriately to drain the surface water.

3.4 Lack of tactile paving and other non-motorised user guidance within the site

Problem

The information provided for audit shows that there is tactile paving proposed within the existing road and footway connections, but there is no detail of how conflict points within the site or proposed pedestrian crossing points are to be treated, signed and marked. Without appropriate guidance, markings, signs and paving pedestrians may come into conflict with cyclists or cross the carriageway at inappropriate locations.

Recommendation

It is recommended that the design team ensures that appropriate tactile paving, signs and markings are used throughout the site to guide pedestrians to suitable crossing locations, and to avoid conflict with cyclists.

Further comments at this stage

No further comments at this stage, although the recommendation remains.

3.5 Raised crossing platforms and speed control devices in the carriageway

Problem

The information provided for audit shows proposed raised platform areas within the carriageway throughout the site. However, there are no details of how these features will be signed to warn drivers of their presence. Without appropriate signage these features may be driven into at an inappropriate speed resulting in a loss of control.

Recommendation

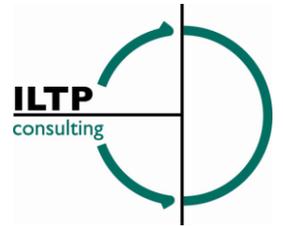
It is recommended that the design team ensures that signage and guidance is in place to inform road users of the nature and location of these speed control devices.

Further comments at this stage

No further comments at this stage, although the recommendation remains.

3.6 Lack of lighting details

Problem



The information provided for audit does not show what lighting is to be in place within the proposed development or how the lighting will be modified along Dundrum Road, without appropriate lighting vulnerable road users may not be apparent to motorists, especially when attempting to cross the carriageway.

Recommendation

It is recommended that the design team ensures that a lighting scheme is designed throughout the proposed development.

Further comments at this stage

The information provided does not detail street lighting provision within the site. It is recommended that the design team ensures that a lighting scheme is designed throughout the proposed development.

4 ITEMS RESULTING FROM THIS STAGE 1 ROAD SAFETY AUDIT

4.1 No details of signs throughout the site

Problem

The information provided for audit does not show details of signs within the site. Without appropriate signs road users may not be fully aware of Yield locations, speed limits, raised platforms, crossing areas or other roadside features and hazards within the site

Recommendation

It is recommended that the design team ensure that signs and markings are designed and detailed appropriately to inform all road users of controls and hazards within the site.

4.2 Cycle lane that leads to left turn lane and not right turn lane

Problem

The information provided for audit shows that a proposed cycle lane approaching the southern egress point for the site leads only to the left turn lane at the junction, cycles at this location wishing to turn right will need to cross the left turn lane against traffic and make a movement without any form of segregation or turn right out the left lane. This may bring them into inappropriate conflict with other road users.

Recommendation

It is recommended that the design team ensures that cycle facilities provide appropriate guidance to cyclists and allow all required movements to undertaken safely. If appropriate segregation cannot be provided for all movements, segregation should be terminated in a manner that allows all movements to safely merge.

5 CONCLUSIONS

It is considered that the site, as currently proposed, is generally conducive to safe access and egress by all forms of road user. It is recommended however that the specific issues raised in this report be taken into account and that appropriate measures be put in place where practicable to mitigate the concerns raised.

This Stage 1 Road Safety Audit Report recommends various actions, which should be considered for inclusion in the detailed design process. Where recommendations are not incorporated into the design this should be documented in an Exception Report and forwarded to the ILTP Road Safety Audit Team. The Design Team should document and provide the rationale for incidences where the audit recommendations have not been incorporated or where alternatives are put forward.

The Design Team should respond to all issues raised in this Stage 1 Road Safety Audit Report through returning a signed copy of the Road Safety Audit Feedback Form.

6 ROAD SAFETY AUDIT TEAM STATEMENT

6.1 Statement

We certify that the drawings and documents provided with the Audit Brief have been examined. The examination has been carried out with the sole purpose of identifying any features of the scheme that could be improved or modified in order to improve the accessibility of the relevant aspects of the scheme. The problems that we have identified have been noted in the report, together with suggestions for improvement, which we recommend should be considered for implementation.

6.2 Signatures

6.2.1 Audit Team Leader Signature

Name: Mark Andrews
Position: Transport Engineer
Date: 21 / 01 / 2022
Organisation: ILTP Consulting

Signed: 

6.2.2 Audit Team Member Signature

Name: Ludmila Santos
Position: Transport Engineer
Date: 21 / 01 / 2022
Organisation: ILTP Consulting

Signed: 

APPENDIX A - STAGE 1 ROAD SAFETY AUDIT FEEDBACK FORM

Audit Reference Number CMH DUNDRUM RSA1 MA 327

Date Audit Completed 21st January 2022

Para No. in Report	Recommendation Accepted (Y/N)	Comments / Alternative Measures (Describe)	Alternative Measures Accepted by Auditor? (Y/N)
3.1	Y	The original bus stop relocation has now been omitted from the proposals. Bus stop location will be discussed and agreed with Dublin Bus and DLRCC.	Y
3.2	Y	The design team will ensure that the appropriate visibility requirements are achieved.	Y
3.3	Y	Road levels to the centreline of roads have been provided. Detailed drainage proposals will be provided and drainage facilities will be located appropriately to drain surface water run-off.	Y
3.4	Y	Appropriate signage, tactile paving and road markings will be provided throughout the scheme.	Y
3.5	Y	Appropriate warning signage and road markings will be provided at raised platform areas.	Y
3.6	Y	Appropriate street lighting will be provided within the development.	Y
4.1	Y	Details of signage and road markings will be provided on the engineer's latest drawings.	Y
4.2	Y	The proposed cycle lane arrangements will be amended at the southern egress to segregate cyclists from vehicular traffic on the approach to the junction.	Y



Signed:

Peter O'Dwyer

Peter O'Dwyer

Design Team Leader

Date 23 / 02 / 2022

Safety Audit Signed Off:

Andrew

Road Safety Audit Team Leader

Date 03 / 03 / 2022