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HOLY CROSS COLLEGE - STAGE 1 ROAD SAFETY AUDIT PREPARED BY BARRY TRANSPORTATION



Systra



Clonliffe Lands Development Access Junctions

Stage 1 Road Safety Audit

February 2021



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APPENDIX 1: ROAD SAFETY AUDIT FEEDBACK FORM

SECTION 1: Introduction

This Road Safety Audit report will assess the new public road access junctions to the Clonliffe Lands Development. The first access is situated on Clonliffe Road and the second on Drumcondra Road Upper. This report makes up part of the accompanying documents for a planning application to Dublin City Council for the proposed development.

The Clonliffe Lands Development site is located at the Holy Cross College campus in Drumcondra. The site is bounded by Drumcondra Road Upper to the west, Clonliffe Road to the south and Tolka River to the north.

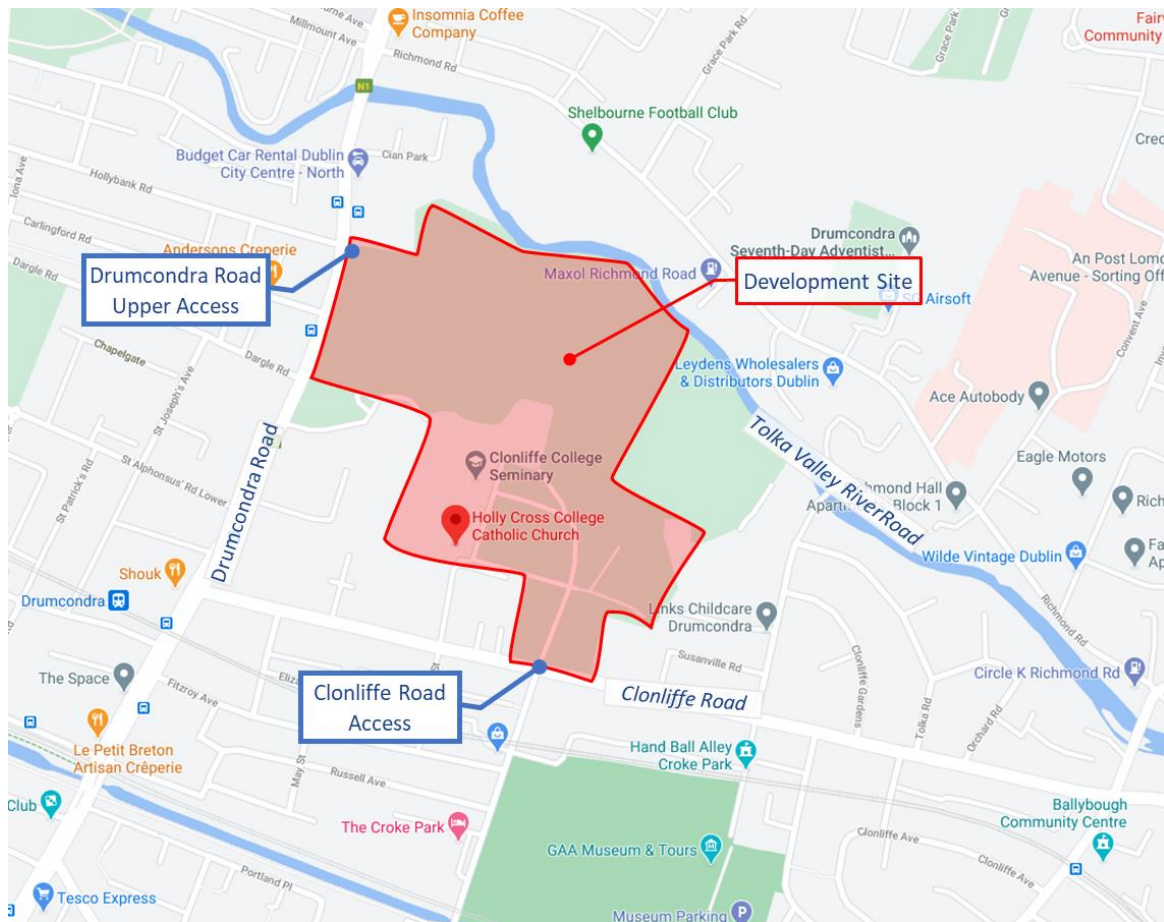


Figure 1.1: Site Location

This audit has been prepared in accordance with the TII publication “GE-STY-01024 - Road Safety Audit”. The Audit Team has examined and reported on only the road safety implications of the scheme and has not examined or verified the compliance of the design to any other criteria. This audit is confined to the details as shown on the scheme drawing provided. Identified problems and recommendations are detailed in Section 2.

The list of drawings and documents supplied with the audit brief are outlined below;

- Clonliffe Road Access Junction and Pedestrian Crossing at Clonliffe Road Drawing
- Drumcondra Road Access Drawing
- Clonliffe Lands Development Transport Assessment Report

The Audit Team is as follows:

Audit Team Leader	Audit Team Member
Tristan Dunne BE MEngSc CEng MIEI	Gerard Claffey BA BAI MAI CEng MIEI
J. B. Barry & Partners Ltd, Classon House, Dundrum Business Park, Dublin 14.	J. B. Barry & Partners Ltd, Classon House, Dundrum Business Park, Dublin 14.

The site visit for this audit was carried out on Thursday 18th February 2021 during daylight hours. Weather conditions during the site visit were dry, road surfaces were dry and traffic volumes were low.

SECTION 2: Clonliffe Road Access Audit Items

2.1 Problem: Traffic Signals on Clonliffe Road and Jones Road

The proposed traffic signals at the Clonliffe Road / Jones' Road junction with the development are inconsistent with the traffic signal arrangement at similar nearby junctions within Dublin City Council. The proposed arrangement includes a primary head, secondary head and a second primary head for each arm. The second primary head is not required at a junction of this nature. See Figure 2.1 of the proposed arrangement and Figure 2.2 for examples of similar junctions near Clonliffe Road with no secondary primary head.

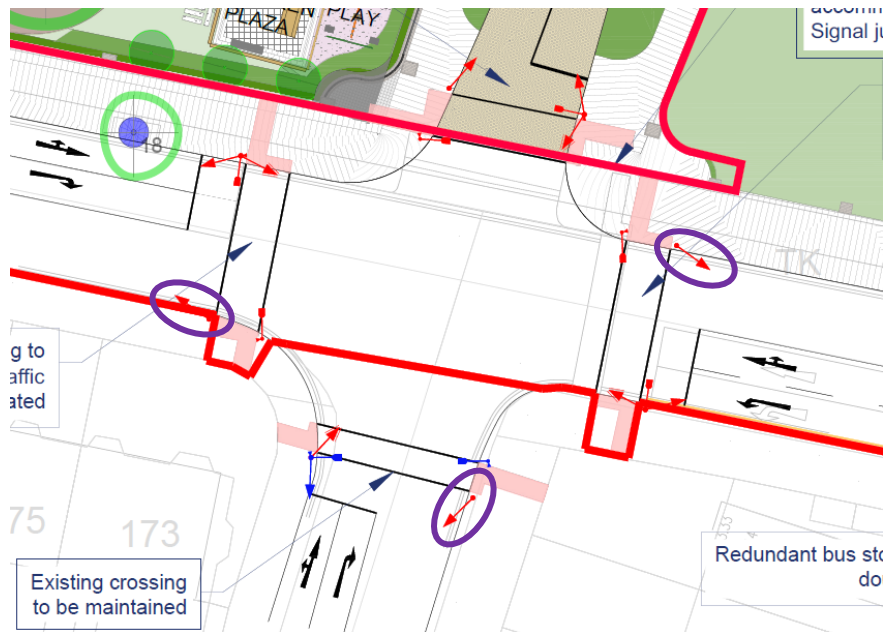


Figure 2.1: Secondary Primary Heads

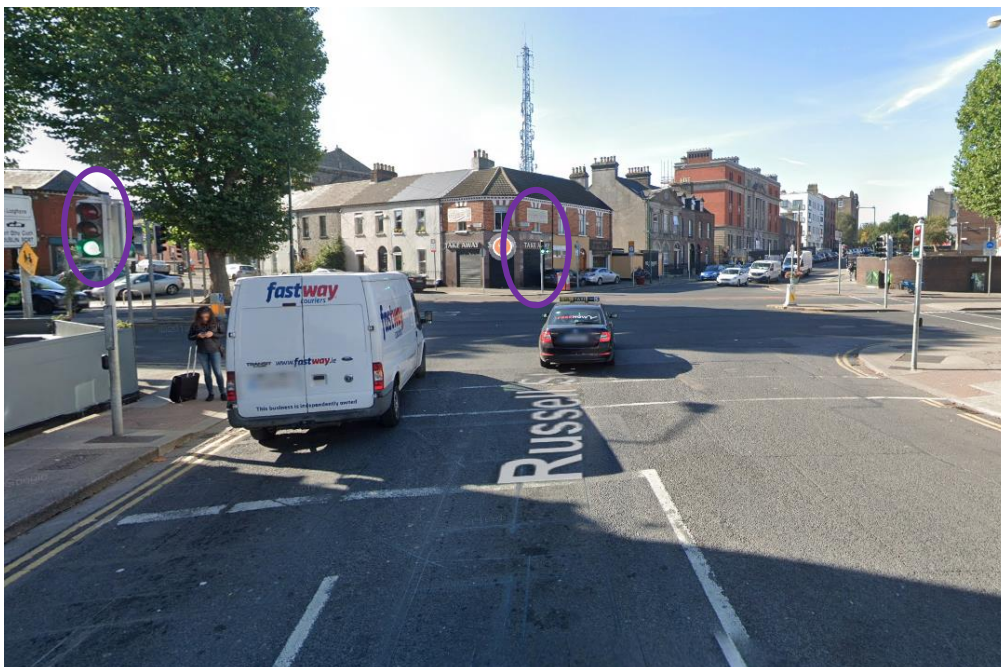




Figure 2.2: No secondary primary head on nearby junctions

Recommendation

Remove the second primary head at the junction.

2.2 Problem: Development Access

The current junction arrangement may give the impression that the Clonliffe Road development entrance is a continuation of the public road from Jones' Road and is not an access to a residential development with no through-traffic permitted, due to the cross-roads nature of the new junction, adoption of traffic signals and the finished proposed for access into the development. This could lead to driver confusion and drivers mistakenly driving straight into the development and then attempting to find a way out again.

Recommendation

Do not provide continuous blacktop road surfacing from Clonliffe Road into the development: provide an alternative colour/texture pavement or a raised table at the entrance to help reinforce that drivers are entering a development and it is not a continuation of the public road.

2.3 Comment: Junction Radii

There is scope for reducing the corner radii at the junction in accordance with DMURS and bringing the pedestrian crossing more in line with the pedestrian desire line

2.4 Comment: Pedestrian/Cyclist Friendly Junction

There is an opportunity lost in not creating a more pedestrian and cyclist friendly junction. The presence of left/right turn lanes on all three arms on the public road create a car centred junction. The removal of these lanes, increasing footpath widths, providing buildouts, and reducing the corner radii would be a far better safer environment for cyclists and pedestrians.

2.5 Comment: Uncontrolled Crossing

Transverse road markings at the uncontrolled pedestrian crossing should be omitted in accordance with normal practice.



Figure 2.3: Incorrect Road Markings

SECTION 3: Drumcondra Road Access Audit Items

3.1 Problem: Left In / Left Out

The proposed Left In and Left Out mountable island arrangement at Drumcondra Road does not make it obvious to drivers that they cannot turn right into or out of the development. Furthermore, the deflection island is not a sufficient physical deterrent for these movements. Drivers may disobey (or miss entirely) the signage and turn right in/out of the development or go straight across the junction to and from Hollybank Road with a subsequent high risk of vehicle conflicts.



Figure 3.1: No secondary

Recommendation

Provide a larger deflection island, physically forcing vehicles to turn left out of the development, preventing vehicles from turning right or traversing to and from Hollybank Road. Alternatively, provision of a signalised junction would resolve safety issues here.

3.2 Problem: Pedestrian Visibility

There will be restricted visibility of the Drumcondra Road Lower footpath due to the boundary walls for drivers exiting the development and this could lead to vehicle/pedestrian collisions. Additionally, there is no traffic calming proposed as part of the access road.



Figure 3.2: Restricted visibility on both sides.

Recommendation

While it is acknowledged that there are restrictions in widening the existing wall opening at the junction to improve visibility, therefore an alternative acceptable solution would be to provide a pedestrian crossing ramp in the form of an entry treatment at the access. This would reinforce pedestrian priority and slow vehicles down. A lower height/slope kerb can be used so that the ramp is gentle and can facilitate a stop line.

SECTION 4: AUDIT TEAM STATEMENT

We certify that we have examined the scheme on-site during daylight hours.

The examination and subsequent report was made with the sole purpose of identifying any features of the scheme that could be removed or modified in order to improve the safety of the proposals.

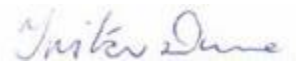
The problems identified have been noted in this report together with associated safety improvement suggestions, which we recommend should be studied for implementation.

No one on the Audit Team has been involved with the scheme design.

Audit Team Leader

Name: Tristan Dunne
BE MEngSc CEng MIEI

Signed:



Date: 01/03/21

Organisation: Barry Transportation

Address: Classon House,
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Audit Team Member

Name: Gerard Claffey
BA BAI MAI CEng MIEI

Signed:



Date: 01/03/21

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Dublin 14.

Appendix 1: Road Safety Audit Feedback Form

Scheme: Clonliffe Lands Development Access Junctions

Audit Stage: Stage 1 Road Safety Audit

Date Audit Completed: 26th February 2021

Paragraph No. in Report	To Be Completed by the Design Team			To Be Completed by the Audit Team
	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Designer's Response / Alternative measures (describe)	Designer's Response / Alternative Measures accepted by Auditors (yes/no)
2.1	Yes	Yes	Secondary primary heads have been removed, as shown on the revised junction arrangement drawing	Yes
2.2	Yes	Yes	An alternative colour/texture pavement is proposed to be provided at the road access entrance, as shown on the revised junction arrangement drawing	Yes
3.1	Yes	Yes	A larger deflection island is proposed to be provided, as shown on the revised junction arrangement drawing	Yes
3.2	Yes	Yes	Entry treatment incorporating raised area of contrasting material is proposed to be provided, as shown on the revised junction arrangement drawing	Yes

Signed:



Designer

Date 29th March 2021

Signed:



Audit Team Leader

Date 30th March 2021

Signed:

Brian Moran

Client

Date 07-04-2021