

Cabinteely Greenway

Stage 1 Road Safety Audit Report

230119-X-90-X-XXX-RP-DBFL-CE-0001

April 2025

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P1	2	20/03/25	Third Draft	Sayed Ahmad Saeed	Mark McKenna	Mark McKenna
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1 INTRODUCTION

1.1 BACKGROUND

DBFL Consulting Engineers have been commissioned to undertake Stage 1 Road Safety Audit for the proposed Cabinteely Greenway in Dublin 18.

The proposed scheme is approximately 2.3km in length and commences at the Bray Road / Cornelscourt Hill Road junction in Cornelscourt Village, then continues along Glen Lawn Drive, Cabinteely Park, Brennanstown Road and Cherrywood (Druids Glen/Orchard Square).

The general location of the subject site in relation to the surrounding road network is illustrated in **Figure 1-1** below.



Figure 1-1 Subject Site Location

1.2 SCHEME DESCRIPTION

The proposed Cabinteely Greenway scheme seeks to provide a safe, high-quality route which improves connectivity for pedestrians and cyclists travelling between local schools, services, amenities and surrounding residential areas. The proposed approximately 2.3km Greenway route passes through predominantly residential areas, although there are also a number of local services and amenities, such as Cabinteely Park, adjacent to the route as well as a number of local schools.

1.3 RSA SCOPE

The geographical scope of this Stage 1 Road Safety Audit considers the extents of the new pedestrian and cycle facility and its transitions with the wider cycle network including tie-ins at the scheme extents and on side road approaches. The geographical scope of this Road Safety Audit is illustrated in Figure1-2 below.



Figure 1 2 Geographical Scope of RSA Audit

The Audit Team membership was as follows:

Team Leader:	Mark McKenna BEng MSc CEng MIEI Cert Comp RSA DBFL Consulting Engineers (Waterford) TII approval number: MM 3363499
Team Member:	Sayed Ahmad Saeed BEng Tech BEng (Hons) MEng MIEI DBFL Consulting Engineers (Dublin) TII approval number: SS 3419515
Trainee Observer :	Riyaz Ebrahim BEng (Hons) MEng MIEI DBFL Consulting Engineers (Waterford) TII Reference number: RE249047
Trainee Observer :	Ruairi Browne BEng (Hons) MIEI DBFL Consulting Engineers (Dublin) TII Reference number: RB283140

The Audit comprised a desktop review of the information listed in Section 4 of this report in addition to an examination on-site of the existing local road network characteristics. The site was visited on Wednesday 1st August 2024 between 12:30pm and 14:30pm. At the time of the site audit the weather was dry with all road/footway surfaces being noted as dry.

This Audit has been carried out in accordance with the relevant sections of the Transport Infrastructure Ireland guidance (TII) guidance GE-STY-01024 December 2017 for Road Safety Audit. The Audit Team has examined only those issues within the proposed design relating to the road safety implications of the scheme and has therefore not examined or verified the compliance of the design to any other design criteria. The objective of the site visit was quantifying:

- existing traffic (pedestrian, cyclist and vehicular) and travel demand characteristics,
- the provision of dedicated facilities availability for vulnerable road users,
- the likely travel desire lines/links to/from the subject site, and
- any issues that might impact the safety of non-motorised users (NMU's).

The problems identified and described in this report are considered by the Audit Team to require action in order to improve the safety of the Scheme and minimise accident occurrence.

1.4 1.4 Collision History

The audit Team was not provided with historical road traffic collision data for the study area. The auditors checked the Road Safety Authority website and noted that access to Road Traffic Collision (RCT) data is not available at the moment. Road Safety Authority website states the below.

"We are in the process of reviewing our road traffic collision (RTC) data sharing policies and procedures. Record-level RTC data cannot be shared until this review is complete"

2 ITEMS RAISED DURING THIS STAGE 1 ROAD SAFETY AUDIT

2.1 PROBLEMS AT GENERAL LOCATIONS

Location (G1) – Swept Path Analysis

Problem:

The auditors note that the existing Cornelscourt Hill Road/Bray Road junction and other side road junctions along the proposed route have been significantly tightened and the drawings do not detail autotracking. The auditors are unsure if large vehicles including busses, waste lorries and fire tenders would be able to safely navigate through these tightened junctions.

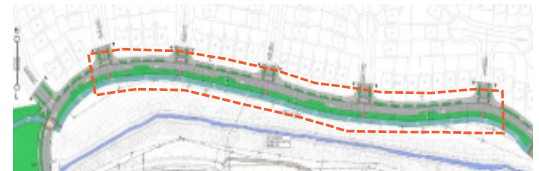
Recommendation:

It is recommended that autotracking of the tightened junctions should be undertaken to ensure that large vehicle safely and conveniently manoeuvre through the junctions.

Location (G2) – Pedestrian Access to/From the Greenway from Side Roads

Problem:

The auditors note that crossing pints providing access to/from the proposed Greenway are not provided for pedestrians residing in the residential areas along the northern side of Glen Lawn Drive. The auditors are concerned that pedestrians seeking to access the Greenway via kerbed grass verge area may trip/fall.



Recommendation:

It is recommended that crossing facilities are provided at appropriate intermediate locations along this section of the scheme.

2.2 PROBLEMS AT SPECIFIC LOCATIONS

Location (S1) – Bray Road Southeast tie-in.

Problem:

The drawings provided for this audit shows that cycle facility along Bray Road terminates to the southeast at the junction with Willow Grove and directs cyclists towards the kerb on the southern side of Willow Grove rather than guiding them on-road in the direction of travel. There is a risk that cyclists may be struck by vehicles entering or exiting Willow Grove or side swipe type collisions with main road traffic as cyclists attempt to redirect their line of travel into the main road.



Recommendation:

It is recommended that the cycle facility should be extended across the side road with cyclists guided into their intended direction of travel.

Location (S2) – Bray Road Northwest tie-in.

Problem:

The drawings provided for this audit shows that the cycle facility along Bray Road terminates to the northwest at the side access road junction leading to M Roe & Sons. This directs cyclists towards the kerb on the northern side of the side road rather than guiding them on-road in the direction of travel. There is a risk that cyclists may be struck by vehicles entering or exiting the side road or side swipe type collisions with main road traffic as cyclists attempt to redirect their line of travel into the main road.



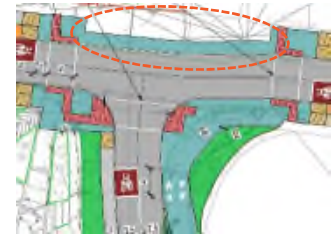
Recommendation:

It is recommended that the cycle facility should be extended across the side road with cyclists guided into their intended direction of travel.

Location (S3) – Shared Path along northern side of Bray Road

Problem:

The auditors note that a narrow shared path is provided along northern side of Bray Road through the junction with Cornelscourt Hill Road. The auditors are concerned that the shared path may not have sufficient width to safely accommodate pedestrians and cyclists.



Recommendation:

It is recommended that the width of the shared facility is sufficient to accommodate both cyclists and pedestrians.

Location (S4) – Toucan Crossing on Cornelscourt Hill

Problem:

The auditors note that a toucan crossing is provided on Cornelscourt Hill adjacent to large trees. The auditors are concerned that the large tree may impact visibility of the traffic light for northbound traffic. This may lead to collision between vehicles and crossing pedestrians or cyclists.



Recommendation:

It is recommended that the traffic lights should be sufficiently visible to approaching vehicles from both directions.

Location (S5) – Access to/From the Greenway from Gorta Mona Drive

Problem:

The auditors note that access to/from the Greenway is not provided for users from Gorta Mona Drive. The auditors are concerned that pedestrian or cyclists seeking to access the Greenway via full height kerbs and the grass verge area may result trip/fall type incidents.



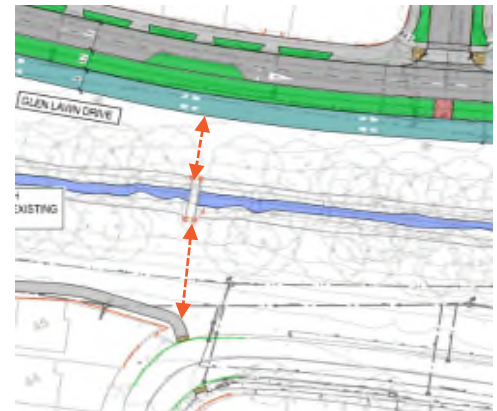
Recommendation:

It is recommended that safe and convenient access should be provided at this desire line.

Location (S6) – Pedestrian Desire Line between Vale View Lawn and the Greenway

Problem:

The auditors note that no pedestrian facility is provided along the new desire line between Vale View Lawn and the proposed Greenway via the exiting pedestrian footbridge. The auditors are concerned that pedestrians seeking to access the Greenway via the steep grass area may slip/fall as they cross the grass area.



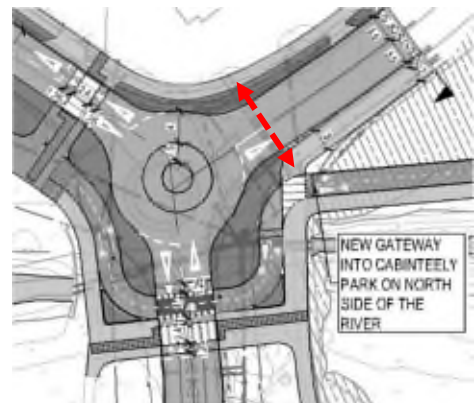
Recommendation:

It is recommended that the potential need for the delivery of a formal pedestrian facility along this desire line should be investigated as part of this scheme.

Location (S7) – Pedestrian Desire Line at Eastern Arm of Glen Drive Roundabout

Problem:

The auditors note that the existing entrance on Glen Drive will be closed and no pedestrian/ facility is provided at the desire line created at the eastern arm of Glen Drive roundabout to cater for Glen Drive residents. The auditors are concerned that pedestrians travelling from dwellings east of the roundabout and along the eastern side of Glen Lawn Dr. to / from the proposed new access into Cabinteely Park may cross Glen Drive along this much shorter route in the path of moving traffic resulting in collisions between vehicles and pedestrians or the proposed Greenway may not be conveniently accessible to some users (wheelchair/push buggy users and visually impaired).



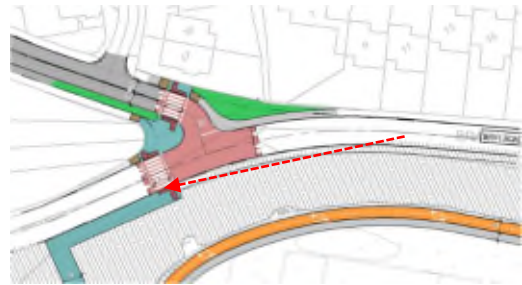
Recommendation:

It is recommended that safe and convenient access should be provided at the pedestrian desire line.

Location (S8) – Forward Visibility to Pedestrian Crossing

Problem:

The auditors are unsure if there is sufficient forward visibility provided between westbound drivers and pedestrians at the pedestrian crossing located on Bray Road immediately to the west of Bóthar Chluain Chaoin. Failure to provide sufficient forward visibility between vehicle drivers and pedestrians at the crossing could result in collisions between vehicles/pedestrian/cyclists.



Recommendation:

It is recommended that sufficient forward visibility for the desired design speed is provided between drivers and the proposed crossings.

Location (S9) – Shuttle System on Brennanstown Road.

Problem:

The drawings submitted for this audit shows proposed Shuttle System on Brennanstown Road. The auditors are unsure if there is sufficient space provided for an opposing vehicle to safely exit the shuttle system when a vehicle is waiting in the opposing lane. Failure to provide sufficient space may lead to side swipe collisions.



Recommendation:

It is recommended that sufficient space should be provided for an opposing vehicle to safely exit the shuttle system.

Location (S10) – Proposed Footpath Tie-in

Problem:

The drawings submitted for this audit shows proposed new footpath on eastern side of Brennanstown Avenue providing a connection to the proposed Greenway. However, the auditors note that the proposed footpath does not tie-in with the existing footpath. This forces pedestrians seeking to access the Greenway to either walk on the grass resulting in slip/fall incidents or walk on the carriageway with live traffic resulting in vehicle/pedestrian collision.



Recommendation:

It is recommended that the proposed footpath should be extended southwards providing tie-in with the existing footpath.

2.3 COMMENTS

Comment C1 – Potential Steep Gradient

The auditors note that the existing path between Cornelscourt Hill Road and Glen Lawn Drive has a perceived steep gradient on approach to Glen Lawn Drive. At this stage of the design process, details of gradients are likely not available. It is recommended that, at detailed design stage, the gradient of the proposed greenway facility over this short section is checked to ensure it is appropriate for all future greenway users.



Comment C2 – Yield Control at Side Road Junctions

The auditors note that Yield Control have been provided at the side road junctions on Cornelscourt Hill. The introduction of the tighter corner radii coupled with the approach to an urban area, 'Stop' road markings and the associated 'Stop' sign should be provided at these side road junctions.



3 AUDIT TEAM STATEMENT

3.1 AUDIT TEAM STATEMENT

I certify that I have examined the drawings and other information listed in Chapter 5. This Audit has been carried out with the sole purpose of identifying any features of the Design that could be removed or modified to improve the safety of the Scheme. The problems that I have identified have been noted in the report, together with suggestions for improvement which we recommend should be studied for implementation.

Audit Team Leader: Mr. Mark McKenna *BEng MSc CEng MIEI Cert Comp RSA*
DBFL Consulting Engineers (Waterford)

Signed:



Date: 17/04/2025

Audit Team Member: Mr. Sayed Ahmad Saeed *BEngTech BEng (Hons) MEng CEng MIEI*
DBFL Consulting Engineers (Dublin)

Signed:



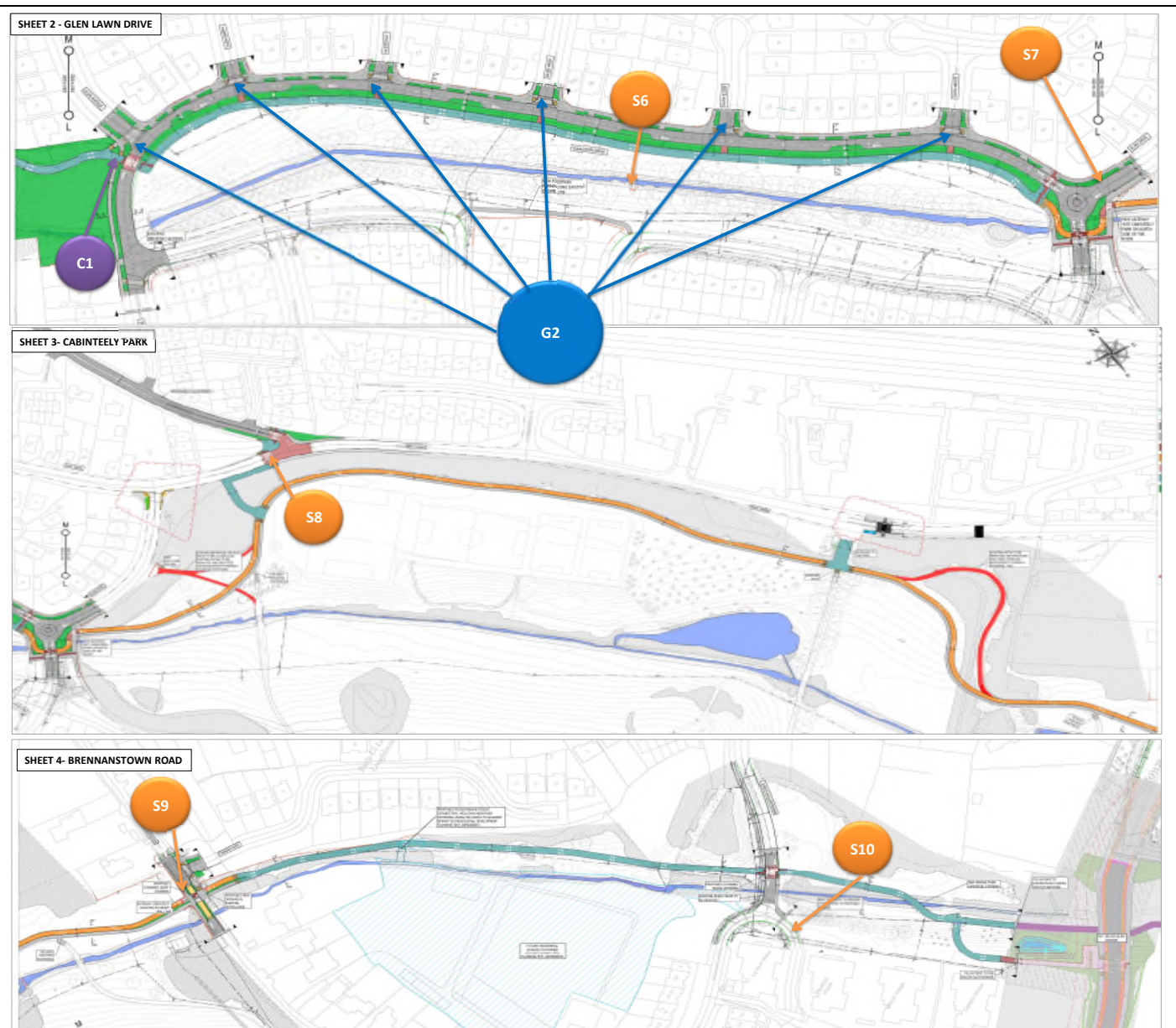
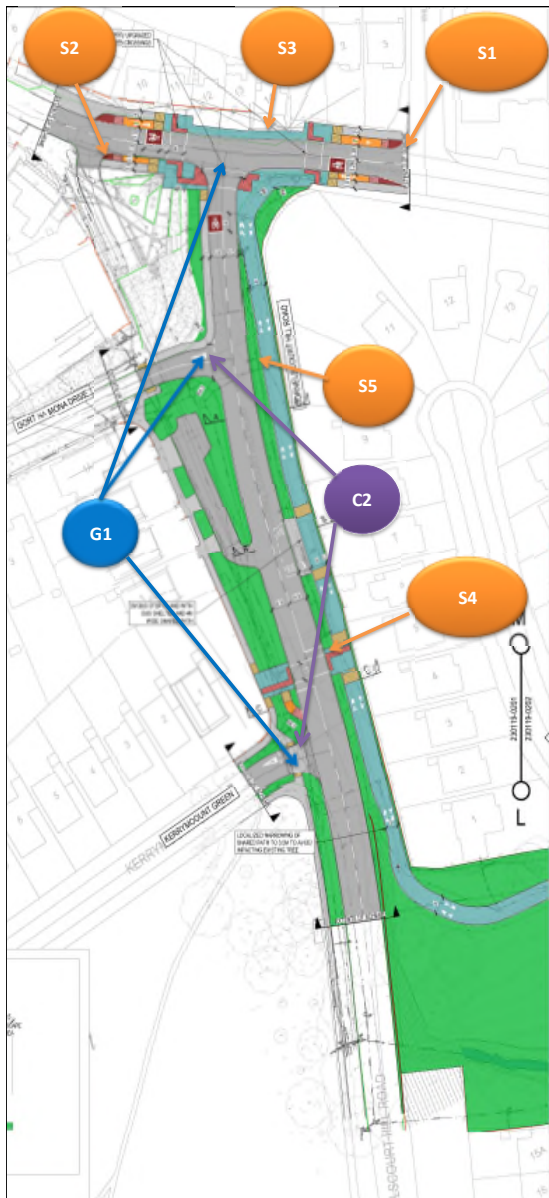
Date: 17/04/2025

4 LIST OF INFORMATION RECEIVED

Items Received		Yes/No	Details
1	Scheme Description	Yes	Information was provided in an email
2	Project Brief	No	
3	Scheme / Project Drawings	Yes	• X-0100-Z00-DTM-SK-DBFL-CE-0221 Sheet 1 - Cornelscourt Hill • X-0100-Z00-DTM-SK-DBFL-CE-0222 Sheet 2 - Glen Lawn Drive • X-0100-Z00-DTM-SK-DBFL-CE-0223 Sheet 3 - Cabinteely Park • X-0100-Z00-DTM-SK-DBFL-CE-0224 Sheet 4 - Brennanstown Road
4	Departures from Standard	No	
5	Traffic Signal Information	N/A	
6	Road Signs & Road Marking Details	No	
7	Traffic Count Information	No	
8	Speed Survey Data	No	
9	Collision Data	No	
10	Previous Road Safety Audit Reports	No	
11	Relevant Design Standards	No	
12	Public Transport Information	No	
13	Other Information	No	

Table 4-1 Information Received as basis for Road Safety Audit

Appendix A: Problem Location Figure



Project :	Cabinteely Greenway	Designed :	SAS	Prepared :	SAS
Client :	Dún Laoghaire–Rathdown County Council	Date :	Augusts 2024	Checked :	MMK
Drawing Title :	Stage 1 RSA Problem Locations	Scale :	NTS		
		File Ref :	230119-DBFL-TR-XX-RP-C0001 RSA Figure		
		Drawing No :	230119		

*Note: For general problems, examples of locations are indicated. Not all occurrences of the specific general problem reference are shown

Appendix B: Feedback Form

STAGE 1 ROAD SAFETY AUDIT FEEDBACK FORM
Scheme: Cabinteely Greenway

Audit Stage: Stage 1

Date Audit Completed: April 2025

To be Completed By Designer				To be Completed by Audit Team Leader
Problem No. in Quality 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)
G1	Yes	Yes		
G2	Yes	Yes		
S1	Yes	Yes		
S2	Yes	Yes		
S3	Yes	No	Shared path section removed from here.	yes
S4	Yes	Yes		
S5	Yes	Yes		
S6	Yes	Yes		
S7	Yes	Yes		
S8	Yes	Yes		
S9	Yes	Yes		
S10	Yes	Yes		

Signed: 
Designer: Aimee Dunne

Date: 02/04/2025

Signed: 
Audit Team Leader: Mark McKenna

Date: 17/04/2025

230119



Signed:

Employer:

Marc Campell - Dún Laoghaire-Rathdown Co.Co.

Date: 17/04/2025

Please complete and return to safety auditor.



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