BRUTON CONSULTING ENGINEERS

Title: **Stage 1 Road Safety Audit and**

DMURS Quality Audit,

For;

Proposed Residential Development, Blackglen Road, Sandyford Dublin 18.

Client: **OCSC Consulting Engineers**

Date: **May 2024**

Report reference: **2286R01**

VERSION: **FINAL (24-10-2024)**

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1.0 Introduction

This report was prepared in response to a request from Mr Wian Marias, OCSC Consulting Engineers, for a Stage 1 Road Safety Audit and a DMURS Quality Audit for a proposed residential development off Blackglen Road, Sandyford, Dublin 18.

The Audit Team comprised of;

Team Leader:	**Norman Bruton**, BE CEng FIEI, Cert Comp RSA.
	TII Auditor Approval no. NB 168446
Team Member:	**Owen O'Reilly**, B.SC. Eng Dip Struct. Eng NCEA Civil Dip Civil. Eng CEng FIEI
	TII Auditor Approval no. OO 1291756

The Audits involved the examination of drawings and other material provided and a site visit by both team members, together, on the 9th of April 2024. The weather at the time of the site visit was dry and the road surface was also dry.

The Stage 1 Road Safety Audit has been carried out in accordance with the requirements of TII Publication Number GE-STY-01024, dated December 2017.

The Quality Audit has been carried out in accordance with the guidance in the Design Manual for Urban Roads and Streets (DMURS), produced by Department of Transport Tourism and Sport in March 2013 and as updated in June 2019 including Advice Notes. The Quality Audit is composed of a number of distinct audits which include an Accessibility Audit, a Walking Audit and a Cycling Audit (i.e. aspects of a Quality Audit carried out independent of the Design Team and generally included as appendices to the overall Audit).

Many issues raised in the Road Safety Audit would also be raised in the various aspects of the Quality Audit, however to avoid repetition items that are common to more than the Road Safety Audit have been included in a table at the start of Section 3.0 of this report.

The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety. It has not been examined or verified for compliance with any other standards or criteria. The problems identified in this report are considered to require action in order to improve the safety of the scheme for road users.

If any of the recommendations within these audits are not accepted, a written response is required, stating reasons for non-acceptance. Comments made within the report under the heading of Observation are intended to be for information only. Written responses to Observations are not required.

The information supplied to the Audit Team is listed in **Appendix A.** The feedback form is contained in **Appendix B.** A plan drawing showing the problem locations is contained in **Appendix C**.

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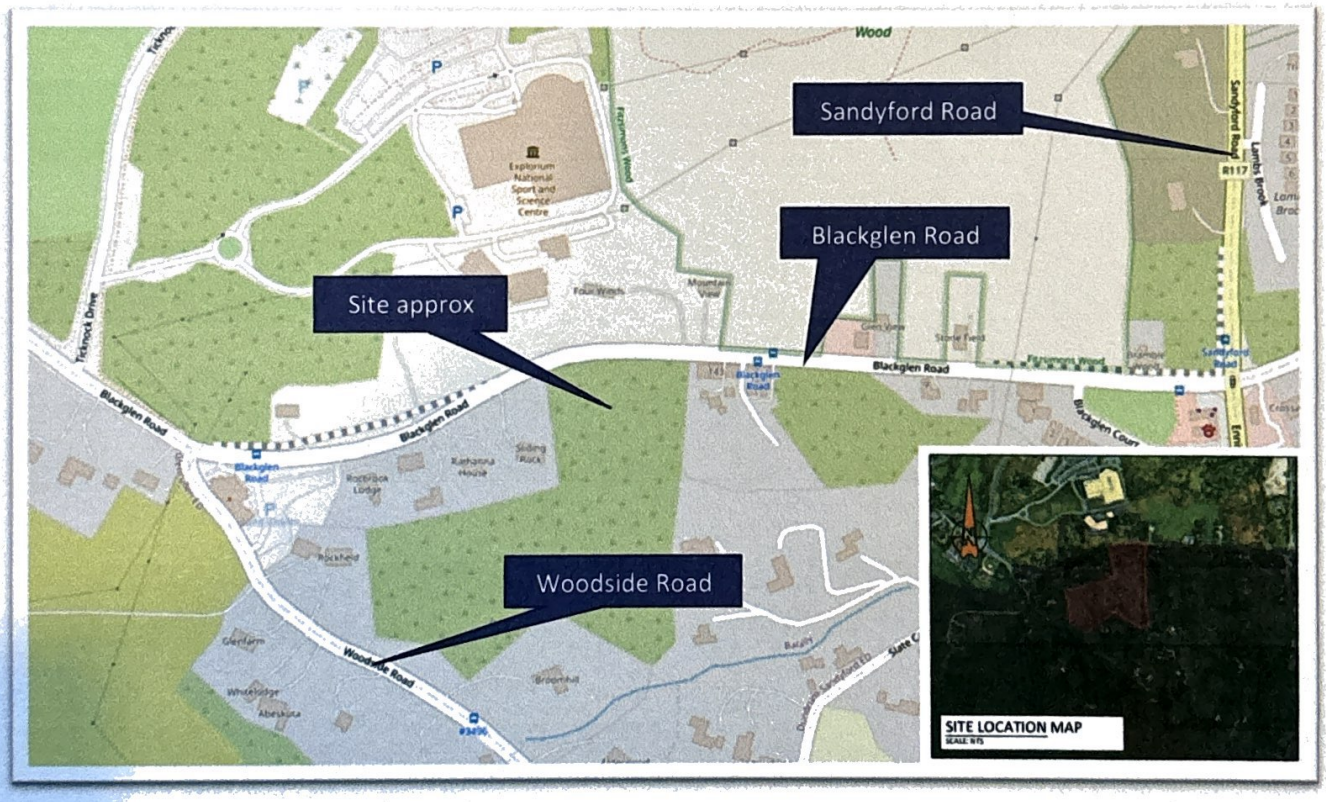
2.0 Background

It is proposed to construct a residential scheme off the realigned Blackglen Road in Dublin 18. A previous Stage 1 Road Safety Audit was carried out on a similar scheme in May 2022 by the same Audit Team.

Vehicular accesses are proposed on Blackglen Road (simple priority junction) and possibly Woodside Road.
The internal roads vary from 6m wide to 4.5m wide carriageways.

The speed limits on both public roads are 50km/hr. It is assumed that the speed limit within the development will be 30km/hr.

The site location is shown below.



Site location Plan. *(Image courtesy of openstreetmap.org)*

3.0 Issues Common to More Audits than RSA

Below is a summary table of problems raised in the Road Safety Audit that would also be raised in the Quality Audit however are not repeated for clarity and brevity.

Problem Reference	Road Safety Audit	Access Audit	Walking Audit	Cycling Audit
4.1	✓		✓	
4.2	✓		✓	
4.3	✓	✓	✓	✓
4.4	✓			

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4.0 Items Raised in This Stage 1 Road Safety Audit

4.1 Problem

LOCATION

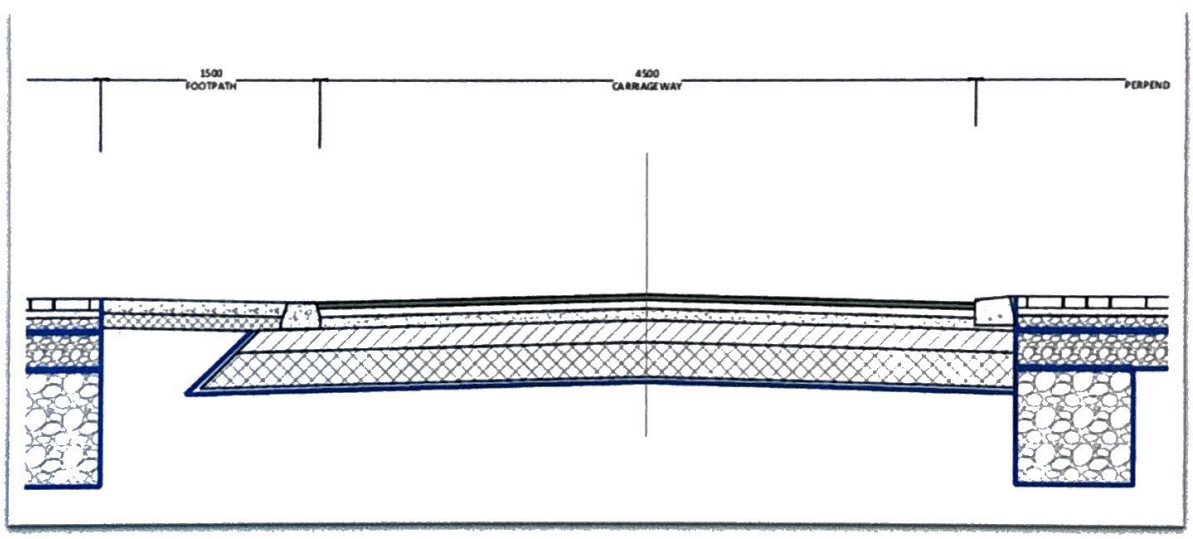
Drawing Z040-OCSC-XX-XX-DR-C-0700 S4 P01, 4.5m carriageway.

PROBLEM

The roads that have a cross section of 4.5m carriageway and 1.5m footpath are narrow for two vehicles to meet and for cars and vans that are parked perpendicular to turn on.

The swept path analysis shows the footpath being used by turning vehicles. The roads are not shown to be shared streets.

The mounting of the footpath by reversing vehicles leads to risks to pedestrians and the narrow carriageway could lead to side-swipe collisions.



RECOMMENDATION

It is recommended that either the carriageways be widened or that shared streets be provided with a pedestrian refuge (of suitable width) rather than a footpath.

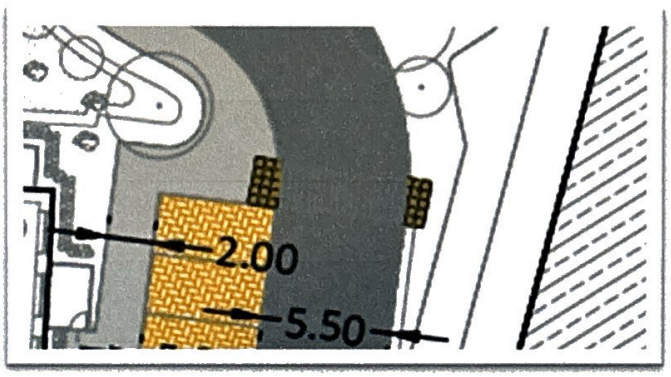
4.2 Problem

LOCATION

Drawing Z040-OCSC-XX-XX-DR-C-0110 S4 P01, Internal uncontrolled pedestrian crossing.

PROBLEM

There is a proposed uncontrolled pedestrian crossing on the main access road from Blackglen Road which is located beside a perpendicular parking space. If a vehicle is parked in this space then the inter-visibility between a driver and a crossing pedestrian would be limited leading to possible collisions.



RECOMMENDATION

It is recommended that suitable inter-visibility be provided.

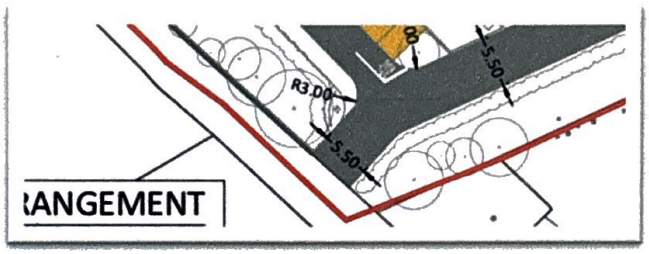
4.3 Problem

LOCATION

Drawing Z040-OCSC-XX-XX-DR-C-0110 S4 P01, Access onto Woodside Road.

PROBLEM

It is unclear what type of access is to be provided onto Woodside Road. A junction for vehicles with corner radii and visibility splays etc. have not been shown. If vehicles use this access it could lead to side-impact or rear-end collisions.



RECOMMENDATION

It is recommended that the Design Team clarify the use of this access and any restrictions on vehicles that may be provided.

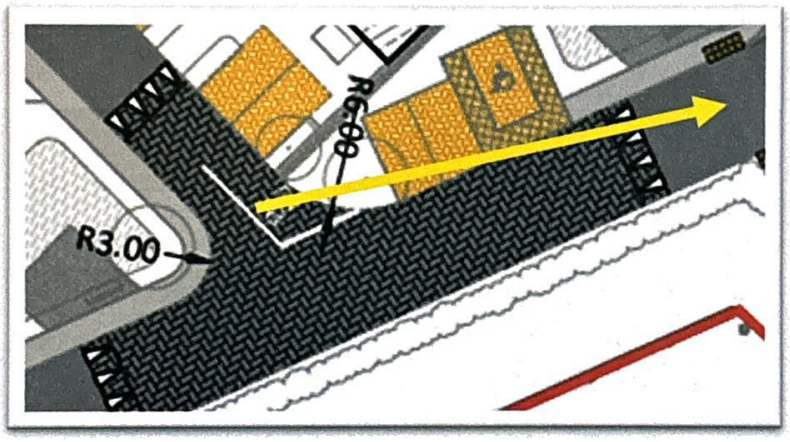
4.4 Problem

LOCATION

Drawing Z040-OCSC-XX-XX-DR-C-0110 S4 P01, Visibility at side road junctions.

PROBLEM

Visibility at the side road junctions may be obscured by parked vehicles which could lead to side-impact or rear-end collisions.



RECOMMENDATION

It is recommended that the visibility splays be kept clear or almost clear of parked vehicles.

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5.0 Items Raised in This Stage 1 Quality Audit – Accessibility Audit.

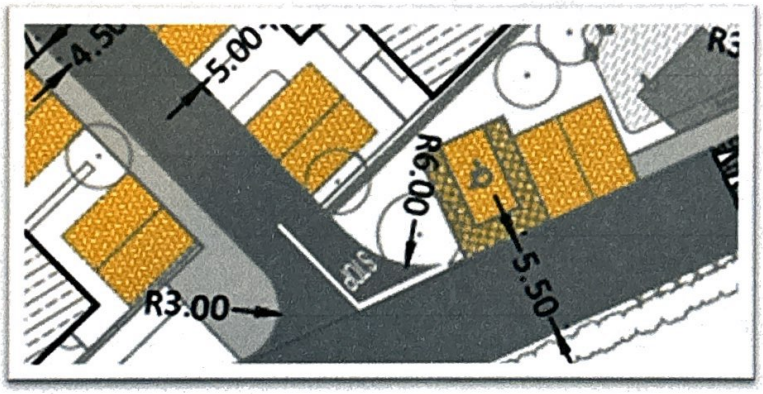
5.1 Problem

LOCATION

Drawing Z040-OCSC-XX-XX-DR-C-0110 S4 P01, Access to/from disabled parking spaces.

PROBLEM

There is a proposed disabled parking space close to the junction of Road 6 and Road 1. There is no apparent footpath for users to enter to travel to their destination without having to enter the carriageway.



RECOMMENDATION

It is recommended that a footpath be provided for users of this and other disabled parking spaces.

6.0 Items Raised in This Stage 1 Quality Audit – Walking Audit.

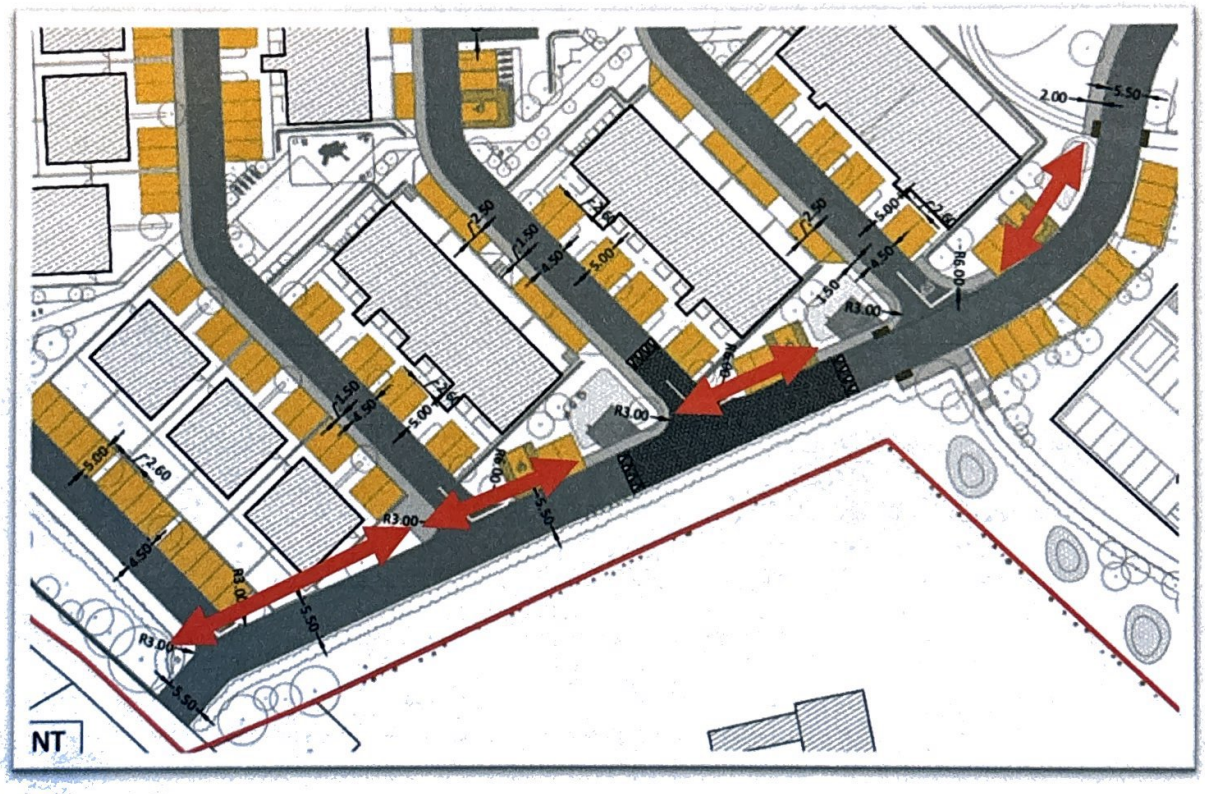
6.1 Problem

LOCATION

Drawing Z040-OCSC-XX-XX-DR-C-0110 S4 P01, Road 1 Footpath continuity.

PROBLEM

The footpath along Road 1 is not continuous at areas of perpendicular parking. This could lead to pedestrians travelling on the carriageway.



RECOMMENDATION

It is recommended that a continuous footpath, of suitable width, be provided along the entire road.

7.0 Items Raised in This Stage 1 Quality Audit – Cycling Audit

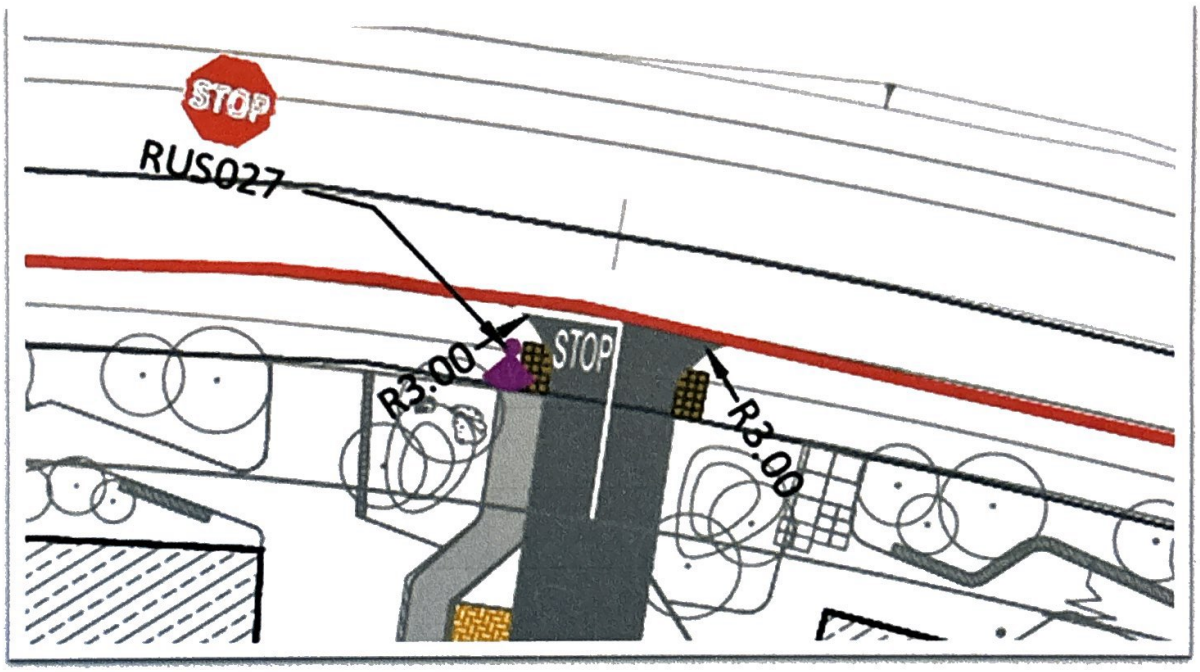
7.1 Problem

LOCATION

Drawing Z040-OCSC-XX-XX-DR-C-0110 S4 P01, Access onto Blackglen Road.

PROBLEM

There are no cycle facilities to join with those on Blackglen Road. A lack of crossing facilities for cyclists can result in cyclists having to share space with pedestrians or general traffic resulting in a higher likelihood of collisions.



RECOMMENDATION

It is recommended that provision be made for turning cyclists on Blackglen Road.

8.0 Audit Statements.

Road Safety Audit Statement

We certify that we have examined the information provided and the site. The examination has been carried out with the sole purpose of identifying any features of the design which 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 would recommend should be studied for implementation. The audit has been carried out by the persons named below who have not been involved in any design work on this scheme as a member of the Design Team.

Quality Audit Statement

We certify that we have carried out this audit in accordance with DMURS for those areas independent of the Design team.

Norman Bruton **Signed:** Norman Bruton

(Audit Team Leader) **Dated:** 24-10-2024

Owen O'Reilly **Signed:** Owen O'Reilly

(Audit Team Member) **Dated:** 24-10-2024

Appendix A

List of Material Supplied for this Road Safety Audit and Quality Audit;

- Drawing Z040-OCSC-XX-XX-DR-C-0140-S4-P01
- Drawing Z040-OCSC-XX-XX-DR-C-0141-S4-P01
- Drawing Z040-OCSC-XX-XX-DR-C-0142-S4-P01
- Drawing Z040-OCSC-XX-XX-DR-C-0143-S4-P01
- Drawing Z040-OCSC-XX-XX-DR-C-0700-S4-P01
- Drawing Z040-OCSC-XX-XX-DR-C-0110-S4-P01
- Drawing Z040-OCSC-XX-XX-DR-C-0115-S4-P01
- Drawing Z040-OCSC-XX-XX-DR-C-0120-S4-P01
- Drawing Z040-OCSC-XX-XX-DR-C-0130-S4-P01
- Drawing Z040-OCSC-XX-XX-DR-C-0131-S4-P01
- Drawing Z040-OCSC-XX-XX-DR-C-0132-S4-P01
- Drawing Z040-OCSC-XX-XX-DR-C-0133-S4-P01

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Appendix B

Feedback Forms (Road Safety Audit & Quality Audit)

SAFETY AUDIT FORM – FEEDBACK ON AUDIT REPORT

Scheme: Blackglen Road, Residential Development

Stage: 1 Road Safety Audit
Date Audit (Site Visit) Completed: 9-4-2024

Paragraph No. in Safety Audit Report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measures (describe)	Alternative measures accepted by Auditors (Yes/No)
4.1	No	No	These roads were designed as shared spaces but have not been labelled as such in the roads drawings. The drawings have been updated to indicate their status as shared spaces, with the reference to a 'footpath' changed to 'pedestrian refuge'.	Yes
4.2	Yes	Yes	N/A	
4.3	No	No	This access is proposed to be used as 'emergency access only' for vehicles. This access will be closed off with retractable bollards spaced less than 2m apart to prevent cars from entering. The bollards will be managed by the concierge, with the ability to lower the bollards in case of emergency. A note indicating the function of the access has been added to the roads drawings for clarity.	Yes
4.4	Yes	Yes		

Signed.....
Design Team Leader

Date...01/11/2024.....

Signed.....Norman Bruton
Audit Team Leader

Date...24-10-2024...

Signed.....
Employer FOR AND ON BEHALF OF ZOLBURY LTD

Date...29.10.24

QUALITY AUDIT FORM – FEEDBACK ON QUALITY AUDIT REPORT

Scheme: Blackglen Road, Residential Development
Quality Audit- Stage 1
Date Audit (site visit) 9/4/2024

Paragraph No. in Quality Audit Report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measures (describe)	Alternative measures accepted by Auditors (Yes/No)
5.1	Yes	Yes		
6.1	Yes	Yes		
7.1	No	No	Cyclist will share the road with motorists within the development. The access design has been updated to tie in with the recently constructed infrastructure as part of the Blackglen Road Improvement Scheme. A toucan crossing is also being proposed just east of the access junction to allow pedestrians and cyclists to cross Blackglen Road safely.	Yes

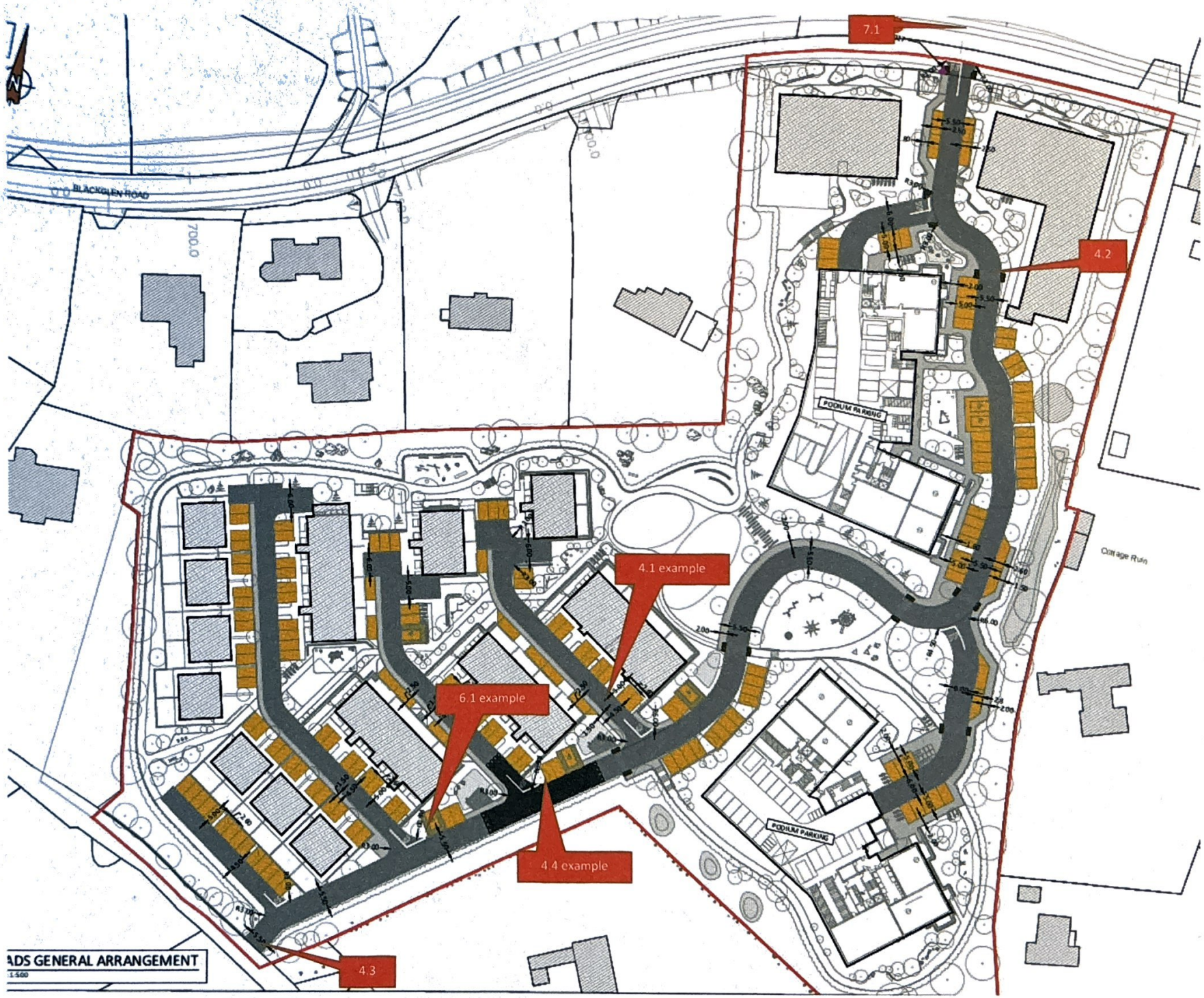
Signed..... **Date** 01/11/2024
Design Team Leader

Signed.....Norman Bruton..... **Date:** 24-10-2024
Audit Team Leader

Signed..... **Date**.....29.10.24.
Employer FOR AND ON BEHALF OF ZOLBUKY LTD

Appendix C

Problem Location Plan.


7.1
4.2
4.1 example
6.1 example
4.4 example
4.3
BLACKGLEN ROAD
700.0
PODIUM PARKING
PODIUM PARKING
Cottage Ruin
ADS GENERAL ARRANGEMENT
1:500