



STEWART PATON ASSOCIATES

Consulting Engineers and Forensic Investigation Specialists

**ROAD LAYOUT
HOUSING DEVELOPMENT
FROGSTON ROAD (SPINE ROAD 3)
EDINBURGH**

STAGE 3 ROAD SAFETY AUDIT
(SPA Ref No: 4282)

Roads Authority: The City of Edinburgh Council

Client: Barratt Homes

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DOCUMENT CONTROL

General

Project	Road Layout, Frogston Road, Spine Road 3
Client	Barratt Homes
Document Type	Stage 3 Road Safety Audit
SPA Ref No	4282

Report Revisions

	Originator	Date	Reviewer	Date	Status
Draft –Rev 0		17/04/23	N/A	N/A	For Review
Draft –Rev 1	N/A	N/A		18/04/23	Convert to Final
Final – Rev 0		18/04/23	N/A	N/A	Issue to Client

1.0 INTRODUCTION

1.1 The report has been prepared for the City of Edinburgh Council as a Stage 3 Road Safety Audit of the road layout of a section of the housing development at Frogston Road / Burdiehouse Road, Edinburgh. The audit was on behalf of Barratt Homes. The Road Safety Audit was carried out during April 2023.

1.2 The Road Safety Audit Team membership was as follows:

[REDACTED] [REDACTED]
[REDACTED] of Stewart Paton Associates Ltd., Consulting Engineers and Forensic Investigation Specialists
(Certificate of Competency in Road Safety Audit gained in August 2017)

[REDACTED] [REDACTED]
[REDACTED] of Stewart Paton Associates Ltd., Consulting Engineers and Forensic Investigation Specialists
(Certificate of Competency in Road Safety Audit gained in February 2013)

1.3 The Road Safety Audit took place at the Edinburgh office of Stewart Paton Associates on 17 April 2023. The Road Safety Audit was undertaken in accordance with the Road Safety Audit Brief / Instruction provided by Barratt Homes. The Road Safety Audit comprised an examination of the documents provided, and these are listed in Annex 1. The Audit Team visited the site of the housing development on 14 April 2023 & 6 April 2023 respectively for a daytime & night-time inspection. [REDACTED] from Barratt Homes was present at the daytime inspection. During the daytime visit the weather was fair, the road surface was dry and traffic volumes were light..

1.4. The terms of reference of the Road Safety Audit are as described in GG 119. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

1.5 All comments and recommendations are referenced to the detailed design drawings and the locations have been indicated on plan included in the Annex 2. Where appropriate, photographs have been included within the body of the report to illustrate issues identified.

1.6 This audit is focussed on the road layout & footway connections to the housing development known as Spine Road 3

1.8 The development includes the roads named, Greenwell Wynd from Bowbridge Crescent westwards to Dunnikier Way.

1.9 It was noted that there were still final works / snagging to be completed at the following areas:-

Bowbridge Crescent (two junctions) – poor block work at incomplete surfacing.



1.10 In line with GG 119 it should be noted that once the Audit Report has been finalised this ends the involvement of the Audit Team in this stage of the project, unless there are substantial changes that result in the Roads Authority/Project Sponsor requesting another Road Safety Audit of the proposals. On receipt of the final report the Design Team is required to provide the Roads Authority/Project Sponsor with a Road Safety Audit Response Report. This report along with any related Exception Reports should be passed onto the Audit Team for information.

Note 1:

The Audit Team notes in relation to the DMRB standard, GG 119: Road Safety Audits, that the following be included in the Audit Team Statement of Road Safety Audit Reports: -

We certify that this Road Safety Audit has been carried out in accordance with GG 119

It is this practice's interpretation that once an Audit Team has been approved this statement within a report is solely related to the processes as detailed in GG 119 associated with reviewing the scheme in terms of the documentation provided in the Audit Brief, undertaking site inspections and producing draft and final Road Safety Audit Reports.

The Audit Team is not responsible for the actions of other stakeholders in relation to other management and approval processes contained within the overall audit process.

The Audit Team does however reserve the right, within the introduction of its reports, to highlight and/or explain any areas where the overall audit process has not followed that laid down in the standard.

Note 2:

Any reference to a Chapter is a reference to a Chapter of the Traffic Signs Manual, reference to the Regulations is a reference to the Traffic Signs Regulations and General Directions 2016 and any reference to a Diagram (Diag) is a reference to a sign Diagram number in those Regulations. References to standards are those found in the Design Manual for Roads and Bridges.

2.0 ACCIDENT RECORD

- 2.1 In the absence of any specific accident records being provided the Road Safety Audit Team have examined the website www.crashmap.co.uk for injury accidents recorded at the site.
- 2.2 A map based plan of the accidents have been provided in Annex 3
- 2.3 It is noted that for the five-year period from 2017 -2021 there were no accidents directly related to the area of the new development.

3.0 ITEMS ARISING FROM THE STAGE 2 AUDIT

- 3.1 The Audit Team note that a Stage 2 Road Safety Audit was undertaken for the whole site in November 2014
- 3.2 Item B.1.4.1 related to the potential for landscaping to obscure visibility. This item is not an issue within the area inspected as part of this audit.
- 3.3 Item B.1.7.1 related to swept paths for larger vehicles. This item is not an issue within the area inspected as part of this audit.
- 3.4 Item B.1.7.2 related to the need for accessible dropped kerbs at locations such as crossing points but also as driveways that act as the main pedestrian route to housing. On site it was noted that multiple kerbs were higher than 25mm at driveways. Dropped kerbs crossing points were lower but not all appeared to be at the 6mm accessible level.
- 3.5 Item B.3.3.1 to B.3.3.3 related to the main junctions to the site and as such are not an issue within the area inspected as part of this audit.
- 3.6 Item B.3.3.4 related to the potential need for give way markings at the side road junctions with the spine road. At present the Audit Team do not believe these are required.
- 3.7 Item B.5.1.1 related to the positioning of lighting columns in shared space areas. This matter appears to have been dealt with in an appropriate manner for the areas inspected.

4.0 ITEMS ARISING FROM THIS STAGE 3 AUDIT

4.1 GENERAL

4.1.1 PROBLEM

Location: Greenwell Wynd- Junctions with Fisher Place, Hapland Row and at No 163
Drawing(s): E9876~0925
Summary: Low ironwork can result in future degradation of the carriageway. This in turn can result in users making unexpected manoeuvres that can lead to various incident types.

It was noted that at the above locations ironwork siting in the carriageway was 'low'.

This has the potential to result in a degrading carriageway surface. This can be seen at No 163, below



RECOMMENDATION

It is recommended that a review of low ironwork be undertaken and repairs made to provide a level surface.

4.2 LOCAL ALIGNMENT

4.2.1

The Audit Team have no comments to raise under this section at this time.

4.3 JUNCTIONS

4.3.1

The Audit Team have no comments to raise under this section at this time.

4.4 NON MOTORISED USERS (NMU)

4.4.1 PROBLEM

Location: Greenwell Wynd- Junctions with Fisher Place and Dunniker Way

Drawing(s): E9876~0925

Summary: The blocking of pedestrian desire lines can result in pedestrians walking on the carriageway with an increased probability of conflicting with vehicular traffic.

At the two junctions locations a contrasting colour surface has been provided to highlight the junction. However, due to the footway layout, part of the junctions are now being used for on-

street parking. This inconsiderate parking then blocks the footway / desire line for pedestrians, especially those with mobility difficulties.



Dunniker Way



Fisher Place

In addition to blocking the pedestrian desire line, the kerb highlighted as Fisher Place has not been dropped.

RECOMMENDATION

It is recommended that steps are taken to ensure the pedestrian route is unobstructed. This may require the footway and kerbing to be extended through the junction.

At Fisher Place a dropped kerb is required.

4.4.2 PROBLEM

Location: Greenwell Wynd- Junction with Bowbridge Crescent (East)

Drawing(s): E9876~0925

Summary: The blocking of pedestrian desire lines can result in pedestrians walking on the carriageway with an increased probability of conflicting with vehicular traffic.

Similar to the comment above inconsiderate parking appears to be taking place at Bowbridge Crescent. In addition to this there is a substandard footway width and a short dropped kerb provided.



RECOMMENDATION

It is recommended that steps are taken to ensure the pedestrian route is unobstructed. This may require the footway and kerbing to be extended through the junction. The sub-standard footway layout as highlighted should also be amended to a more 'standard layout, similar to that opposite.

4.5 ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING

4.5.1

The Audit Team have no comments to raise under this section at this time.

5.0 AUDIT TEAM STATEMENT

We certify that this audit has been carried out generally in accordance with GG 119

AUDIT TEAM LEADER

Name: [REDACTED]
[REDACTED]
Position: [REDACTED]

Signed: [REDACTED]

Dated: 18 April 2023

Organisation: Stewart Paton Associates Ltd
Consulting Civil Engineers

Address: 69 Barnton Park Avenue
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EH4 6HD

AUDIT TEAM MEMBER

Name: [REDACTED]
[REDACTED]
Position: [REDACTED]

Signed: [REDACTED]

Dated: 18 April 2023

Organisation: Stewart Paton Associates Ltd
Consulting Civil Engineers

Address: 69 Barnton Park Avenue
Edinburgh
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Annex 1 LIST OF PLANS AND DOCUMENTS

E9876~0925 [Phasing Plan RCC]

Annex 2 PROBLEM LOCATION PLAN

- Specific problem areas have been identified and referenced by the comment number in the text
- General issues covering multiple areas have not been highlighted on this plan so as to avoid clutter and potential misinterpretation.

(Spine Road 3 in yellow below)



Annex 3 ACCIDENT RECORD

