



Road Safety Audit Stage 2

Proposed Site Access

Eldon Way

Wick

Littlehampton

Date: 17th September 2019

Report produced for: Caneparo Associates

Report produced by: M & S Traffic Ltd

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Report Title Road Safety Audit Stage 2

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1 INTRODUCTION

- 1.1 This report describes a Stage 2 Road Safety Audit carried out on a proposed site access to an industrial estate of 1,225sqm Gross Internal Area for flexible use within Land Use Classes B1c/B2/B8 comprising 4 employment units with associated areas for car parking, service yards and landscaping off Eldon Way, Wick, Littlehampton.

The Audit was requested by the design organisation, Caneparo Associates, 21 Little Portland Street, London, W1W 8BT on behalf of West Sussex County Council.

- 1.2 The Audit Team membership was as follows:

Bryan Shawyer BEng (Hons), MSc, MCIHT, MSoRSA, HA RSA Cert Comp, Team Leader

David Bond, BA (Hons), MCIT, MILT, Team Member

- 1.3 The audit was undertaken following the principles of GG 119, The Design Manual for Roads and Bridges.

The documents available at the time the report was compiled are detailed in Appendix A.

- 1.4 The Audit took place at the Gillingham offices of M&S Traffic in September 2019 and comprised an examination of the documents provided as listed in Appendix A, plus a joint visit to the site of the proposed scheme on the morning of the 12th September 2019. Weather conditions at the time were fine and the road surface was dry. Traffic flows were low and free flow speeds were moderate. No pedestrian and cycle movements were observed.

- 1.5 The report has been compiled, only with regards to the safety implications for road users of the layout presented in the supplied drawings. It has not been examined or verified for compliance with any other standards or criteria. This safety audit does not perform any "Technical Check" function on these proposals. It is assumed that the Project Sponsor is satisfied that such a "Technical Check" has been successfully completed prior to requesting this safety audit.

- 1.6 The auditors have not been informed of any Departures from Standards in this scheme construction.

- 1.7 All comments and recommendations are referenced to the detailed drawings and the locations have been detailed relating to the plans supplied with the audit brief, Appendix B.

2 SAFETY ISSUES RAISED AT PREVIOUS AUDITS

- 2.1 The site was subject to a Stage 1 Safety Audit, undertaken in March 2018 by M&S Traffic.
- 2.2 In the Stage 1 Audit items 3.1.1, 3.1.2 and 3.3.1 in part remain a concern. These items are referred to again in this report in paragraphs 3.1.1, 3.1.2 and 3.3.1.

3 ITEMS RAISED AT THE STAGE 2 AUDIT

3.1 General

3.1.1 PROBLEM

Location: Proposed access with Eldon Way.

Summary: Insufficient construction details could compromise road safety.

Construction details were provided for assessment; however, these did not include the Polished Stone Value (PSV) of the carriageway surface. A low PSV could lead to differential braking or overshoot collisions, particularly under severe braking conditions, though it is recognised that vehicle speeds will likely be low.

RECOMMENDATION

It is recommended that PSV details should be checked to ensure they provide adequate grip resistance for the speed of road.

3.1.2 PROBLEM

Location: Proposed ramp to raised table.

Summary: Ponding could lead to loss of control collisions.

A raised table is proposed; however, the ramp may be a barrier to surface water drainage and could lead to the creation of a low spot. A low spot could lead to ponding and possible loss of control of collisions, particularly in wet or icy conditions, though it is recognised that vehicle speeds are likely to be very low.

RECOMMENDATION

That suitable drainage should be provided.

3.1.3 PROBLEM

Location: Proposed ramp to raised table.

Summary: Insufficient construction detail on raised tables could lead to loss of control collisions.

No details of the ramp profiles or height of humps have been provided for assessment. There is concern that if the height is outside normal ranges, this could lead to loss of control collisions, though it is recognised that vehicle speeds are likely to be very low.

RECOMMENDATION

That ramp profiles should be within normal accepted ranges.

3.2 Local Alignment

3.2.1 No comment.

3.3 Junctions

3.3.1 **PROBLEM**

Location: Proposed access with Eldon Way.

Summary: Insufficient carriageway space could lead to head on collisions or side swipe collisions.

It is noted that 'At any time' waiting restrictions have been provided on the western side of the carriageway, each side of the access, and within the bell mouth of the access. However, the swept paths provided show that the larger vehicles enter the opposing running lane when egressing the access, which could lead to head on collisions or side swipe collisions.

Further, the junction follows a sweeping bend, where the junction for southbound traffic may not be sufficiently visible, see figure 1 below, where forward visibility may be impeded by a hedgerow and tree trunk. A lack of forward visibility and warning of the junction could lead to head on collisions or rear end shunts.



Figure 1: Tree trunk and hedgerow restrict forward visibility on bend.

RECOMMENDATION

It is recommended that the junction radii should be eased to provide sufficient carriageway space for all expected movements. It is also recommended that the hedgerow should be cut back and that a 'Side road ahead' sign to Diagram 506.1 should be installed on the approach to the junction.

3.4 Non-Motorised User Provision

3.4.1 PROBLEM

Location: Proposed access with Eldon Way.

Summary: Lack of facilities could compromise pedestrian safety

The footway on the south side of the access is shown as ending at the access. There is a concern that this will result in pedestrians entering and exiting the site having to walk within the access thereby risking conflict with vehicles, though it is recognised that vehicle speeds will likely be low.

RECOMMENDATION

It is recommended that a safer arrangement for pedestrians entering and leaving the site should be provided.

3.5 Road Signs, Carriageway markings and Lighting

3.5.1 PROBLEM

Location: Proposed access with Eldon Way.

Summary: Insufficient warning of raised table may lead to loss of control collisions or rear end shunts.

No warning signs have been proposed in advance of the raised table at the access. Insufficient warning of the raised table could lead to possible loss of control collisions or sudden braking and rear end shunts and be a particular problem for powered two-wheel riders.

RECOMMENDATION

It is recommended that 'Road hump' signs, to diagram 557.1 should be installed on the approaches to the raised table. It is also recommended that triangular warning markings to diagram 1062 should be installed on the ramps of the raised table.

4 ISSUES IDENTIFIED DURING THE STAGE 2 AUDIT THAT ARE OUTSIDE THE TERMS OF REFERENCE

4.1 Any issues that the Audit Team wish to bring to the attention of the Client Officer which are not covered by the road safety implications of this audit have been included in the following section. These issues could include maintenance items, operational issues or poor existing provision. It should be understood however, that in raising these issues, the Audit Team do not warrant that a full review of the existing highway environment has been undertaken beyond the scope of the audit.

4.2 There are no additional issues to raise in this section.

5 AUDITOR TEAM STATEMENT

5.1 We certify that this audit has been carried out following the principles of GG 119.

Audit Team Leader

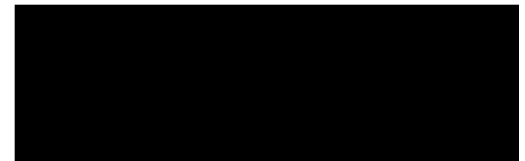
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Date: 17/09/2019

APPENDIX A

List of drawings and documentation submitted for auditing:

Drawing Number	Title
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See Drawing Register & Issue Sheet

TR002, 1 of 9	Swept Path Analysis using a 12m Rigid Lorry, Alternative Layout
TR002, 2 of 9	Swept Path Analysis using a 12m Rigid Lorry, Alternative Layout
TR002, 3 of 9	Swept Path Analysis using a 12m Rigid Lorry, Alternative Layout
TR002, 4 of 9	Swept Path Analysis using a 12m Rigid Lorry, Alternative Layout
TR002, 5 of 9	Swept Path Analysis using a 16.5m FTA Design Articulated Vehicle, Alternative Layout
TR002, 6 of 9	Swept Path Analysis using a 16.5m FTA Design Articulated Vehicle, Alternative Layout
TR002, 7 of 9	Swept Path Analysis using a 16.5m FTA Design Articulated Vehicle, Alternative Layout
TR002, 8 of 9	Swept Path Analysis using a 16.5m FTA Design Articulated Vehicle, Alternative Layout
TR002, 9 of 9	Swept Path Analysis using a 16.5m FTA Design Articulated Vehicle, Alternative Layout

Supporting documentation:

- Stage 1 Road Safety Audit, M&S Traffic, March 2018.

APPENDIX B

Plan attached showing the locations of the problems identified as part of this audit (location numbers refer to paragraph numbers in the report).