

Castle Hill Hotel Heritage Limited

Castle Hill Huddersfield,
HD4 6TA

Combined Stage 1 -2 Road Safety
Audit



Control Sheet

CLIENT: Castle Hill Hotel Heritage Limited
PROJECT TITLE: Castle Hill Huddersfield,
 HD4 6TA
REPORT TITLE: Combined Stage 1 -2 Road Safety Audit
PROJECT REFERENCE: 156199
DOCUMENT NUMBER: 002
ISSUE NUMBER: 01
DATE: August 2024

Issue & Approval Schedule	Issue 01 Final		Name		Signature		Date	
	Prepared by		David Colley		A signed copy is available on request		30/08/2024	
	Checked by		Ashley Armitage				30/08/2024	
	Approved by		David Colley				30/08/2024	
Issue Record	Issue	Date	Status	Description	Name			
	02				Prepared			
					Checked			
					Approved			
	03				Prepared			
					Checked			
					Approved			

Sanderson Associates Consulting Engineers is a trading name of Fairhurst Group LLP, a limited liability partnership registered in Scotland with the registered number SO307306 and registered office at 43 George Street, Edinburgh EH2 2HT.

This document has been prepared in accordance with the Fairhurst Quality and Environmental Management System and in accordance with the instructions of the client, Castle Hill Hotel Heritage Limited, for the client's sole and specific use. Any other persons who use any information contained herein do so at their own risk. Any information provided by third parties and referred to herein has not been checked or verified by Fairhurst unless otherwise expressly stated within this report.

Unless otherwise agreed in writing, all intellectual property rights in, or arising out of, or in connection with this report, are owned by Fairhurst. The client named above has a licence to copy and use this report only for the purposes for which it was provided. The licence to use and copy this report is subject to other terms and conditions agreed between Fairhurst and the client.

Acknowledgements

Reference has been made to Crashmap to check the accident history on the local highway network;

Contents

1. Introduction.....	5
2. Items Raised for this Combined Stage 1 - 2 Road Safety Audit.....	7
3. Audit Team Statement	9

List of Appendices

Appendix A

Marked Up Plan for the combined Stage 1 - 2 RSA

Project Summary

Report title:	Combined Stage 1-2 Road Safety Audit
Date:	30 August 2024
Document reference and revision:	156199-002-01
Prepared by:	Sanderson Associates
On behalf of:	Castle Hill Hotel Heritage Limited
	Kirklees Council (Overseeing Organisation)

1. Introduction

- 1.1 Sanderson Associates Consulting Engineers has been appointed on behalf of client Castle Hill Hotel Heritage Limited to carry out a combined Stage 1 - 2 Road Safety Audit (RSA) of S278 highway works comprising of 3 areas of carriageway widening to help two cars to pass on Castle Hill Side. The approximate postcode is HD4 6TA.
- 1.2 This combined Stage 1 - 2 Road Safety Audit was instructed by email dated 23 August 2024 from the client Castle Hill Hotel Heritage Limited via Sanderson Associates. A combined Stage 1 - 2 Road Safety Audit Brief (Ref 156199-100-01 dated 27th of August 2024) has been prepared by Sanderson Associates Consulting Engineers and provided to the Audit Team together with drawings for Audit purposes. The Audit Team have not been advised that there is a previous road safety audit for the proposals. The Highway Authority is Kirklees Council.
- 1.3 The Audit Team members are as follows:
- Audit Team Leader – David Colley MCIHT, Associate Director at Sanderson Associates
 - Audit Team Member – Ashley Armitage MIHE, Assistant Engineer at Sanderson Associates
 - Observer – Simon Burkinshaw FIHE, Principal Engineer at Sanderson Associates
- 1.4 The proposed S278 highway works are shown on drawing 156199-100-001 and relate to the provision of 3 areas of carriageway widening, together with new carriageway construction at each of the proposed passing place locations to tie in to the existing carriageway construction; cutting back existing foliage (3m width) on the northeast side of castle Hill side as depicted on the plans and new road markings and signage on the length of the carriageway works. There is no existing street lighting on Castle Hill Side and none is proposed.
- 1.5 The following S278 drawings and information has been used for Audit purposes.
- Drawings by Sanderson Associates.
- 156199-100-001 - General Arrangement and Site Clearance
 - 156199-100-002 - Contours and Sections (Sheet 1 of 3)
 - 156199-100-003 - Contours and Sections (Sheet 2 of 3)
 - 156199-100-004 - Contours and Sections (Sheet 3 of 3)
 - 156199-100-005 - Dedication Plan
 - 156199-700-001 - Pavement and Kerbing
- 1.6 Reference to the Crashmap.co.uk website indicates that there have been no recorded accidents in the immediate vicinity of the three passing bays in the 5-year period 2018 to 2022. The nearest incident is located at the junction of Castle Hill Side and Ashes Lane.
- 1.7 The Audit took place on site on Wednesday morning 28th August 2024. During the site visit the weather was warm, windy with broken cloud. The road surface was damp from overnight showers and vehicle, pedestrian and cycle flows appeared normal. No incidents were observed on the street.

- 1.8 The terms of reference of the Road Safety Audit are as described in GG119. The team has examined the works and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the works to any other criteria.
- 1.9 All of the problems described in Section 2 of this report are considered by the Audit Team to require action in order to improve the safety of the scheme. However, any recommendation included within this report should not be regarded as being a prescriptive design solution to the problem raised. They are intended only to indicate a proportionate means of eliminating or mitigating the identified problem. It is noted that there may be alternative methods of addressing a problem that would be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.
- 1.10 A marked up plan is included in **Appendix A**, which identifies the approximate location of problems that have been raised. General problems or those with multiple locations have not all been shown.
- 1.11 Following the completion of the Road Safety Audit, the design team should prepare a '*Road Safety Audit Response Report*' in collaboration with the Overseeing Organisation. The response report should incorporate the following:
 - Decision Log spreadsheet, where each Problem and Recommendation in the Road Safety Audit report is reiterated;
 - In the Decision Log, a response should be provided by the Design Team and then by the Overseeing Organisation for each problem raised. This should then be followed by an agreed action.

Further information to assist the preparation of the Road Safety Audit Response Report is provided in **GG119 Sections 4.11 to 4.19 and Appendix F** (that includes a Road Safety Audit Response Report template). In accordance with GG119, the response report should be produced and finalised within one month of the issue of the Road Safety Audit report. A copy of the response report should be issued to the Road Safety Audit Team for information.

2. Items Raised for this Combined Stage 1 - 2 Road Safety Audit

- 2.1 The problems that are raised in the combined Stage 1 - 2 Road Safety Audit are presented in this section. A copy of a marked up plan showing Stage 1 – 2 RSA problem locations is included in **Appendix A** of this Audit Report.

Problem 2.1:

Location: Northern most passing place.

Summary: Existing gully not shown on drawing adjacent to passing place widening.

There is an existing road gully adjacent to passing place widening which will fall in the wheel track of vehicles and powered two wheelers. The concern is that if adequate drainage is not provided it could lead to skid or loss of control incidents in the carriageway during periods of inclement weather. It is noted that vehicles could also be braking in this area on a downhill approach to the passing place.

Recommendation: Reposition the gully against the channel line to intercept surface water.

Problem 2.2:

Location: Areas of carriageway surfacing.

Summary: The drawing 156199-700-001 shows to areas of carriageway surfacing and description of the construction materials and thicknesses. However, no details are provided of the PSV value for the surface course aggregate. The concern is that vehicles will be slowing and braking in these areas in conjunction with the gradient of the road. If inappropriate levels of skid resistance are provided this could lead to skidding or loss of control type incidents in conflict with vehicles or pedestrians since they could share the same surface.

Recommendation: Utilise surface course materials with appropriate skid resistant properties.

Problem 2.3:

Location: Areas of proposed 0.45m wide verge between the parking bay and retaining walls.

Summary: The drawing 156199-700-001 shows three areas of 0.45 wide verge between the parking bay and retaining walls in conjunction with the placing place width of 4.5m. The concern is if vegetation grows in the verge area, it could lead to drivers providing more clearance against the verge (to avoid their vehicle scratched or damaged) thereby effectively reducing the 4.5m width for passing. The result of this could lead to head-on offside collisions between vehicles and wing mirror clashes.

Recommendation: Utilise a surface material that inhibits vegetation growth.

Problem 2.4:

Location: Proposed tapers at the ends of the passing places.

Summary: The drawings show 1 in 3 tapers to be provided at the ends of the passing places which may inhibit the manoeuvring of vehicles passed each other particularly the shorter southernmost passing bay. The concern is that two large cars may not have sufficient length to orientate parallel to each other with the 4.5m width and taking into account wing mirrors. The result of this could lead to head-on offside collisions between vehicles and wing mirror clashes. Furthermore, it could lead to the southbound vehicle overriding on the verge. It was also noted that in places the verge was lower, with a vertical drop adjacent to the carriageway, which could lead to damage to vehicle wheels and car bodies.

Recommendation: Provide appropriate taper lengths to allow vehicles to manoeuvre passed each other and raise verge levels where needed adjacent to the passing places.

Problem 2.5:

Location: Existing foliage along north western side of Castle Hill Side.

Summary: The drawing 156199-100-001 shows the area of existing foliage to be cleared and notes a strip 3m wide from the edge of carriageway. This is needed to assist in providing forward visibility between approaching vehicles and for drivers to use the passing places accordingly. The concern is that without appropriate visibility it could lead to drivers not making use of the passing places resulting in vehicles reversing as another vehicle approaches from behind with consequent rear shunt type incidents or head on offside vehicular collisions whilst vehicles try to pass each other. The drawing provides no details of the maintenance regime or the height to which the foliage should be cut and trimmed.

Recommendation: Provide details of the proposed maintenance regime and heights to which foliage should be cut and trimmed.

3. Audit Team Statement

3.1 We certify that the terms of reference of the audit are as described in GG119.

Audit Team Leader:

David Colley MCIHT

Highways England Approved RSA Certificate of Competency

Associate Director at Sanderson Associates Consulting Engineers

Signed:

Dated: 30th August 2024

Audit Team Members:

Ashley Armitage MIHE

Assistant Engineer at Sanderson Associates Consulting Engineers

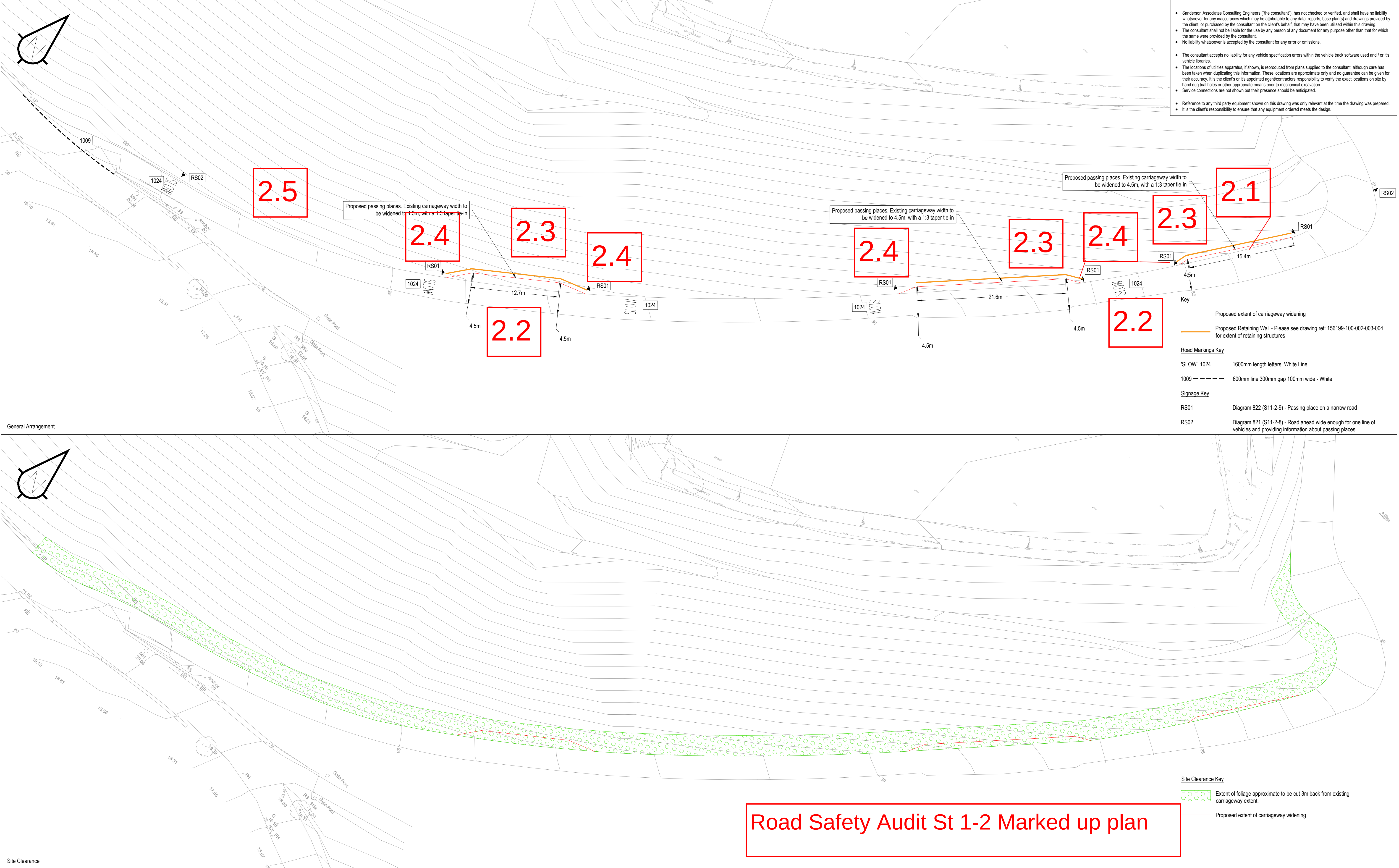
Signed:

Dated: 30th August 2024



Appendix A

Marked Up Plan for the combined Stage 1 - 2 RSA



Sa sanderson associates consulting engineers Highways Traffic Transportation Water T 01924 844080 mail@sandersonassociates.co.uk F 01924 844081 www.sandersonassociates.co.uk	Client	Project Title	Drawing Title						Scale	1:250	Drawn By		TOD	
									Drawing Size	A1	Checked By		MB	
									Date	September-23	Approved By		MB	
											Drawing Number		156199-100-001	Rev
								Rev	Amendment			Drawn	Date	Checked
CASTLE HILL HOTEL HERITAGE LTD			CASTLE HILL, HUDDERSFIELD			GENERAL ARRANGEMENT AND SITE CLEARANCE								



FAIRHURST



Sanderson House, Jubilee Way, Grange Moor,
Huddersfield, WF4 4TD



01924 844080



mail@sandersonassociates.co.uk



www.sandersonassociates.co.uk

CIVIL ENGINEERING • STRUCTURAL ENGINEERING • TRANSPORTATION • ROADS & BRIDGES
PORTS & HARBOURS • GEOTECHNICAL & ENVIRONMENTAL ENGINEERING • PLANNING &
DEVELOPMENT • WATER SERVICES • HEALTH & SAFETY / CDM SERVICES



Sanderson Associates Consulting Engineers is a trading name of Fairhurst Group LLP, a limited liability partnership.
Registered Office: 43 George Street, Edinburgh, EH2 2HT | Registered No: SO307306 | VAT No. 259 9411 23