BRYAN G HALL
CONSULTING CIVIL & TRANSPORTATION PLANNING ENGINEERS

Stage 1 Road Safety Audit Designer's Response

Project Details

Report Title:	Stage 1 Road Safety Audit Designer's Response – Proposed Site Access, Hemingfield Road, Hemingfield
Date:	21st August 2024
Document Reference and Revision:	23-160-006.03
Prepared by:	Bryan G Hall Limited
On behalf of:	Barnsley Metropolitan Borough Council (Overseeing Organisation)

Authorisation Sheet

Project:	Land at Hemingfield Road, Hemingfield
Report Title:	Stage 1 RSA Designer's Response
Prepared by:	
Name:	Martin Crabtree
Position:	Associate
Signed:	
Organisation:	Bryan G Hall Limited
Date:	21st August 2024
Approved by:	
Name:	
Position:	
Signed:	
Organisation:	Barnsley Metropolitan Borough Council
Date:	

Introduction

This Stage 1 Road Safety Audit Designer's Response has been prepared by Bryan G Hall Limited to address the points raised in the Stage 1 Road Safety Audit of the proposed vehicular access junction with Hemingfield Road, to serve a proposed residential development. The Stage 1 Road Safety Audit was carried out by Bryan G Hall Limited and is dated 15th July 2024 (report reference no. 23-160-005.01).

The proposed site access drawing has been revised to address the comments raised by the audit team and is included at **Appendix BGH1** of this Designer's Response, along with an additional supporting swept path analysis drawing at **Appendix BGH2**, as detailed in this Designer's Response.

Key Personnel

Overseeing Organisation:	Barnsley Metropolitan Borough Council
RSA Team:	Bryan G Hall Limited
Design Organisation:	Bryan G Hall Limited

Road Safety Audit Decision Log

RSA Problem	RSA Recommendation	Design Organisation Response	Overseeing Organisation Response	Agreed RSA Action
Problem A				
Parking on western side of Hemingfield Road opposite the proposed site access.	It is recommended that measures to ensure that parking does not restrict carriageway width opposite the proposed side road are provided.	Paragraph 5.9 of the Transport Assessment (document ref. 23-160-001.03) sets out that a 4 metre wide northbound through lane is proposed to accommodate the existing on street parking on Hemingfield Road in the vicinity of the proposed site access junction. This, alongside the provision of the 3 metre wide right turn ghost island means that traffic can continue to flow while vehicles are waiting to turn right into the site. Should vehicles be parked fully within the carriageway, this would require 2 metres of carriageway width, in line with the guidance in Figure 8.18 of Manual for Streets for parallel parking spaces. When combined with the proposed 3 metre wide right turn ghost island, there would therefore be an available width of around 5 metres for a car waiting to turn right into the site and a northbound car to pass through. It has been observed on site that vehicles currently park partially on the footway, therefore the available width may even be more than 5 metres. Figure 7.1 of Manual for Streets indicates that a minimum carriageway width of 4.1 metres is wide enough for two cars to pass each other, therefore a width of 5 metres is considered to be appropriate to accommodate a car waiting to turn right and a northbound car passing through. Figure 7.1 of Manual for Streets indicates that a minimum carriageway width of 4.8 metres is wide enough for a car and a larger rigid vehicle to pass each other. Therefore it may also be possible for a northbound refuse vehicle or a bus to pass a car waiting to turn right into the site. If not,		

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		then the northbound vehicle would simply need to wait briefly for the right turning car to clear. The modelling of the proposed site access junction shows that there would be minimal delays to vehicles turning right into the site of around 6/7 seconds and that queuing of more than 1 vehicle is not likely to occur, therefore this is not considered to be an issue. Furthermore, at present, it is apparent that vehicles may have to encroach into the opposing carriageway to pass the parked vehicles. Therefore, it is considered that the proposed site access arrangement represents an improvement over the existing situation.		
Problem B				
Hemingfield Road southbound approach to the proposed site access.	Provide sufficient stopping sight distance on approach to the proposed new junction from the north.	In response to Problem C, a footway is now proposed to the north of the access, which will necessitate the removal of some vegetation in this area. Any remaining vegetation within the adopted highway is to be trimmed back as necessary to achieve the 2.4 metres x 53 metres visibility splay to the north. A note has been added to the proposed site access drawing to clarify this.		
Problem C				
Footway provision on Hemingfield Road to the north of the proposed access.	It is recommended that tactile paving and dropped kerbs are provided at a suitable location to the north of the proposed access and that appropriate intervisibility is provided between the crossing location and oncoming vehicles.	The proposed site access drawing has been amended to extend the proposed footway on the eastern side of the carriageway to the north for around 45 metres. An uncontrolled pedestrian crossing point with dropped kerbs and tactile paving is then proposed to be located in the vicinity of numbers 86 and 88 Hemingfield Road, just to the south of the existing vehicular dropped crossing which provides access to the private driveways for number 84 and 86 Hemingfield Road. 53 metres forward visibility will be provided for southbound vehicles on Hemingfield Road to see		

RSA Problem	RSA Recommendation	Design Organisation Response	Overseeing Organisation Response	Agreed RSA Action
		pedestrians on the eastern side of the crossing at a point 0.5 metres back from the dropped kerb. The 53 metres stopping sight distance has been measured along the centre of the southbound carriageway. The existing trees and vegetation will be trimmed back as necessary to achieve this forward visibility. On the western side of the carriageway, the proposed crossing is located where existing dwellings have private driveways and some additional block paved space in front of the properties to park off the carriageway. Therefore crossing pedestrians are very unlikely to be masked by vehicles parked on Hemingfield Road.		
Problem D				
Site access pedestrian crossing facilities	It is recommended that tactile paving and dropped kerbs are provided at a suitable location on the desire line across the minor arm of the proposed junction.	An uncontrolled pedestrian crossing with dropped kerbs and tactile paving will be provide at the proposed site access as suggested. The proposed site access has been amended to show this.		
Problem E				
Proposed bus stop relocation location on Hemingfield Road.	It is recommended that forward visibility between drivers on the southbound carriageway of Hemingfield Road and the relocated bus stop is reviewed and measures are provided to ensure that the visibility envelope remains clear of obstruction.	The exact location of the relocated bus stop is to be agreed with BMBC and the local public transport operators. Table 5.1 of the Transport Assessment shows that the surveyed 85th percentile speeds for eastbound vehicles in the vicinity of the relocated bus stop is 28.3mph, which equates to a 39 metre stopping sight distance. The proposed site access drawing has been amended to show a red hatched area within the site behind the proposed footway on the inside of the bend. The red hatched area will need to be kept clear from any obstruction above 1.05m in height, in order to provide 39 metres forward visibility around the bend and towards the relocated bus stop.		

RSA Problem	RSA Recommendation	Design Organisation Response	Overseeing Organisation Response	Agreed RSA Action
Problem F				
Bus stops to the south of the scheme on Hemingfield Road.	It is recommended that the existing and proposed bus stops are provided with raised kerbs in line with the Disability Discrimination Act.	Details of any works relating to the relocated and existing bus stops will be agreed with BMBC as part of the S278 detailed design of the highway works.		
Problem G				
Existing bus stop to the south west of the site on the southern side of Hemingfield Road.	It is recommended that a crossing facility across Hemingfield for pedestrians is provided.	The proposed site access drawing has been amended to show an uncontrolled pedestrian crossing with dropped kerbs and tactile paving on Hemingfield Road around 5 metres to the east of Mellwood Grove, measured from the end of the kerb radius on the eastern side of the junction. 43 metres forward visibility will be achievable provided for westbound vehicles on Hemingfield Road to see pedestrians on the southern side of the crossing at a point 0.5 metres back from the dropped kerb. The 43 metres stopping sight distance has been measured along the centre of the westbound carriageway and takes into account the bend in Hemingfield Road to the east. Given the presence of the bend, a 43 metres stopping sight distance, equating to vehicle speeds of 30mph, is considered to be robust, as vehicles are likely to be travelling slower than this around the bend and up the hill. Indeed, the ATC survey indicates that the 85th percentile speed of westbound vehicles on Hemingfield Road in the vicinity of the proposed crossing point is 26.5mph.		
Problem H				
Hemingfield Road southbound through lane width.	It is recommended the southbound movement through the junction is assessed further to ensure that large vehicles including buses can pass through	Swept path analysis of a single deck bus and a 16.5 metre articulated HGV travelling southbound along Hemingfield Road has been undertaken, as shown on drawing number 23/160/ATR/003 Rev A at **Appendix BGH2**.		

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	the junction safely without encroaching on the right turn pocket associated with the proposed access.	BMBC have requested that a 0.5 metre clearance from the kerb line is provided for swept path analysis, therefore this has been reflected. The swept path analysis shows that both vehicles can pass southbound through the proposed junction without encroaching into the area of the right turn ghost island where vehicles may be waiting to turn right into the site. Whilst there is a very slight encroachment into the entry side of the ghost island, this is exaggerated by the 0.5 metre kerb clearance shown on the swept paths, as in reality, vehicles would be travelling more centrally within the southbound lane. Full height kerbs will be provided along Hemingfield Road, in the vicinity of the site access to provide added protection for pedestrians along the footway.		

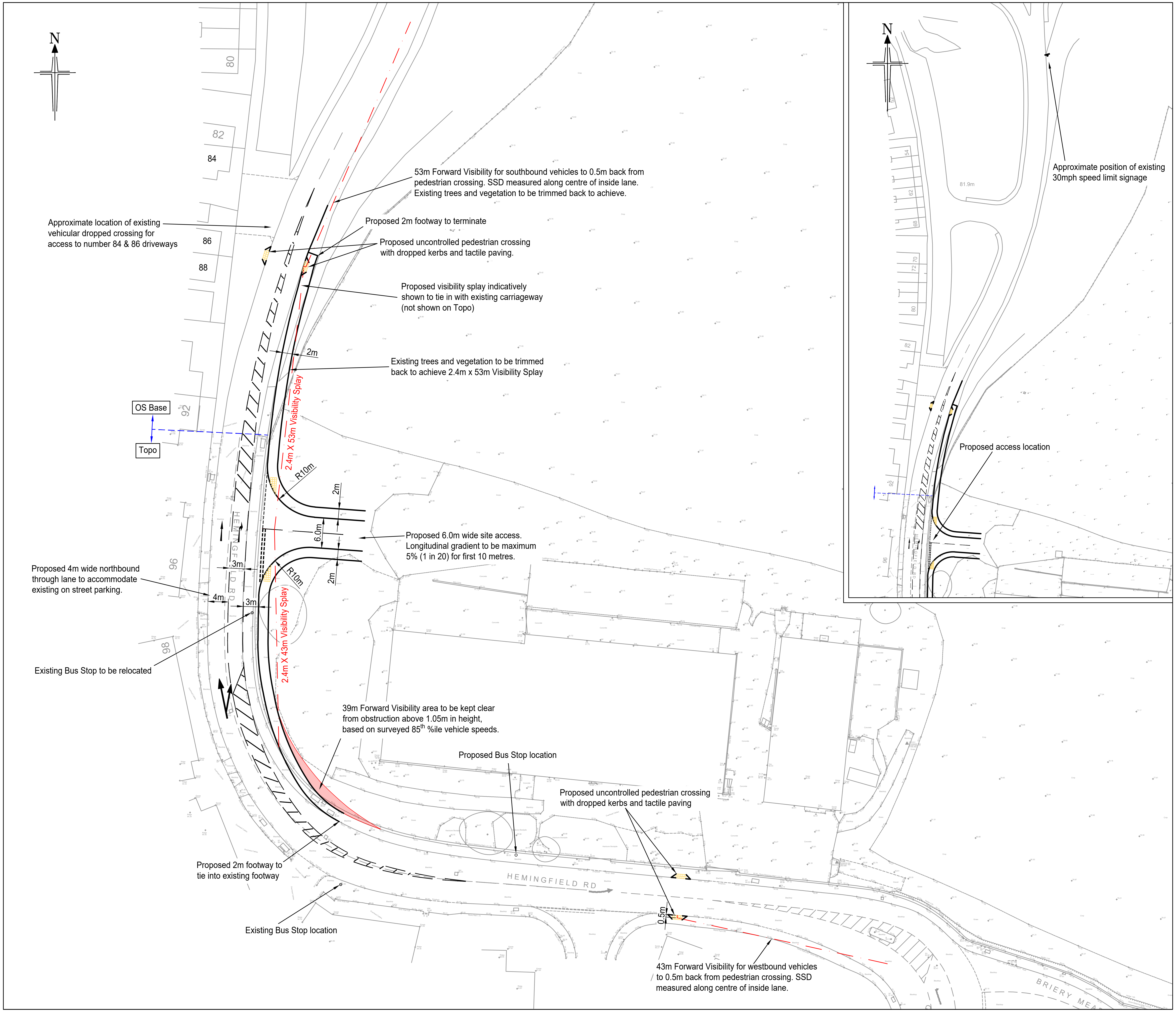
Design Organisation Statement

On behalf of the Design Organisation I certify that: **1) the RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Overseeing Organisation.**	
Name:	Martin Crabtree
Position:	Associate
Signed:	
Organisation:	Bryan G Hall Limited
Date:	21st August 2024

Overseeing Organisation Statement

On behalf of the Overseeing Organisation I certify that: **1) the RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the design organisation; and** **2) the agreed RSA actions will be progressed.**	
Name:	
Position:	
Signed:	
Organisation:	Barnsley Metropolitan Borough Council
Date:	

APPENDIX BGH 1



It is the contractors responsibility to ensure full compliance with the Building Regulations. Do not scale from this drawing, use figured dimensions only. It is the contractors responsibility to check and verify all dimensions on site. Any discrepancies to be reported immediately.
IF IN DOUBT ASK.

Materials not in conformity with relevant British or European Standards/Codes of practice or materials known to be deleterious to health & safety must not be used or specified on this project.

Bryan G Hall Limited has not checked or verified, and shall therefore not be liable for any inaccuracies which may be attributable to any base plan(s) reports, data or information provided by the client, or purchased by the consultant on the client's behalf, that may have been utilised within this drawing.

Bryan G Hall Limited shall not be liable for the use of this or any associated document, for any purpose, by any person other than that for which they were provided.

It remains the client's and/or its appointed contractor's responsibility to check for any discrepancies. Any anomalies discovered must be reported immediately to Bryan G Hall Limited for verification.

The locations of utilities apparatus, if shown, have been reproduced from plans supplied to Bryan G Hall Limited. Although care has been taken when duplicating this information, these locations are approximate only. No guarantee can be given by Bryan G Hall Limited for their accuracy. It is the client's or its appointed agent/contractor's responsibility to verify the exact locations on site by appropriate means prior to mechanical excavation.

Rev:	Date:	Amendment:	DRN	CHK	APR
E	21.08.24	Client name updated	RD	MC/JP	MC
D	19.07.24	Amended in response to Stage 1 RSA	RD	MC/JP	MC
C	18.01.24	Visibility amended to ATC speeds	RD	MC	MC
B	06.11.23	Title block updated following client comments	MIT	MC	SCW

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Client: Hargreaves Land Limited

Status: For Planning

Scale: 1:500
Size: A2 - 594 x 420

Drawn: MIT   Chkd: MC   Appvd: BR

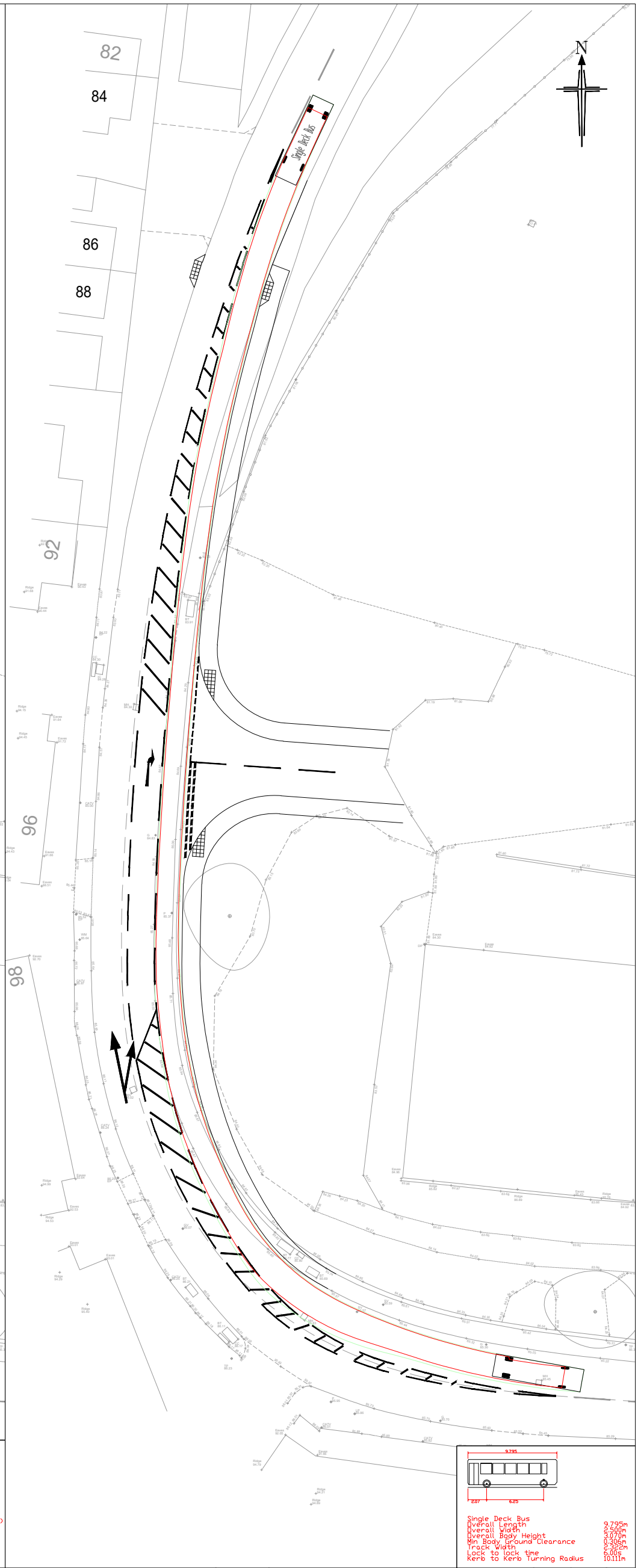
Project: Residential Development Hemingfield, Barnsley

Title: Proposed Access Arrangement - Right Turn Ghost Island Junction

Drawing No: 23/160/SKH/007   Revision: E

Job No: 23-160   Date: 13.10.23

APPENDIX BGH 2



Rev:	Date:	Amendment:	DRN	CHK	APR
A	21-8-24	Update Client Details	RD	MC	SCW

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Title: SWEPT PATH ANALYSIS OF HEMINGFIELD ROAD SOUTHBOUND

Client: HARGREAVES LAND LIMITED

Project: RESIDENTIAL DEVELOPMENT, HEMINGFIELD, BARNSLEY

Scale: 1:500 Size: A3 - 297 x 420

Drawn: RD Chkd: MC Appvd: MC

Drawing No: 23/160/ATR/003

Job No: 23-160

Revision: A

Date: 02.08.2024