

Technical Note

Date: 18th March 2020

Project: Proposed Residential Development off Pitt Street, Wombwell (2019/1117)

Title: Road Safety Audit (RSA1) – Designer's Response

1. Purpose

- 1.1 Waterman has undertaken a Road Safety Audit (RSA1) of the proposed access to the residential development off Pitt Street in Wombwell. The RSA1 is attached as Appendix A.
- 1.2 This Designer's Response has been prepared in response to the issues raised and recommendations made in the RSA1.

2. Problem 1 – Risk of Pedestrian Trips/Falls

- 2.1 The RSA1 identifies the potential for pedestrian trips/falls while crossing the new access junction.

RSA1 Recommendation

- 2.2 It is recommended that pedestrian crossing facilities inclusive of dropped kerbs and tactile paving be included in the detailed design of the new access junction.

Designer's Response

- 2.3 The proposed access junction has been amended to include dropped kerbs and tactile paving at the access junction. The updated layout is attached as Appendix B.

3. Problem 2: Risk of Rear Shunts

- 3.1 The historical accident data presented in Enzygo's Transport Statement shows that there have been a cluster of accidents on Pitt Street a number of which resulted in serious injury and more than half of which involved children being struck by vehicles.
- 3.2 The speed survey submitted to the auditor that 85thile speeds are between 36mph and 37mph. While the visibility design has been provided to reflect the recorded speeds in line with Manual for Streets, there is concern that there may be some vehicles that will still be travelling above the speeds used for the visibility calculation.

RSA1 Recommendation

- 3.3 It is recommended that the scheme is designed with parameters appropriate to a higher speed limit or that measures are implemented to ensure that the speed of vehicles passing the access is such that the design operates safely.

Designer's Response

- 3.4 The visibility required at the access has been calculated in line with the design guide method set out in Manual for Streets using speed survey data.
- 3.5 Notwithstanding the above, a review has been made of the visibility available and the splay adjusted to 78m based on the formula for 45mph design speed. This is shown in Appendix B.
- 3.6 The adjustment has been discussed with the auditor who has confirmed that this is satisfactory. Confirmation of this is attached as Appendix C.

- 3.7 To accommodate this visibility, all boundary treatments and/or landscaping within the splay will be maintained at a height below 600mm.
- 3.8 The width of Pitt Street limits the opportunities to introduce other design measures to reduce speeds at the access. However, the visibility splay has been increased as recommended.

Appendix A

HARTWOOD PITT STREET, WOMBWELL BARNSELY

SECTION 278 WORKS

SA 2842

STAGE 1 ROAD SAFETY AUDIT

March 2020

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REV	ISSUE STATUS	PREPARED BY/DATE	CHECKED BY/DATE	APPROVED BY/DATE
1	DRAFT	JC 16 March 2020	AD 16 March 2020	
2	FINAL	JC 17 March 2020	AD 17 March 2020	AD 17 March 2020
3				

Our Markets



Property & Buildings



Transport & Infrastructure



Energy & Utilities



Environment

Disclaimer note

The client has confirmed that it is entering into the agreement under which this report is being prepared on its own behalf and not on behalf of, or for the benefit of any other party and has agreed that in any event of any claim arising out of or in connection with that agreement and/or the report itself it shall be entitled to recover from Waterman Aspen Limited only the losses, if any, it has itself suffered.

This report therefore is for the private and confidential use of the client for whom it was prepared solely for the purposes requested by the client. It should not be reproduced in whole or in part or relied upon by any third party for any use whatsoever without the express written authority of Waterman Aspen Limited.

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1.0 INTRODUCTION

1.1 This report is a Stage 1 Road Safety Audit (RSA) carried out on the proposed Section 278 works associated with a residential development of approximately 110 units on a site to the north of Pitt Street in Wombwell, Barnsley. It has been undertaken at the request of SK Transport on behalf of their Client Hartwood.

1.2 The RSA team, staff members from Waterman Aspen, present at the RSA were:

Joe Clarbour
Audit Team Leader

Adrian Dawson
Audit Team Member

We confirm that no member of the Audit Team has been involved with the design process and that at least one member of the Audit Team holds the Highways England Certificate of Competency.

1.3 The site visit was carried out on the morning of Thursday 12th March 2020. The weather during the site visit was bright and the carriageway surface dry.

1.4 The RSA brief issued to the team comprised of various elements listed at Appendix Two.

1.5 The scheme has been examined and this report compiled only with regard to the safety implications for road users of the scheme as presented. It has not been examined or verified for compliance with any other Standards or criteria. However, in order to clearly explain a safety problem or the recommendation to resolve a problem, the Audit Team may on occasion have referred to a design standard for information only. Any audit comments should not be construed as implying that a technical audit has been undertaken in any respect.

1.6 All of the problems described in this report are considered by the RSA team to require action in order to improve the safety of the scheme and minimise collision occurrence. However, if any of the problems or recommendations within this Road Safety Audit report are not accepted, a copy of the signed exception report from the Overseeing Organisation should be sent to the Road Safety Audit Team Leader.

1.7 Any recommendations included within this report should not be regarded as being prescriptive design solutions to the problems raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, in accordance with GG119, and in no way imply that a formal design process has been undertaken. There may be alternative methods of addressing a problem which would be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.

2.0 PROPOSALS

- 2.1 The scheme proposes a new priority “Give Way” junction connecting into the north side of Pitt Street that will provide access into the development site. The proposed layout includes a 5.5m wide carriageway leading into the site with 2.0m wide footways along both sides connecting into existing footways running along the north side of Pitt Street to the east and west.

3.0 RECORDED INJURY ACCIDENT HISTORY

- 3.1 Details of accidents occurring over the five-year period between January 2013 and December 2017 were summarised in a transport statement (TS) covering the proposed development prepared by Enzygo in the Summer of 2019. A copy of the TS has been provided to the Audit Team. The results show that six injury accidents occurred within approximately 200m of each side of the proposed site access during this period, three of which resulted in serious injury and three slight injury. It is noted that four of the accidents involved children being struck by vehicles whilst attempting to cross Pitt Street.

4.0 DEPARTURES FROM STANDARD

- 4.1 No Departures from Standards were highlighted to the Audit Team.

5.0 DOCUMENTS AND INFORMATION NOT PROVIDED

- Highway construction details
- Street lighting designs including lighting levels
- Landscape proposals
- Highway long and cross sections
- Traffic signing and road marking proposals

6.0 MATTERS ARISING FROM PREVIOUS ROAD SAFETY AUDITS

6.1 No previous Road Safety Audits have been forwarded to the Audit Team.

7.0 MATTERS ARISING FROM THIS STAGE 1 ROAD SAFETY AUDIT

7.1 Problem

Location – At the access junction

Summary: Risk of pedestrian trips / falls

The proposed footway layout on both sides of the access junction does not appear to include pedestrian crossing facilities. There is a risk that pedestrians attempting to cross the new access junction would be forced to negotiate full height kerbs without the aid of tactile markers to guide them. This could lead to a risk of trips and falls and may pose a particular difficulty for pedestrians with sight impairment.

Recommendation

It is recommended that pedestrian crossing facilities inclusive of dropped kerbs and tactile paving be included in the detailed design of the new access junction.

7.2 Problem

Location – In the vicinity of the access junction on Pitt Street

Summary: Risk of rear shunt collisions

The historical accident data close to the site indicates a cluster of accidents occurred in the five-year period between 2013 and 2017, a number of which resulted in serious injury and more than half of which involved children being struck by vehicles. Data submitted to the Audit Team suggests that the mean of the 85%ile surveyed speed is between 36 and 37 mph. Whilst the general design of the access junction layout appears to be broadly consistent with design guidance set out within Manual for Streets, the 85%ile speeds suggest that some vehicles may significantly exceed the speed limit. The cluster of accidents may support this. Consequently, it may be that the design – including visibility, etc - should be adequate for a higher speed. If drivers leaving the access do not see approaching vehicles, then they may pull out into live traffic, resulting in a side-on collision.

Recommendation

It is recommended either that the scheme is designed with parameters appropriate to a higher speed limit, or that measures are implemented to ensure that the speed of vehicles passing the access is such that the design operates safely.

8.0 GENERAL COMMENTS

No details of proposed lighting arrangements have been provided therefore the Audit Team is not able to comment upon this matter.

No drawings detailing signs and line markings have been supplied for audit therefore it has not been possible for the Audit Team to provide detailed commentary.

APPENDIX ONE

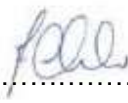
9.0 AUDIT TEAM STATEMENT

AUDIT TEAM STATEMENT

We certify that the audit has been carried out in accordance with the requirements set out in GG119. The problems identified have been noted in this report together with associated safety improvement suggestions which we recommend should be studied for implementation.

AUDIT TEAM LEADER

Joe Clarbour MSc, BA Hons
Senior Traffic Engineer
Waterman Aspen
5th Floor
1 Cornwall Street
Birmingham
B3 2DX

Signed:

Date: 16 March 2020

AUDIT TEAM MEMBER

Adrian Dawson MCIHT MSoRSA
Principal Road Safety Engineer
Waterman Aspen
5th Floor
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B3 2DX

Signed:

Date: 16 March 2020

APPENDIX TWO

10.0 LIST OF DRAWINGS AND DOCUMENTS PROVIDED TO THE AUDIT TEAM

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Drawings

- 200226_SK22001_TN01(-00) Pitt Street, Wombwell, Proposed Site Access General Arrangement
- SK22001-001 Rev A Pitt Street, Wombwell, Swept Path Analysis

Documents

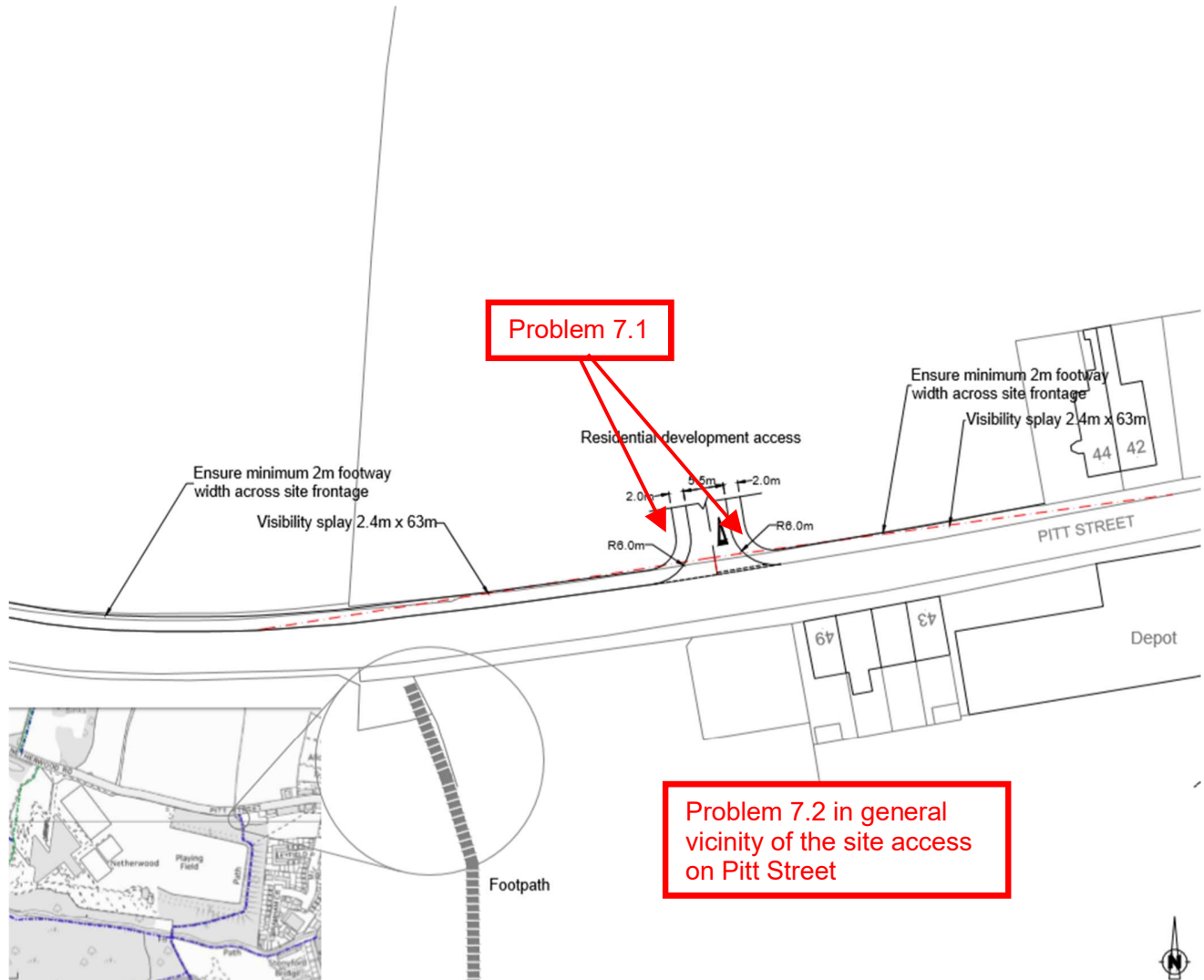
- 20191117 Pitt Street, Wombwell Transport Statement

APPENDIX THREE

11.0 PROBLEM LOCATION PLAN

Stage 1 Road Safety Audit – Hartwood Pitt Street, Wombwell, Barnsley: Section 278 Works

- Extract from drawing: 200226_SK22001_TN01(-00) Pitt Street, Wombwell, Proposed Site Access General Arrangement



services

buildings services
civil engineering
energy & environmental
secondment & outsourcing
structural engineering
transport planning

sectors

aviation
commercial
communication & technology
conservation / historic
education
energy
government & defence
healthcare
highways
hotels
industrial
marine
rail
residential
retail
sports & leisure
transportation
urban regeneration
waste
water

united kingdom

belfast
birmingham
brentwood
bristol
cardiff
cirencester
derby
dundee
edinburgh
glasgow
leeds
lingfield
london
manchester
newcastle-upon-tyne
nottingham
sheffield
solihull
warrington

ukraine

kiev

kazakhstan

almaty

china

beijing
tianjin

india

chennai

united arab emirates

abu dhabi
dubai

australia

brisbane
melbourne
sydney

belgium

brussels

poland

warsaw

romania

bucharest

ireland

cork
dublin

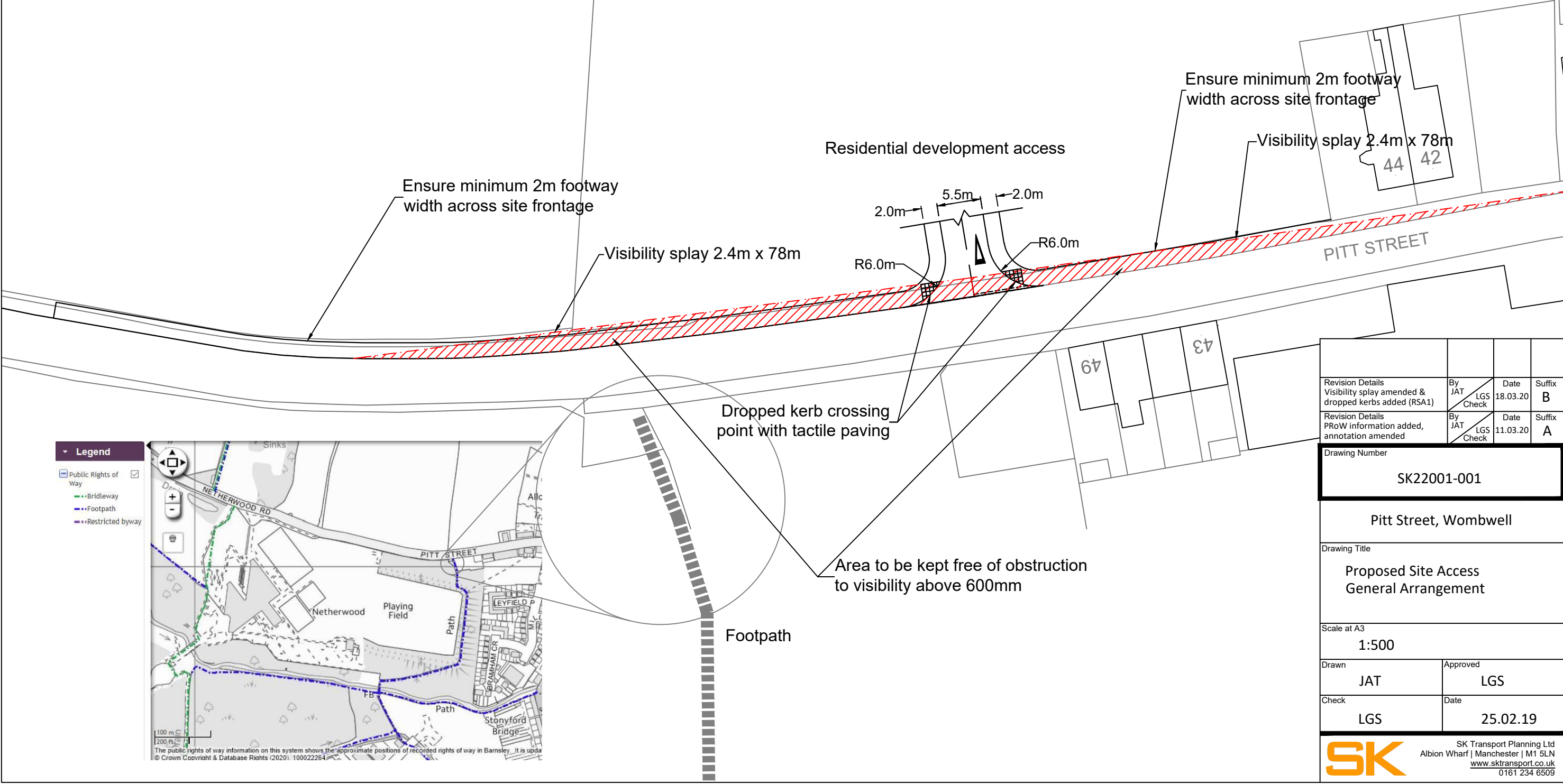


Appendix B

THIS DRAWING MAY BE USED ONLY FOR THE PURPOSE INTENDED AND ONLY WRITTEN DIMENSIONS SHALL BE USED

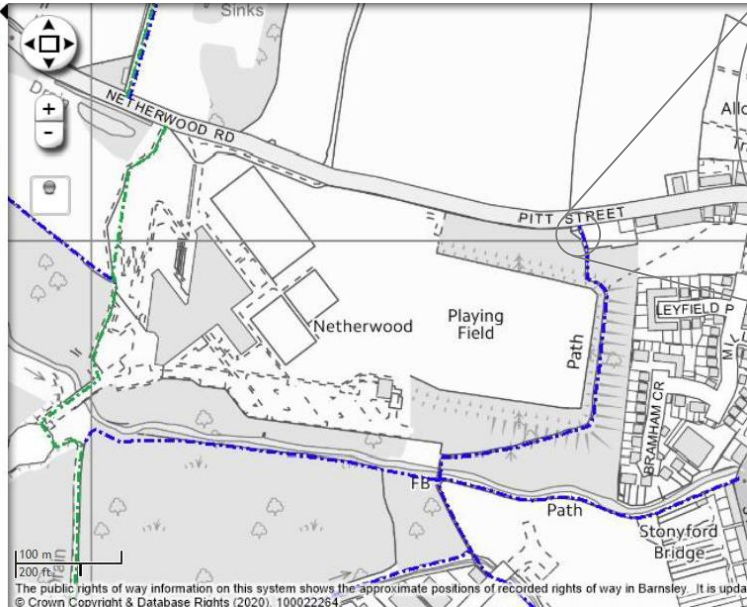
NOTES

Layout subject to detailed design and confirmation of statutory undertakers' equipment.



Legend

- ☒ Public Rights of Way
- ☐ Bridleway
- ☐ Footpath
- ☐ Restricted byway



Revision Details Visibility splay amended & dropped kerbs added (RSA1)	By JAT	LGS Check	Date 18.03.20	Suffix B
Revision Details PRoW information added, annotation amended	By JAT	LGS Check	Date 11.03.20	Suffix A

Drawing Number
SK22001-001

Pitt Street, Wombwell

Drawing Title
Proposed Site Access General Arrangement

Scale at A3
1:500

Drawn	Approved
JAT	LGS

Check	Date
LGS	25.02.19



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Appendix C

RE: Pitt Street Barnsley



Adrian Dawson <Adrian.Dawson@watermanaspen.co.uk>

Thu 19/03/2020 14:19

To: Lesli Speers ^

↩ Reply | v

Inbox

You forwarded this message on 19/03/2020 15:02

Hi Lesli –

Further to our conversation this morning, the increase in visibility would certainly assuage our concerns.

Adrian Dawson

Senior Road Safety Engineer
Road Safety Audit Manager
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Email - adrian.dawson@watermanaspen.co.uk

Website - www.watermanaspen.co.uk

From: Lesli Speers <lesli.speers@sktransport.co.uk>

Sent: 19 March 2020 10:25

To: Adrian Dawson <Adrian.Dawson@watermanaspen.co.uk>

Subject: Pitt Street Barnsley

Hi Adrian

We have reviewed the RSA recommendations for Pitt Street and are happy with the recommendation for the ped crossing and have updated the layout with this. In terms of the visibility splay, we calculated this in line with design guidance and have used a new speed survey and MfS calculation. The recommendation appears to be outside normal guidance and we would like a little more of a steer as to what you are recommending. As you will appreciate we are desperately trying to maintain the hedgerow to the west, the removal of which will impact on the attenuation pond.

We have reviewed the visibility and can increase from 63m to 78m which would equate to a 45mph design speed

using the MfS formula. Do you think this would provide the comfort recommended?

Kind regards

Lesli

Lesli Speers

Director



Please click [here](#) for our current COVID-19 policy

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