



Section 278 Works, Long Lane / Woodmansey Mile, Beverley

Stage 3 Road Safety Audit

December 2023

SECTION 278 WORKS
LONG LANE / WOODMANSEY MILE
BEVERLEY

BELLWAY HOMES

STAGE 3 ROAD SAFETY AUDIT

Report by: Adam Bradley

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Ref: 23-381.001.01

Date: December 2023

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Road Safety Audit Location Plan

1.0 INTRODUCTION

- 1.1 This Report comprises a Stage 3 Road Safety Audit (RSA) as defined in the Institution of Highways and Transportation (IHT) document 'Road Safety Audit Guidelines' and the Department for Transport (DfT) Design Manual for Roads and Bridges (DMRB) Standard GG 119 Road Safety Audit. The RSA is concerned with the Section 278 (S278) works associated with the Bellway 'Beverley-J' residential development located to the east of Woodmansey Mile and Long Lane, in Beverley.
- 1.2 The development comprises the construction of 300 dwellings with access taken via an extension to Woodmansey Mile across Long Lane and into the site. As part of the extension to Woodmansey Mile a four arm signalised junction has been installed to control movements along Long Lane and Woodmansey Mile, allowing ahead only vehicle movements on all approaches with turning movements for vehicles prohibited. There are no restrictions to cycle movements and uncontrolled pedestrian crossing points have been provided across the Long Lane arms of the junction and on the western Woodmansey Mile arm of the junction.
- 1.3 Shared footway cycleway routes have been provided along with footway connections between Woodmansey Mile (west) and Long Lane (north and south).
- 1.4 The Audit considers the highway safety implications of the completed S278 works, including the interface with the proposed development, and the points of connection with the existing highway network. The Audit was carried out in November/December 2023.
- 1.5 The Audit Team comprised:-

Road Safety Audit Team Leader

Adam Bradley BSc (Hons), MCIHT

Principal Engineer

Bryan G Hall Consulting Civil and Transportation Planning Engineers

Road Safety Audit Team Member

David Bell

Director

MEng, CEng, MCIHT, (Certificate of Competency in Road Safety Audit gained in October 2013)

Bryan G Hall Consulting Civil and Transportation Planning Engineers

- 1.6 The Audit Team visited the site of the highway works, together, on the afternoon (1pm – 3pm) and evening (4:30pm and 5pm) of 21st November 2023. During the site visit the weather was clear and the road surface was dry. The Highway Authority, East Riding of Yorkshire Council (ERYC) is the Overseeing Organisation, and they were represented at the site visit by Paul Copeland who is a Principal Engineer. The local police road safety team were invited to attend but declined and confirmed that they were content for the audit to take place in their absence.
- 1.7 During the RSA site visit traffic levels were observed to be moderate with regular pedestrian and cycle activity.
- 1.8 The Audit team have been provided with the Stage 2 RSA (ref: 3913 BEV-J Development, Woodmansey Mile, S278 Works RSA 2 - Final Issue 1) and Designers Response (ref: 3913 s278 RSA 2 - Des Res V1 23 03 22), these have been reviewed as part of the Stage 3 Audit.
- 1.9 The terms of reference of the Road Safety Audit are as described in GG 119. The auditors have examined and reported only on the road safety implications of the scheme as constructed and has not examined or verified the compliance to any other criteria.

2.0 ITEMS RAISED BY PREVIOUS ROAD SAFETY AUDITS

- 2.1 Items raised in previous RSAs have been reviewed and those detailed in this section are considered to remain or not to have been addressed completely.

Problem A (Problem 2.1 from Stage 2 RSA ref: 3913 BEV-J Development, Woodmansey Mile, S278 Works RSA 2 - Final Issue 1)

- 2.2 Location: Proposed Woodmansey Mile / Long Lane traffic signal junction

Summary

Risk of collisions between drivers undertaking banned turning movements and other junction users.

The traffic signal junction only permits ahead movements (except cycles) on all four arms of the junction. This is communicated by 'ahead only' signal heads, 'ahead only' road markings and tight junction radii. However, a significant number of drivers were observed throughout the Stage 3 RSA site visit making various banned left and right turn movements and this is likely to increase as the development is occupied by more residents. There is also evidence of vehicles making the right turn from Woodmansey Mile onto Long Lane by crossing the footway and grass verge to the south of the junction. Drivers undertaking banned turning movements (albeit at low speed) are at an increased risk of collision with other junction users who would otherwise not be expecting to encounter turning vehicles.



Turning movements to/from the development site onto Long Lane also result in a general increase in vehicle flows on Long Lane which, for the most part, is a route where pedestrians are required to walk in the carriageway. Increased vehicle flows on Long Lane therefore increases the risk of vehicle to pedestrian collisions along this road.

Recommendation

It is recommended that additional measures are provided in the verges to prevent drivers from driving over footway and verge in order to make banned movements.

It is also recommended that measures are implemented on street in the form of signage and carriageway markings to ensure better compliance with the Traffic Regulation Orders associated with banned movements on both Long Lane and Woodmansey Mile.

3.0 ITEMS RAISED IN THIS ROAD SAFETY AUDIT

- 3.1 All items raised within this Stage 3 RSA are shown on the annotated plan at **Appendix BGH1**.

Problem B

- 3.2 Location: Top of embankment to the east of Long Lane in the vicinity of water course.

Summary

It was noted during the site visit that fencing does not extend fully along the carriageway boundary to both the north and south of the culvert across the water course which runs parallel to Long Lane. There is also a lack of fencing on the top of the headwalls to both sides of the culvert. This allows pedestrian access from the highway to the embankment and area surrounding the water course and therefore increases the risk of falls and water related injuries.

The lack of appropriate fencing at the top of the embankments allows pedestrians including vulnerable users such as children to access the area surrounding embankment directly to the east of Long Lane, to the north and south of the new culvert. The area includes steep banks surrounding the culvert which lead down to the water course and the headwalls which surround the culvert which also have no barrier in place. The absence of a barrier, the steep banks and the lack of barrier surrounding the headwalls will increase the risk of pedestrians falling down the embankment with an increased risk of injury and possible drowning.





Recommendation

It is recommended that fencing is extended along the boundary of Long Lane and the area surrounding the headwalls to control pedestrian access.

Problem C

3.3 Location: Footway to the northwest of the new signalised junction.

Summary

Incomplete corduroy paving and lack of suitable signage may lead to confusion and an increased risk of collisions between pedestrians and cyclists.

It was noted during the site visit that corduroy paving has only been installed across part of the footway to the northwest of the signalised junction, to the east and west of the tactile paving associated with the uncontrolled pedestrian crossing location on Woodmansey Mile. There is also corduroy paving across the footway connection to the rear of the footway, in line with the uncontrolled crossing, which provides a footpath connection heading north from the junction. There are no shared footway cycleway signs in the vicinity of the paving arrangements indicating what is shared footway cycleway and what is footway, which may result in pedestrians and cyclists being unsure as to what the status of the footway is.

The lack of signage along the northern side of Woodmansey Mile combined with the gaps between corduroy paving and the edge of the footway may lead to confusion and an increased risk of pedestrian cycle collisions in the vicinity of the uncontrolled crossing and on the northern side of Woodmansey Mile to the east and west of the signalised junction.



Recommendation

It is recommended that corduroy paving is extended to the edge of the footway and clear signage is provided to differentiate between shared footway cycleway and footway. Signage should also be provided to define the use of the northern footway to the east of the signalised junction on Woodmansey Mile. It is recommended that guidance contained within LTN 1/20 is considered as part of any further changes to the tactile paving and signage design.

Problem D

- 3.4 Location: Tactile paving arrangement at uncontrolled crossings to the north and south of the signalised junction on Long Lane.

Summary

Tactile paving has been installed incorrectly at a depth of less than 1.2 metres to either side of the uncontrolled pedestrian crossings across the northern and southern arms of the signalised junction on Long Lane and may cause confusion leading to collisions involving visually impaired pedestrians.

Tactile paving set out at a depth of less than 1.2 metres is generally used at uncontrolled crossings away from a junction (Fig 8 Guidance on the use of Tactile Paving Surfaces 2022). The use of tactile paving of less than 1.2 metres depth in the direction of travel provides conflicting and confusing information for visually impaired pedestrians and increases the risk of collisions between pedestrians and vehicles.

Recommendation

It is recommended that the tactile paving arrangements are extended to ensure that the tactile paving arrangements are consistent with current guidance.

Problem E

- 3.5 Location: verge to the west of Long Lane, to the south of the signalised junction.

Summary

Signs to diagram 956 of the Traffic Signs Regulations and General Directions remain in place in the verge to the west of Long Lane on the southern arm of the junction. These signs incorrectly indicate that the footway is a shared footway cycleway and will lead to an increased risk of collisions between pedestrians and cyclists.



Recommendation

It is recommended that the signs are removed.

Problem F

3.6 Location: Northbound approach to signalised junction on Long Lane.

Summary

The Quiet Lane sign located in the eastern verge on Long Lane, to the southeast of the signalised junction, partially obstructs visibility to the secondary signal head associated with northbound traffic. The obstructed visibility of the signal head increases the risk of drivers travelling northbound entering the junction into the path of vehicles or cyclists travelling eastbound or westbound on Woodmansey Mile, leading to an increased risk of collisions.

The obstructed visibility also increases the risk of sudden braking on the approach to the junction leading to an increased risk of shunt type collisions. The signpost can be seen in the foreground of the photograph below, obscuring the signal head.



Recommendation

It is recommended that the Quiet Lane sign is relocated away from the line of sight for drivers travelling northbound on Long Lane.

Problem G

3.7 Location: Northbound and southbound approaches to signalised junction on Long Lane.

Summary

No advance warning signs have been provided on the northbound and southbound Long Lane approaches to the signalised junction. The risk is that drivers approaching the junction are unaware of the presence of signals at the junction on their approach and this may result in sudden braking leading to shunt type collisions of loss of control type collisions on the approaches to the junction.

Recommendation

It is recommended that traffic signal advance warning signs are installed on the approaches to the junction on Long Lane.

General Comments

- 3.8 During the RSA site visit it was noted that street lighting was not operational during the hours of darkness.

4.0 AUDIT STATEMENT

We certify this audit has been carried out in accordance with GG119.

ROAD SAFETY AUDIT TEAM LEADER

Adam Bradley BSc (Hons), MCIHT

Principal Engineer

Bryan G Hall Consulting Civil and Transportation Planning Engineers



Signed:

Date: 19.12.2023

ROAD SAFETY AUDIT TEAM MEMBER

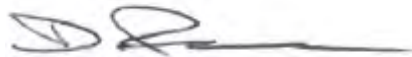
David Bell

Director

MEng, CEng, MCIHT,

(Certificate of Competency in Road Safety Audit gained in October 2013)

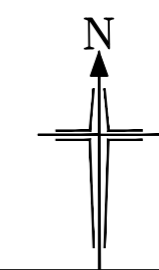
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Signed:

Date: 19.12.2023

APPENDIX BGH 1



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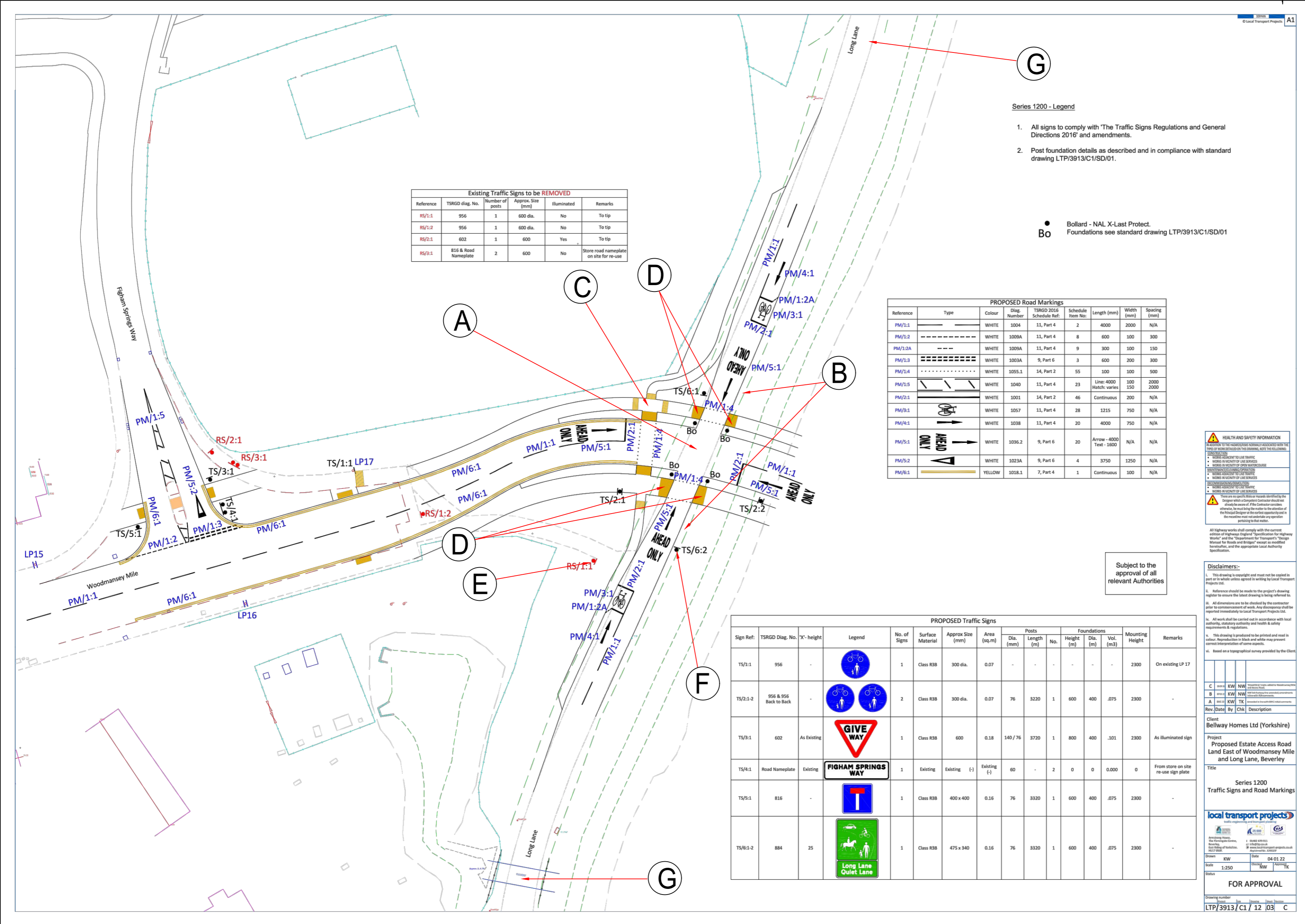
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Existing Traffic Signs to be REMOVED					
Reference	TSRGD Diag. No.	Number of posts	Approx. Size (mm)	Illuminated	Remarks
RS/1:1	956	1	600 dia.	No	To tip
RS/1:2	956	1	600 dia.	No	To tip
RS/2:1	602	1	600	Yes	To tip
RS/3:1	816 & Road Nameplate	2	600	No	Store road nameplate on site for re-use

- Series 1200 - Legend**
- All signs to comply with 'The Traffic Signs Regulations and General Directions 2016' and amendments.
 - Post foundation details as described and in compliance with standard drawing LTP/3913/C1/SD/01.

Bo Bollard - NAL X-Last Protect.
 Foundations see standard drawing LTP/3913/C1/SD/01

PROPOSED Road Markings									
Reference	Type	Colour	Diag. Number	TSRGD 2016 Schedule Ref.	Schedule Item No.	Length (mm)	Width (mm)	Spacing (mm)	Remarks
PM/1:1	---	WHITE	1004	11, Part 4	2	4000	2000	N/A	
PM/1:2	---	WHITE	1009A	11, Part 4	8	600	100	300	
PM/1:2A	---	WHITE	1009A	11, Part 4	9	300	100	150	
PM/1:3	---	WHITE	1003A	9, Part 6	3	600	200	300	
PM/1:4	---	WHITE	1055.1	14, Part 2	55	100	100	500	
PM/1:5	---	WHITE	1040	11, Part 4	23	Line: 4000 Hatch: varies	100	2000	
PM/2:1	---	WHITE	1001	14, Part 2	46	Continuous	200	N/A	
PM/3:1	---	WHITE	1057	11, Part 4	28	1215	750	N/A	
PM/4:1	---	WHITE	1038	11, Part 4	20	4000	750	N/A	
PM/5:1	---	WHITE	1036.2	9, Part 6	20	Arrow - 4000 Text - 1600	N/A	N/A	
PM/5:2	---	WHITE	1023A	9, Part 6	4	3750	1250	N/A	
PM/6:1	---	YELLOW	1018.1	7, Part 4	1	Continuous	100	N/A	

HEALTH AND SAFETY INFORMATION

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- Based on a topographical survey provided by the Client.

PROPOSED Traffic Signs															
Sign Ref.	TSRGD Diag. No.	X'-height	Legend	No. of Signs	Surface Material	Approx. Size (mm)	Area (sq.m)	Diag. (mm)	Length (m)	Height (m)	Diag. (m)	Vol. (m3)	Mounting Height	Remarks	
TS/1	956	-		1	Class R38	300 dia.	0.07	-	-	-	-	-	2300	On existing LP 17	
TS/2:1-2	956 & 956	Back to Back		2	Class R38	300 dia.	0.07	76	3320	1	600	400	.075	2300	
TS/3:1	602	As Existing		1	Class R38	600	0.18	140 / 76	3720	1	800	400	.101	2300	As illuminated sign
TS/4:1	Road Nameplate	Existing		1	Existing	Existing (-)	Existing (-)	60	-	2	0	0	0.000	0	From store on site re-use sign plate
TS/5:1	816	-		1	Class R38	400 x 400	0.16	76	3320	1	600	400	.075	2300	
TS/6:1-2	884	25		1	Class R38	475 x 340	0.16	76	3320	1	600	400	.075	2300	

Subject to the approval of all relevant Authorities

FOR APPROVAL

Drawing number: LTP/3913/C1/12/03 C

Rev:	Date:	Amendment:	DRN	CHK	APR
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Client: BELLWAY HOMES

Status: RSA

Scale: N.T.S.
 Size: A2 - 594 x 420

Drawn: LD Chkd: AB Appvd: MC

Project: LONG LANE, BEVERLEY RSA3

Title: STAGE 3 RSA PROBLEM LOCATION PLAN

Drawing No: 23/281/RSA/001
 Job No: 23-281

Revision: -
 Date: 19.12.2023

Bryan G Hall Limited

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