

Road Safety Audit Stage 3

Wightman Road Safety Improvements

Prepared for: London Borough of Haringey

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CONT	CONTENTS PAGE			
1.	SCHEME DETAILS	1		
1.1	PROJECT DETAILS	1		
1.2	INTRODUCTION	1		
2.	ITEMS RAISED AT PREVIOUS ROAD SAFETY AUDIT(S)	3		
2.1	Summary	3		
2.2	Summary from Section 3 (Items Raised in Previous Road Safety Audit)	3		
3.	STAGE 3 ROAD SAFETY AUDIT	4		
3.1	GENERAL	4		
3.2	LOCAL ALIGNMENT	6		
3.3	JUNCTIONS	7		
3.4	NON-MOTORISED USERS	8		
3.5	ROAD SIGNS, CARRIAGEWAY MARKING AND LIGHTING	9		
4.	AUDIT TEAM STATEMENT	10		
APPEN	NDIX A			
APPEN	NDIX B			





1. SCHEME DETAILS

1.1 PROJECT DETAILS

Project Title:	Wightman Road Safety Improvements
The Overseeing Organisation:	London Borough of Haringey
The Design Organisation:	Yomi Komolafe Sustainable Transport London Borough of Haringey

1.2 INTRODUCTION

- 1.2.1 This report details the results of a Stage 3 Road Safety Audit undertaken in May 2020 for the Wightman Road Safety Improvements scheme in Haringey.
- 1.2.2 The scheme encompasses Wightman Road, between Turnpike Lane and Lothair Road South. The proposals consist of providing additional raised tables, entry treatments at junctions and public realm improvements.
- 1.2.3 The Road Safety Audit Team consists of:

Fadzil Ismail Team LeaderNic Akintujoye Team Member

Umer Ghaffar participated as an observer for this Road Safety Audit.

- **1.2.4** The report has been prepared in response to the request received from the Overseeing Organisation on 22nd April 2020.
- 1.2.5 The Audit took place remotely in May 2020 and comprised of an examination of the drawings and documents as listed in Appendix A of this report.
- **1.2.6** The Audit Team visited the site, both for the day and night audits, on 10th May 2020 at 13:00 and at 20:45 respectively. The weather was fine, and the road surface was dry.
- 1.2.7 Luke Heming of the MET Police TMU attended the day site visit. Following the submission of the draft report, Luke Heming provided his comments on 19th June 2020 as follow:

"This scheme was introduced prior to my appointment as TMO for Haringey. Prior to this audit I was contacted by the local borough neighbourhood police team who indicated that they, and a number of residents, had concerns with this new scheme as they believed it made the road more dangerous. Their main concern was turning into and out of the junctions along the east side. Paragraph 3.1.1 highlights this issue. By moving the parking bays closer to the junctions more than negates the extended view that the kerb buildouts could provide and makes the turning into Wightman Road problematic. As per the recommendations the intervisibility between vehicles at the junctions and on Wightman Road itself needs to be improved. Consideration should also be given to a speed survey at different points along the road with a view to introducing further traffic calming if required. The chicane problem highlighted in 3.2.2 also causes issues for cyclists who have to follow the line of the traffic out towards the opposing lane, although not witnessed during the audit this has been raised by a resident."

1.2.8 The terms of reference of the Road Safety Audit are generally as described in GG119 (formerly HD19/15). The Road Safety Audit Team has examined and





- reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.
- **1.2.9** No details of any departures from standards have been provided.
- **1.2.10** All comments and recommendations are referenced to the design drawings and A4 location plans in Appendix B of this report.





2. ITEMS RAISED AT PREVIOUS ROAD SAFETY AUDIT(S)

2.1 Summary

A Stage 1 Road Safety Audit was undertaken by Project Centre in July 2018, with the report reference 1000004931/RSA1/DG. A copy of the report has been provided to the Audit Team. Below is a summary of the issues raised in that Audit being raised again in this Stage 3 Road Safety Audit. No Designer's Response or Stage 2 Road Safety Audit has been provided to the Audit Team.

2.2 Summary from Section 3 (Items Raised in Previous Road Safety Audit)

2.2.1 Problem 3.2.1:

Location: Multiple locations.

Summary: Sharply angled tapers at proposed chicanes may lead to sideswipe type collisions.

RSA Stage 3 Comment:

The Audit Team feels that this has not been fully addressed and as such, this issue has been brought forward again as Problem 3.2.1 in this Stage 3 Road Safety Audit report.

2.2.2 Problem 3.3.1:

Location: Multiple locations at junctions.

Summary: Risk of vehicle overrun where carriageway width has been reduced, potentially resulting in sideswipe collisions or vehicle / pedestrian collisions

RSA Stage 3 Comment:

The Audit Team feels that this has not been fully addressed and as such, this issue has been brought forward again as Problem 3.3.1 in this Stage 3 Road Safety Audit report.





3. STAGE 3 ROAD SAFETY AUDIT

It was noted on the drawings provided that the modification to the Burgoyne Road entry is to be carried out as part of a separate scheme. Therefore, the Audit Team has excluded Burgoyne Road from this Road Safety Audit. During the site visit it was observed that the cycle contra-flow markings were marked on site but had since been blacked out.

3.1 GENERAL

3.1.1 PROBLEM:

Location: General - multiple locations; junctions where vehicles exit onto

Wightman Road

Summary: Sightlines for motorists exiting onto Wightman Road compromised by parking, could lead to collisions with vehicles travelling along Wightman Road.

Detail: Buildouts have been provided at side road junctions along Wightman Road, and parking bays on Wightman Road have been extended closer to the junction. The sightlines for motorists turning out of several side roads appear to be restricted by parked vehicles on Wightman Road. The Audit Team is concerned that restricted sightlines could lead to collisions between vehicles turning out of the side roads and those travelling along Wightman Road.

Recommendation: It is recommended to review sightlines and amend the layout to ensure adequate sightlines are provided, including, but not limited, to removing or shortening parking bays.

Designers Response: Partially Accepted

The Manual for Streets 1 (MFS1) guideline for forward visibility on a 20mph road is 25m. However, Manual for Streets 2 (MFS2) states reduced visibility at priority junctions are associated with reduced vehicle speeds. It also states that the effects on pedestrians and cyclists are also positive as vehicle slow down on the approach to junctions and turn slowly as they exit onto the main road; this helps pedestrians and cyclist establish priority. In addition, Manual for Street 1 (MFS1) advises that junctions can be designed to promote slow motor-vehicle speed with the introduction of vertical and horizontal deflections.

The scheme included relocating existing partial footway parking fully onto the carriageway and the removal of existing speed tables and pedestrian refuges. It was acknowledged that removal of these traffic calming measures would lead to an increase in vehicular speeds. The proposal therefore included staggering the parking provision to create Chicanes and reducing the length of existing forward visibility splays to a minimum of 10m as traffic calming measures to help regulate traffic speeds.

Speed surveys were conducted before and after the highway improvement works. The pre-construction survey results show an average northbound speed of 18.8mph and southbound speed of 19mph.

Following the introduction of the scheme, the survey results show average speeds of 17.6mph northbound and 17.3mph southbound. This equates to a reduction of 1.2mph northbound and 1.7mph southbound.





The desired speed reduction was therefore achieved, however a review of the scheme following construction has shown that 5 of the roads exiting onto Wightman Road do not meet the design aim to achieve a minimum of 10m forward visibility. These roads are listed below:

- Raleigh Road
- Allison Road
- Seymour Road
- Effingham Road
- Lausanne Road

The identified amendments to achieve the minimum 10m forward visibility on these roads requires the removal of a cumulative length of 5m of existing parking bays outside nos. (152, 218, 256, 272, 280) Wightman Road. 2no. trees will also be removed on Wightman Road at its junction with Allison Road and Raleigh Road as part of the proposed measures to obtain the 10m minimum forward visibility.

Furthermore, monitoring of collisions and observed or notified near misses at the locations will be carried out and a Road Safety Audit stage 4 will also be arranged once a full year's, post implementation road traffic collision data is available; this data is likely to be available 6 to 12 months following the end of the period being assessed, due to a lag in production of validated data. Identified remedial measures will be implemented where appropriate.

3.1.2 PROBLEM:

Location: General – multiple locations; junctions where vehicles exit onto Wightman Road

Summary: Sightlines for motorists exiting onto Wightman Road compromised by street planting and parking, could lead to collisions with vehicles travelling along Wightman Road.

Detail: Further to Problem 3.1.1, new trees and other planting have been implemented at the buildouts as part of the scheme. The Audit Team is concerned that some of this planting may compromise sightlines for motorists turning onto Wightman Road. This could lead to collisions with vehicles travelling along Wightman Road.

Recommendation: It is recommended to review sightlines and amend the layout to ensure adequate sightlines are provided, including, but not limited, to relocating or removing trees.

Designers Response: Partially Accepted

The Manual for Streets 1 (MFS1) guideline for forward visibility on a 20mph road is 25m. However, Manual for Streets 2 (MFS2) states reduced visibility at priority junctions are associated with reduced vehicle speeds. It also states that the effects on pedestrians and cyclists are also positive as vehicle slow down on the approach to junctions and turn slowly as they exit onto the main road; this helps pedestrians and cyclist establish priority. In addition, Manual for Street 1 (MFS1) advises that junctions can be designed to promote slow motor-vehicle speed with the introduction of vertical and horizontal deflections.

The scheme included relocating existing partial footway parking fully onto the carriageway and the removal of existing speed tables and pedestrian refuges. It was acknowledged that removal of these traffic calming measures would lead to an increase in vehicular speeds. The proposal therefore included staggering the





parking provision to create Chicanes and reducing the length of existing forward visibility splays to a minimum of 10m as traffic calming measures to help regulate traffic speeds.

Speed surveys were conducted before and after the highway improvement works. The pre-construction survey results show an average northbound speed of 18.8mph and southbound speed of 19mph.

Following the introduction of the scheme, the survey results show average speeds of 17.6mph northbound and 17.3mph southbound. This equates to a reduction of 1.2mph northbound and 1.7mph southbound.

The desired speed reduction was therefore achieved, however a review of the scheme following construction has shown that 5 of the roads exiting onto Wightman Road do not meet the design aim to achieve a minimum of 10m forward visibility. These roads are listed below:

- Raleigh Road
- Allison Road
- Seymour Road
- Effingham Road
- Lausanne Road
- The identified amendments to achieve the minimum 10m forward visibility on these roads requires the removal of a cumulative length of 5m of existing parking bays outside nos. (152, 218, 256, 272, 280) Wightman Road. 2no. Trees will also be removed on Wightman Road at its junction with Allison Road and Raleigh Road as part of the proposed measures to obtain the 10m minimum forward visibility.

Furthermore, monitoring of collisions and observed or notified near misses at the locations will be carried out and a Road Safety Audit stage 4 will also be arranged once a full year's, post implementation road traffic collision data is available. The results will be analysed, and amendments will be undertaken where necessary.

3.2 LOCAL ALIGNMENT

3.2.1 PROBLEM:

Location: Multiple locations, at newly installed chicanes

Summary: Sharply angled tapers at proposed chicanes may lead to sideswipe or head-on collisions.

Detail: Chicanes have been installed in several locations to help calm traffic speeds. The stagger length between the buildouts accompanying these chicanes appears to be short, resulting in increased path-angles or sharp tapers. It is appreciated that a wider path angle could help reduce vehicles speeds. However, this could potentially lead to vehicles encroaching the centre line and into the opposing traffic lane, as observed during the site visit. The Audit Team is concerned that this could potentially lead to sideswipe / head-on collisions, in particular during the hours of darkness or adverse weather conditions.

Recommendation: It is recommended to increase the stagger length between the buildouts and reduce the path angles of the chicanes. Alternatively, it may be necessary to provide additional measures such as road studs and / or measures to reduce the speed of vehicles immediately on the approach to or at the chicanes.





Designers Response: Rejected

Manual for Streets 1 (MFS1) states that main road speed is influenced by road width and forward visibility, it also advises that there are instances where it is desirable and appropriate to restrict forward visibility to control traffic speed. In this instance, the staggered lengths create a reduced forward visibility which in turn slows vehicular speeds as drivers' behaviour change with the new layout.

Speed surveys were conducted before and after the highways improvement works. The preconstruction survey results show an average northbound speed of 18.8mph and southbound speed of 19mph.

Following the introduction of the scheme, the survey results show average speeds of 17.6mph northbound and 17.3mph southbound. This equates to a reduction of 1.2mph northbound and 1.7mph southbound. The desired speed reduction was therefore achieved.

To date no issues have been reported with the length of the tapers, however, monitoring of collisions and observed or notified near misses at the locations will be carried out and a Road Safety Audit stage 4 will also be arranged once a full year's, post implementation road traffic collision data is available. The results will be analysed, and amendments will be undertaken where necessary.

3.2.2 PROBLEM:

Location: Multiple locations, at reverse staggered chicane buildouts

Summary: Layout of chicanes can give drivers the impression that oncoming vehicles are headed straight for them, leading to collisions.

Detail: Further to Problem 3.2.1, the Audit Team is concerned that the unconventional reverse staggered layout of chicanes at some locations, may provide drivers with a misleading impression of the direction of oncoming traffic. Opposing traffic can appear to be heading straight for each other. In addition, this could potentially cause glaring issues from the oncoming vehicles headlights. The Audit Team is concerned that this could lead to sudden braking / rear shunt type collisions, head-on collisions or loss of control collisions.

Recommendation: It seems disproportionate to recommend removal of the reversed staggered chicanes at this stage now that they have been implemented. Therefore, it is recommended to regularly monitor all collisions and near misses at the locations. Furthermore, it is recommended to undertake a Stage 4 Road Safety Audit and ensure that remedial actions are completed.

Designers Response: Accepted

Monitoring of collisions and observed or notified near misses at the locations will be carried out and a Road Safety Audit stage 4 will also be arranged once a full year's, post implementation road traffic collision data is available. The results will be analysed, and amendments will be undertaken where necessary.

3.3 JUNCTIONS

3.3.1 PROBLEM:

Location: Multiple junction locations, at newly installed buildouts





Summary: Risk of vehicle overrun where carriageway / junction width has been reduced, potentially resulting in sideswipe collisions or vehicle to pedestrian collisions.

Detail: The scheme installed buildouts at several junctions to help calm traffic and reduce the crossing distance for pedestrians. However, the Audit Team is concerned that due to the tight turning radii vehicles turning left into / from the side roads may overrun onto the opposing traffic lane, leading to collisions with oncoming vehicles. In addition, it is concerned that turning vehicles may be forced to mount the kerb when negotiating the tighter turning radii, which could potentially lead to vehicle to pedestrian collisions.

Recommendation: It seems disproportionate to recommend junction alterations at this stage now that the buildouts have been constructed. Therefore, it is recommended to regularly monitor collisions and all near misses at these locations, and if the issues persist the junction layouts should then be amended. In addition, if necessary, it is recommended to provide mitigation measures (such as bollards) to prevent vehicle mounting the kerb.

Designers Response: Partially Accepted

Manual for Streets 1 (MFS1) advises that carriageway width should be a minimum of 4.8m. The current road widths exceed this minimum width and vary between 5.5 and 6m. In addition, swept path analysis was also undertaken as part of developing the proposals, which shows adequate space for turning vehicles.

However, monitoring of collisions and observed or notified near misses at the locations will be carried out and a Road Safety Audit stage 4 will also be arranged once a full year's, post implementation road traffic collision data is available. The results will be analysed, and amendments will be undertaken where necessary.

3.4 NON-MOTORISED USERS

3.4.1 PROBLEM:

Location: A – Wightman Road, uncontrolled crossing north of junction with Atterbury Road

Summary: Risk of vehicle to pedestrian collisions due to poor inter-visibility.

Detail: Northbound vehicles approaching this informal crossing do so from a bend. The Audit Team is concerned that motorists approaching from the south at inappropriate speed do not have adequate visibility of pedestrians on the western kerb wishing to use the crossing, and vice versa, which could potentially result in vehicle to pedestrian collisions. It was noted that there is a long gap between the newly installed raised table to the north of the uncontrolled crossing, and the next raised table to the south of the uncontrolled crossing.

Recommendation: It is recommended to provide additional traffic calming measures, to reduce the northbound vehicle speeds on the approach to this location. These may include, but are not limited to, additional vertical deflection and / or vehicle activated signage.

Designers Response: Accepted

Speed surveys were conducted before and after the highway improvement works. The pre-construction survey results show an average northbound speed of 18.8mph and southbound speed of 19mph.





Following the introduction of the scheme, the survey results show average speeds of 17.6mph northbound and 17.3mph southbound. This equates to a reduction of 1.2mph northbound and 1.7mph southbound. The desired speed reduction was therefore achieved.

However, additional measures will be provided to reduce vehicular speeds on the approach to the uncontrolled crossing in the form of a vehicle activated sign.

3.5 ROAD SIGNS, CARRIAGEWAY MARKING AND LIGHTING

3.5.1 **PROBLEM**:

Location: B – Umfreville Road at the junction with Wightman Road

Summary: No entry signs not clearly visible following planting and building out of junction, could result in collisions if vehicles mistakenly enter.

Detail: Buildouts have been installed at the junction of Umfreville Road / Wightman Road. Umfreville Road is a one-way westbound road, with vehicles turning in from Wightman Road prohibited. Signage is present to indicate this. However, following the kerbworks and planting at this junction the signs appear to be less visible to motorists on Wightman Road. During the site visit, a number of near misses were observed; vehicles were witnessed trying to turn into Umfreville Road. The Audit Team is concerned that this could result in head-on collisions with vehicles turning out of Umfreville Road.

Recommendation: It is recommended to relocate the no entry signs at this junction, ensuring visibility is clear for motorists approaching on Wightman Road.

Designers Response: Rejected

A site review was undertaken with respect to the no-entry sign on Umfreville Road, the sign at this junction was found to be appropriately located. However, the no-entry signs at the junction of Lothair Road south is obscured and will therefore be amended along with a de-cluttering of the junction.

3.5.2 PROBLEM:

Location: Multiple locations along Wightman Road, at raised tables / road humps

Summary: Lack of ramp markings could lead to sudden braking shunt type or loss of control collisions.

Detail: It was noted on site that ramp markings have not been marked at several raised tables / road humps along Wightman Road. The Audit Team is concerned that this could lead to sudden braking shunt type collisions or loss of control collisions for vehicles travelling along Wightman Road.

Recommendation: It is recommended to mark ramp markings at all raised tables / road humps.

Designers Response: Accepted

The ramp markings will be installed where required. Instructions have been given to our term contractor to carry out the required road marking installation.





4. AUDIT TEAM STATEMENT

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

ROAD SAFETY AUDIT TEAM LEADER		
Name:	Fadzil Ismail	
Signed:	Ham).	
Organisation:	Project Centre	
Date:	03/06/2020	
ROAD SAFETY AUDIT TEAM MEMBER		
Name:	Nic Akintujoye	
Signed:		
Organisation:	Project Centre	
Date:	03/06/2020	





Appendix A





SCHEDULE OF DOCUMENTS EXAMINED

(Documents Forming the Audit Brief)

Title	Numbers (s)
General Arrangement (Section 1)	RJHWP-GLATS-WR-DD-GA/01
General Arrangement (Section 2)	RJHWP-GLATS-WR-DD-GA/02
General Arrangement (Section 3)	RJHWP-GLATS-WR-DD-GA/03
General Arrangement (Section 4)	RJHWP-GLATS-WR-DD-GA/04
General Arrangement (Section 5)	RJHWP-GLATS-WR-DD-GA/05
General Arrangement (Section 6)	RJHWP-GLATS-WR-DD-GA/06
General Arrangement (Section 7)	RJHWP-GLATS-WR-DD-GA/07
General Arrangement (Section 8)	RJHWP-GLATS-WR-DD-GA/08
General Arrangement (Section 9)	RJHWP-GLATS-WR-DD-GA/09

Other documents:

1000004931/RSA1/DG – Wightman Road Stage 1 RSA

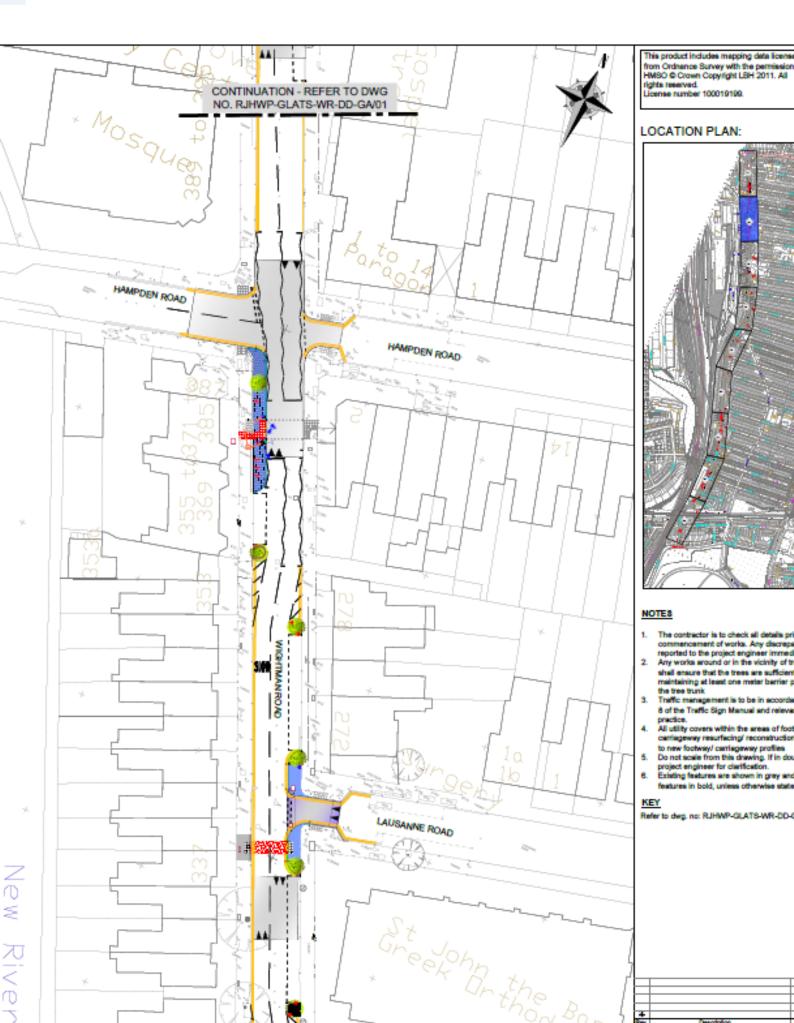




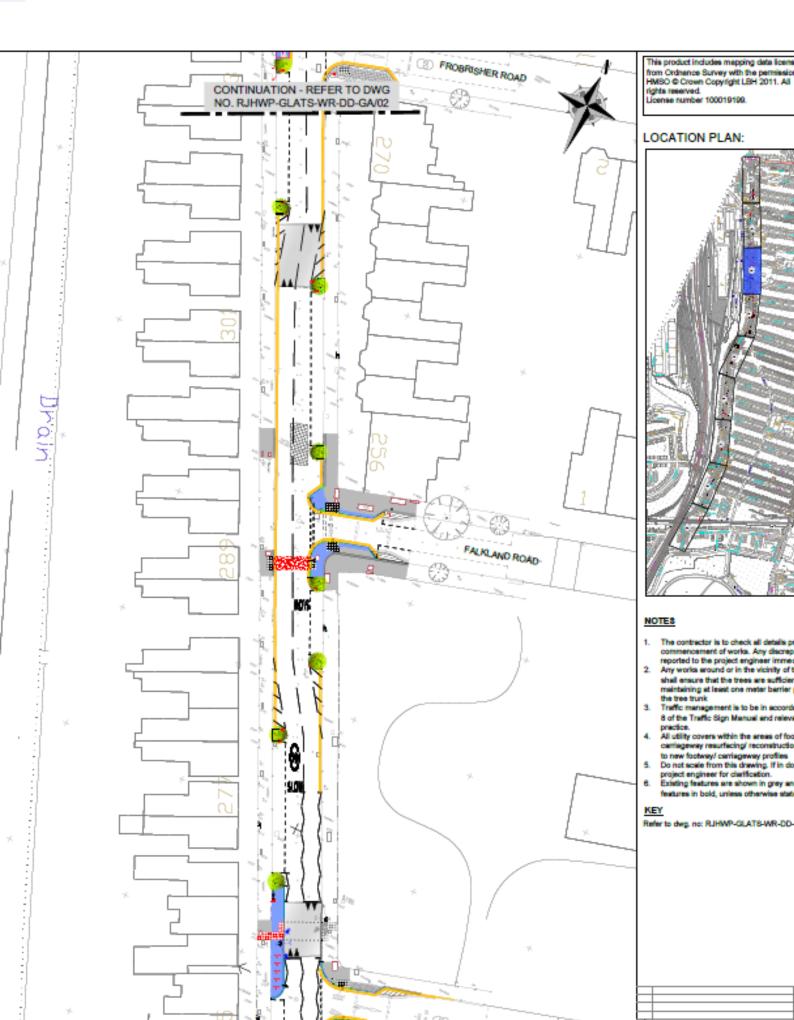
Appendix B



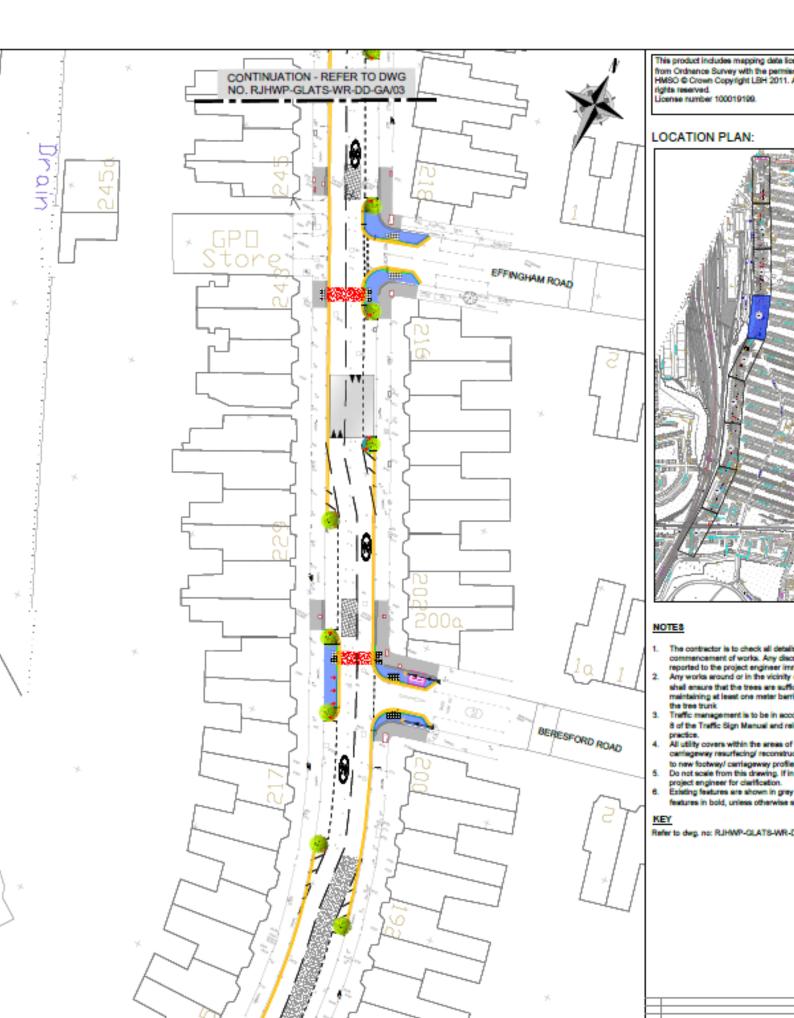




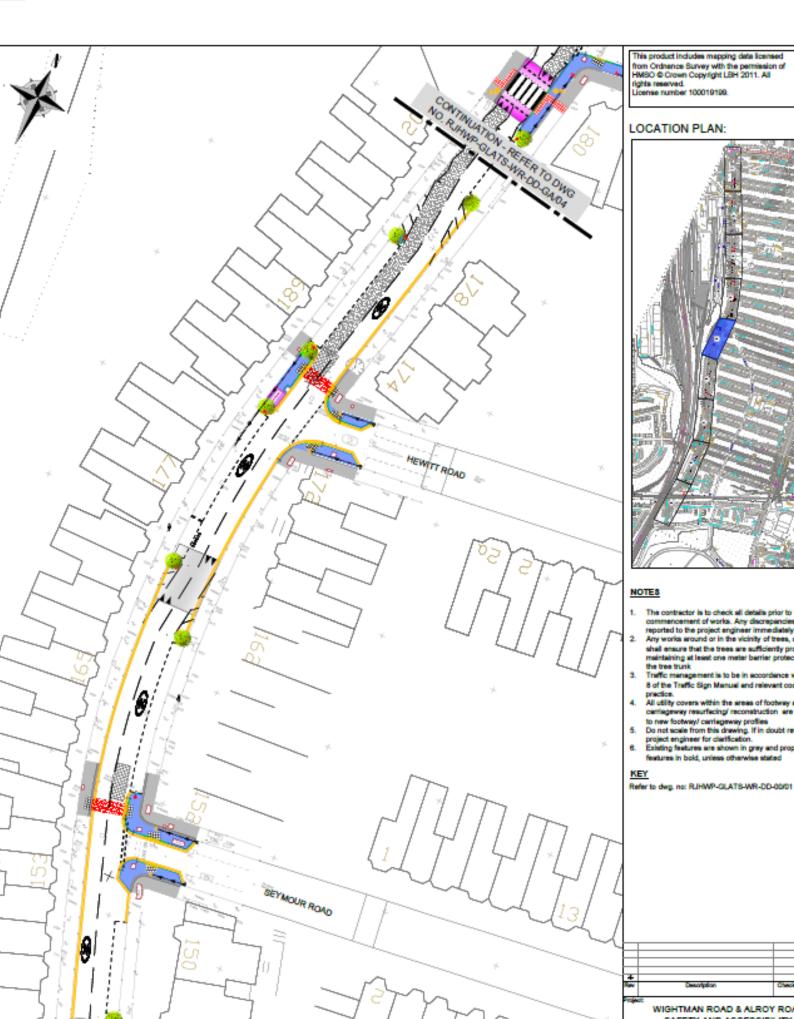








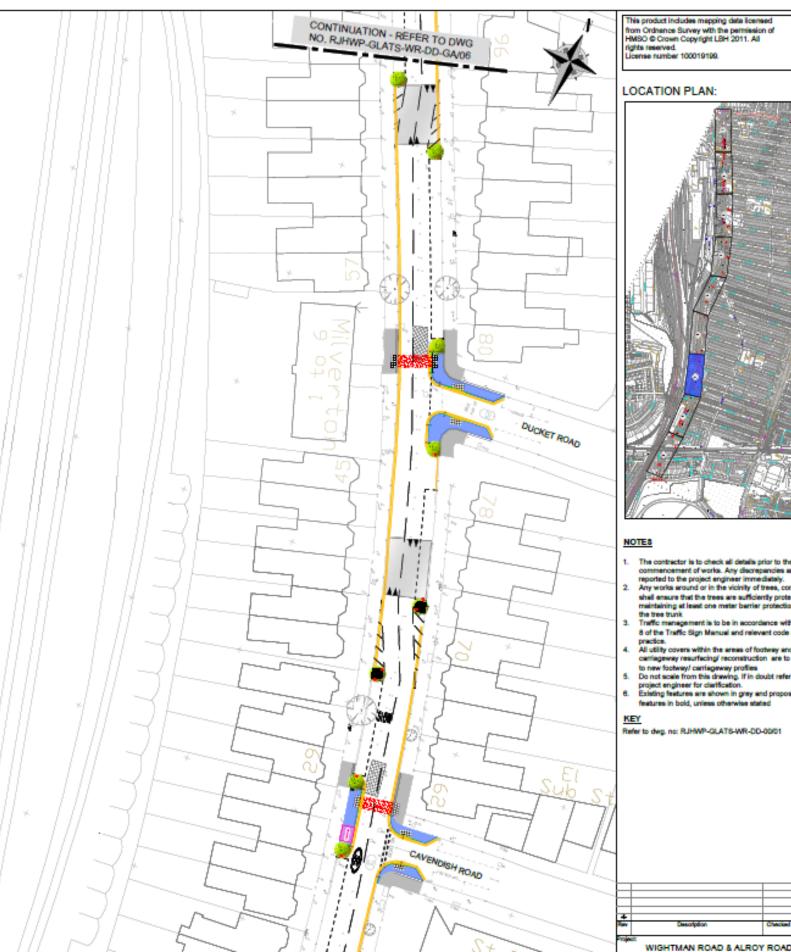






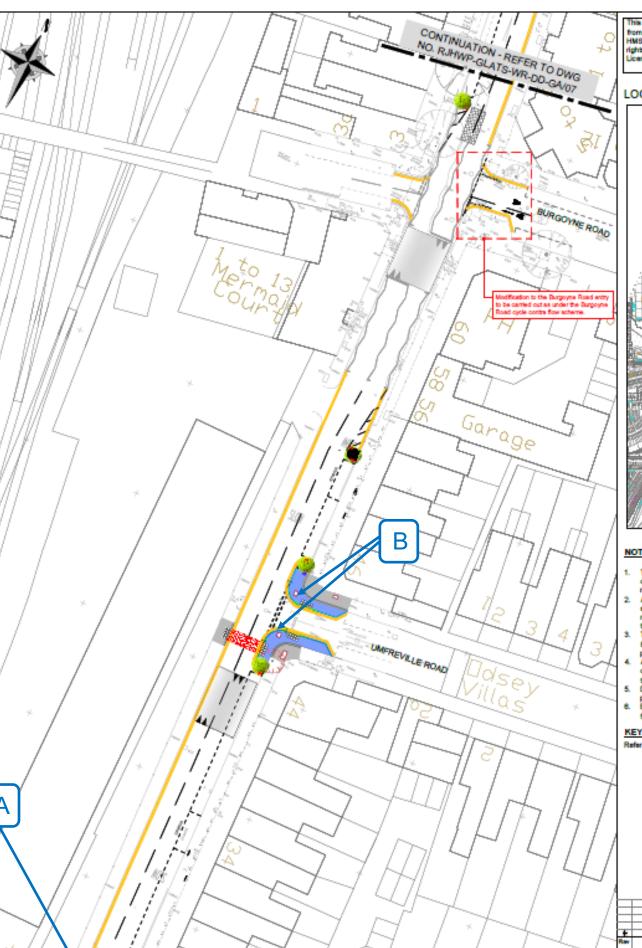






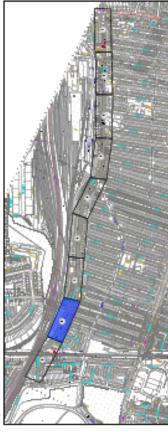






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LOCATION PLAN:



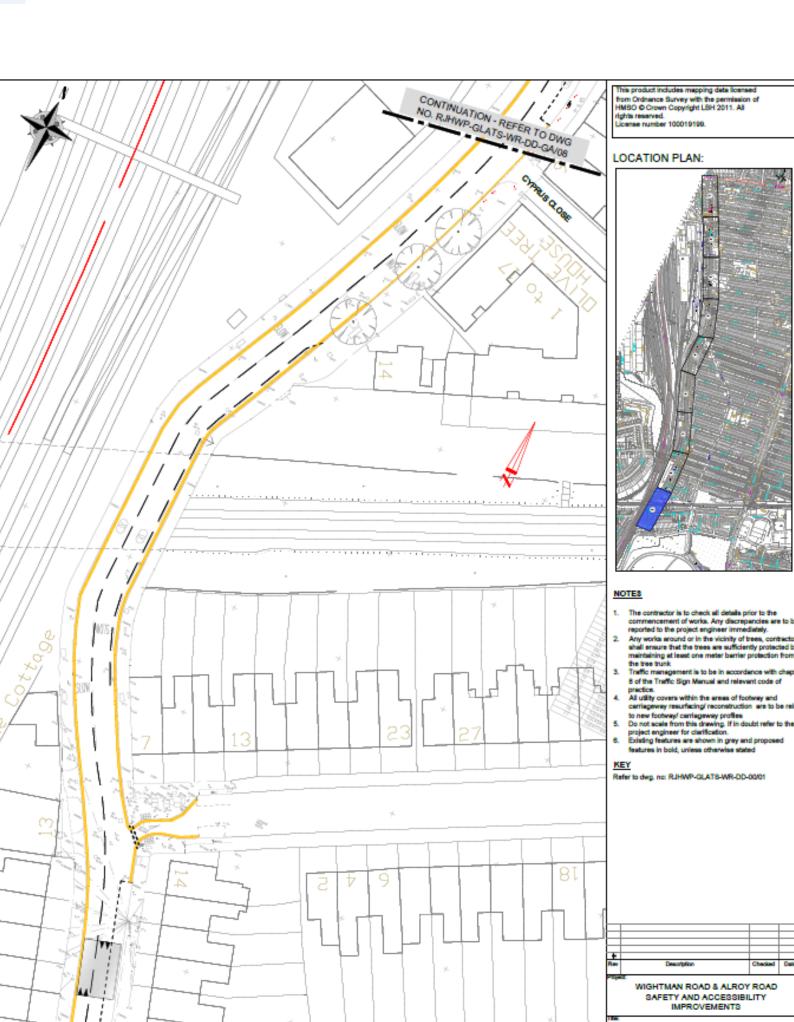
NOTE8

- The contractor is to check all details prior to the commencement of works. Any discrepancies a reported to the project engineer immediately. Any works around or in the vicinity of trees, coshall ensure that the trees are sufficiently prote maintaining at least one meter barrier protection the tree trunk. Traffic management is to be in accordance with 8 of the Traffic Sign Manual and relevant code practice.
- practice.
 All utility covers within the areas of footway and All usiny covers within the areas of footway an carriageway resurfacing reconstruction are to to new footway! carriageway profiles. Do not scale from this drawing. If in doubt refer project engineer for clarification. Existing features are shown in grey and propor
- features in bold, unless otherwise stated

KEY

Refer to dwg. no: RJHWP-GLATS-WR-DD-00/01

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QUALITY

It is the policy of Project Centre to supply Services that meet or exceed our clients' expectations of Quality and Service. To this end, the Company's Quality Management System (QMS) has been structured to encompass all aspects of the Company's activities including such areas as Sales, Design and Client Service.

By adopting our QMS on all aspects of the Company, Project Centre aims to achieve the following objectives:

- Ensure a clear understanding of customer requirements;
- Ensure projects are completed to programme and within budget;
- Improve productivity by having consistent procedures;
- Increase flexibility of staff and systems through the adoption of a common approach to staff appraisal and training;
- Continually improve the standard of service we provide internally and externally;
- Achieve continuous and appropriate improvement in all aspects of the company;

Our Quality Management Manual is supported by detailed operational documentation. These relate to codes of practice, technical specifications, work instructions, Key Performance Indicators, and other relevant documentation to form a working set of documents governing the required work practices throughout the Company.

All employees are trained to understand and discharge their individual responsibilities to ensure the effective operation of the Quality Management System.







Award Winning









LONDON TRANSPORT AWARDS



Certifications



Accreditations











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