

**DESIGNER'S RESPONSE TO
STAGE 1 ROAD SAFETY AUDIT
PLAS COCH, WREXHAM**

Prepared in accordance with Appendix F of GG119 Rev 0

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PROJECT DETAILS

Document Details

Report Title	Designer's Response to Stage 1 Road Safety Audit
Date	18.12.2020
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Prepared By:	ADL Traffic and Highways Engineering Ltd
On behalf of	n/a

Authorisation Sheet

Project:	Proposed McDonald's Restaurant, Plas Coch Retail Park, Wrexham
Report Title	Designer's Response to Stage 1 Road Safety Audit
Prepared by:	
Name	R. Green
Position	Associate
Signed	
Organisation	ADL Traffic & Highways Engineering Ltd
Date	18.12.2020
Approved by:	
Name	C. Chapman
Position	Director
Signed	CC
Organisation	ADL Traffic & Highways Engineering Ltd
Date	18.12.2020

CONTENTS

		Page No
1.0	INTRODUCTION	
1.1	Background to Road Safety Audit	1
1.2	Key Personnel	1
1.3	Baseline for Audit	1
2.0	ROAD SAFETY AUDIT DECISION LOG	3
3.0	STATEMENTS	12

APPENDICES

1.0	WELSH GOVERNMENT JUNCTION IMPROVEMENTS
2.0	PROPOSED HIGHWAY IMPROVEMENTS
3.0	PROPOSED PEDESTRIAN CROSSING
4.0	ARCHITECT'S SITE LAYOUT

1.0 INTRODUCTION

1.1 Background to Road Safety Audit

- 1.1.1 It is proposed to construct a McDonald's Restaurant at the Plas Coch Retail Park, Wrexham. Application P/2019/0919 was submitted to Wrexham Council on 12 December 2019.
- 1.1.2 In their consultation response of 27th February 2020, the Highway Authority requested a Stage 1 Road Safety Audit was undertaken to review the pedestrian environment on Plas Coch Road.
- 1.1.3 In response to this, a Stage 1 Road Safety Audit has been prepared to consider the adjacent highway network and facilities serving the site and this document forms ADL's Designer's Response to the Audit.
- 1.1.3 The audit was undertaken in accordance with GG119 by TMS Consultancy and this Designer's Response has been prepared in line with the template provided at Appendix F of GG119.

1.2 Key Personnel

- 1.2.1 The following organisations were involved in the preparation of the safety audit.

Table 1A Key Personnel

Overseeing Organisation	n/a
RSA Team	P. Cook, TMS
Design Organisation	R. Green, ADL Traffic & Highways Engineering Ltd

1.3 Baseline for Audit

- 1.3.1 This audit has been undertaken on the current highway layout surrounding the proposal site at the Plas Coch Retail Park at Wrexham.

- 1.3.2 It is noted that the Welsh Government are proposing changes to the A483 Junction 5 interchange and the Berse Road Roundabout, the latter of which was included in the scope of this audit.
- 1.3.3 A copy of the Welsh Government proposals are provided as Appendix 1.0 and it is noted that these include improvements to the Berse Road Roundabout, including the provision of a signalised crossing on the northbound exit from the roundabout onto Plas Coch Road. These improvements are currently at the consultation stage. The Welsh Government have funding for the works and expect them to be implemented by 2022. However, the detailed design is not yet fully committed.
- 1.3.4 Therefore, this Designer's Response is prepared based on the findings of the Audit, which relates to the existing highway layout at Wrexham, however, additional commentary is provided after the review of the problems raised in the Audit, in relation to the Welsh Government proposals.

2.0 ROAD SAFETY AUDIT DECISION LOG

- 2.1 This section considers the matters raised in the audit, utilising the same numbering as the audit document.

Audit Reference 2.1

RSA Problem:

Location – Proposed splitter island alteration at the Retail roundabout access to development site access road

Summary: Risk of injury to visually impaired pedestrians and wheelchair users.

The existing splitter island has incorrect tactile paving, a high kerb upstand and steep footway ramp slopes. This could cause problems for both visually impaired road users and wheelchair users leading to collisions with passing vehicles and injuries.

RSA Recommendation:

The tactile paving should be a minimum of 800mm deep on the footways and the splitter island. The ramp slopes should preferably be 1 in 20 or a maximum of 1 in 12. The dropped kerbs should be flush with the carriageway or a maximum of 6mm high.

Design Organisation Response:

The recommendation is accepted, and the improvement is shown on the plan in Appendix 2.0.

Overseeing Organisation Response:

N/A

Agreed RSA Action:

Overseeing Organisation Response:

N/A

Agreed RSA Action:

Audit Reference 3.1

RSA Problem:

Location – Pedestrian crossing points

Summary: Risk of injury to pedestrians

The proposed restaurant will attract customers from the University / BBC Wales complex and properties north of the roundabout. The existing crossing facilities are poor with incorrect tactile paving across Plas Coch Road northern arm, no tactile paving across the entrance to the University / BBC Wales complex and incomplete / no dropped kerbs across the western and southern arms of the junction. This could result in pedestrians being hit by passing vehicles and injured.

RSA Recommendation:

A pedestrian crossing assessment should be carried out and appropriate crossing facilities provided.

Design Organisation Response:

The recommendation is accepted, and the following improvements are shown on the plan at Appendix 2.0:

Existing Tactile paving on the northern arm reviewed and updated.
Existing dropped kerbs on the east arm serving the university upgraded to tactile paving.
New crossings with tactile paving are shown on the south arm.

Overseeing Organisation Response:

N/A

Agreed RSA Action:

Audit Reference 4.1

RSA Problem:

Location Pedestrian entrance to restaurant

Summary: Risk of injury to pedestrians

The proposed restaurant will attract customers across Plas Coch Road in the vicinity of the pedestrian entrance. There are no crossing facilities here and the facilities at Plas Coch roundabout are poor. This could result in pedestrians being hit by passing vehicles and injured.

RSA Recommendation:

A signalised pedestrian crossing assessment should be carried out and appropriate crossing facilities provided.

Design Organisation Response:

A signalised pedestrian crossing is proposed on Plas Coch Road, and can be seen in Appendices 3.0 and 4.0 respectively. The pedestrian crossing facilities at the Plas Coch Road Roundabout are also proposed to be improved in accordance with the Safety Audit recommendations (see item 3.1)

As noted in paragraph 1.3.3 the Welsh Government have also proposed a signalised pedestrian crossing facility on Plas Coch Road but at the roundabout.

The mechanisms for the provision of the Audit improvements, to allow flexibility for delivery, are discussed at the end of this review.

Overseeing Organisation Response:

N/A

Agreed RSA Action:

Audit Reference 5.1

RSA Problem:

Location – Pedestrian crossing facilities

Summary: Risk of injury to pedestrians

The proposed restaurant will attract customers across Plas Coch Road and Mold Road. The pedestrian facilities are incomplete, providing controlled crossings of 2 of the 3 signalised entry arms (Mold Road east and Plas Coch Road north) and none of the exit arms. This absence of facilities could lead to injuries to pedestrians from collisions with passing vehicles.

The tactile paving for the crossing of Plas Coch Road is incorrect with the stem on the wrong side of the crossing. Similarly, for the crossing of Mold Road east (exit from roundabout) the layout is also incorrect, using an old T shaped layout which was reserved for Zebra crossings but is no longer used. This could result in visually impaired pedestrians being hit by passing vehicles and injured.

RSA Recommendation:

The correct tactile paving layouts should be provided.

Design Organisation Response:

The recommendation is accepted, and the location of these improvements are identified at Appendix 2.0.

Whilst it is likely that there will be improvements to the Berse Road Roundabout as a result of the Welsh Government improvements scheme in the medium to long term, the developer accepts the findings of the safety audit none the less.

Overseeing Organisation Response:

N/A

Agreed RSA Action:

Audit Reference 5.2

RSA Problem:

Location – Pedestrian crossing facilities

Summary: Risk of injury to pedestrians

The tactile paving layout for the Mold Road east entry arm does not have a stem which is should as it is a controlled crossing. Where the cycle tracks meet the crossing there is no signing for a change from segregated use to shared use with pedestrians and vice versa. This could result in visually impaired pedestrians being hit by passing vehicles and collisions between cyclists and pedestrians resulting in injuries.

RSA Recommendation:

The correct tactile paving layouts should be provided. Signs should be provided for the change in cycle track status.

Design Organisation Response:

The recommendation is accepted, and the location of these improvements are identified at Appendix 2.0.

Whilst it is likely that there will be improvements to the Berse Road Roundabout as a result of the Welsh Government improvements scheme in the medium to long term, the developer accepts the findings of the safety audit none the less.

Overseeing Organisation Response:

N/A

Agreed RSA Action:

Audit Reference 5.3

RSA Problem:

Location Cycle facility north east corner of roundabout

Summary: Risk of injury to cyclists and pedestrians

There is an off-carriageway cycle facility leading from Plas Coch Road across Mold Road east, linking to a cycle facility on the south- east side of Mold Road.

The facility leaving Plas Coch Road has a high kerb upstand which could lead to cyclists falling off their cycles. The corduroy tactile paving provided here and elsewhere it crosses footways is incorrect and could lead to cyclists colliding with visually impaired pedestrians. Where the facility re-joins Mold Road it does not provide adequate guidance for cyclists to safely re-join the carriageway which could result in a collision with a motor vehicle.

RSA Recommendation:

The kerb upstand should be flush with the carriageway. The correct tactile paving layouts should be provided. White line guidance should be provided for cyclist re-entering the carriageway on Mold Road.

Design Organisation Response:

The recommendation is accepted, and the location of these improvements are identified at Appendix 2.0.

Whilst it is likely that there will be improvements to the Berse Road Roundabout as a result of the Welsh Government improvements scheme in the medium to long term, the developer accepts the findings of the safety audit none the less.

Overseeing Organisation Response:

N/A

Agreed RSA Action:

Summary of problems raised at Stage 1 Road Safety Audit

- 2.2 This completes the review of the matters raised in the Stage 1 Road Safety Audit and it is noted that all matters raised can be addressed via local highway improvements.
- 2.3 All items raised within this audit, but notably the proposed signalised crossing point (Audit Ref. 4.1) on Plas Coch Road are proposed to be secured via s106 funding as it may be superseded by improvements proposed by the Welsh Government, which would include a signalised crossing on the Plas Coch Road exit of the Berse Road Roundabout, as well as other improvements to the Berse Road roundabout.
- 2.4 The proposed funding mechanism would allow this crossing to be provided if the Welsh Government scheme does not come forward. It is considered that if the Welsh Government crossing is implemented, this will provide a suitable solution to address the concerns raised at Audit item 4.1 and ADL's proposed crossing would be superseded.

3.0 STATEMENTS

3.1 Design Organisation

3.1.1 The following declaration has been completed on behalf of the design organisation.

Design Organisation Statement

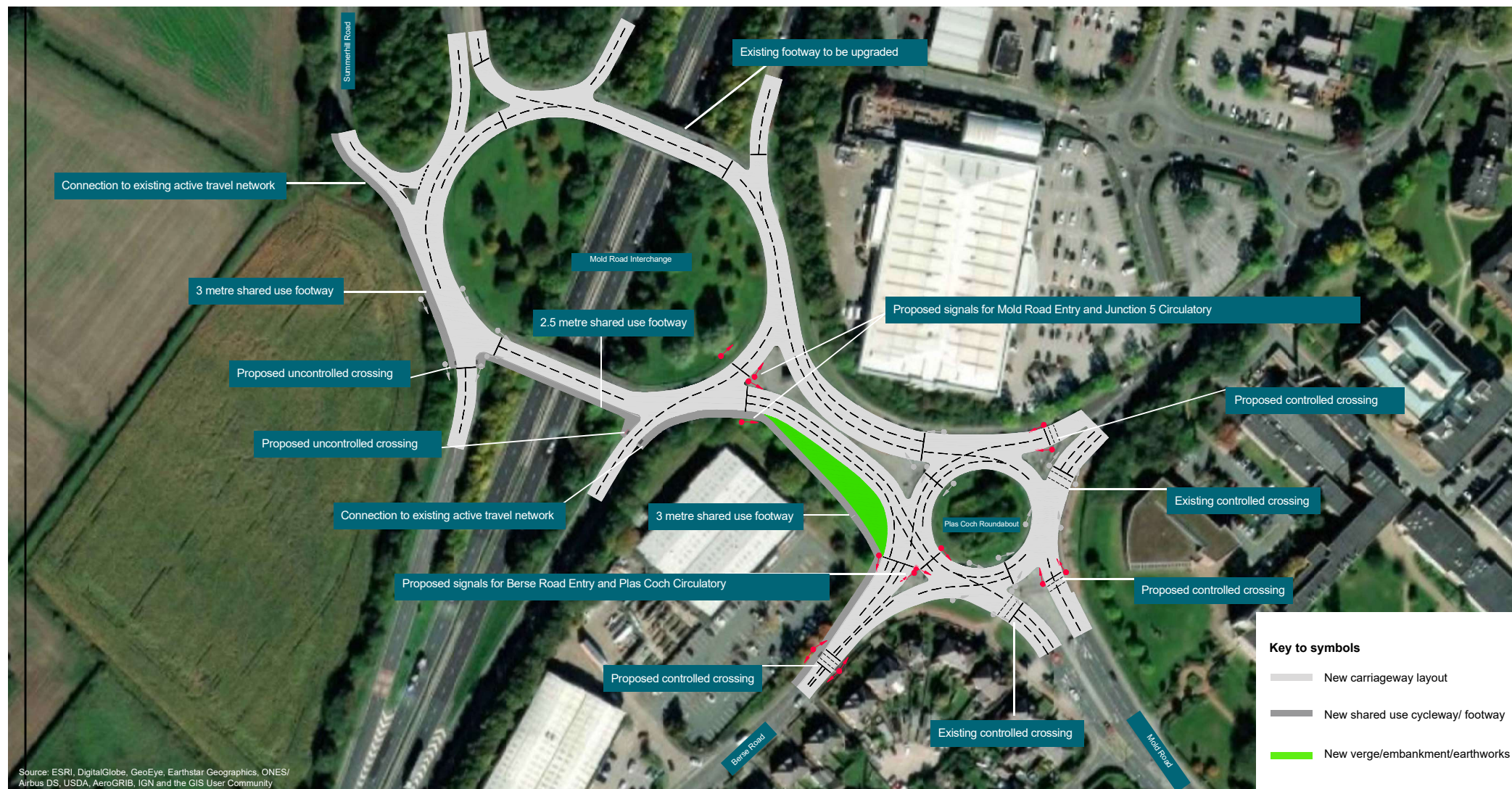
On behalf of the design organisation I certify that:	
1) The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with Overseeing Organisation.	
Name:	Rob Green
Signed:	
Position:	Associate
Organisation:	ADL Traffic and Highways Engineering Ltd
Date:	18.12.2020

WELSH GOVERNMENT JUNCTION IMPROVEMENTS



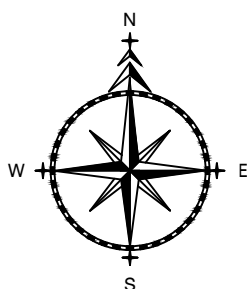
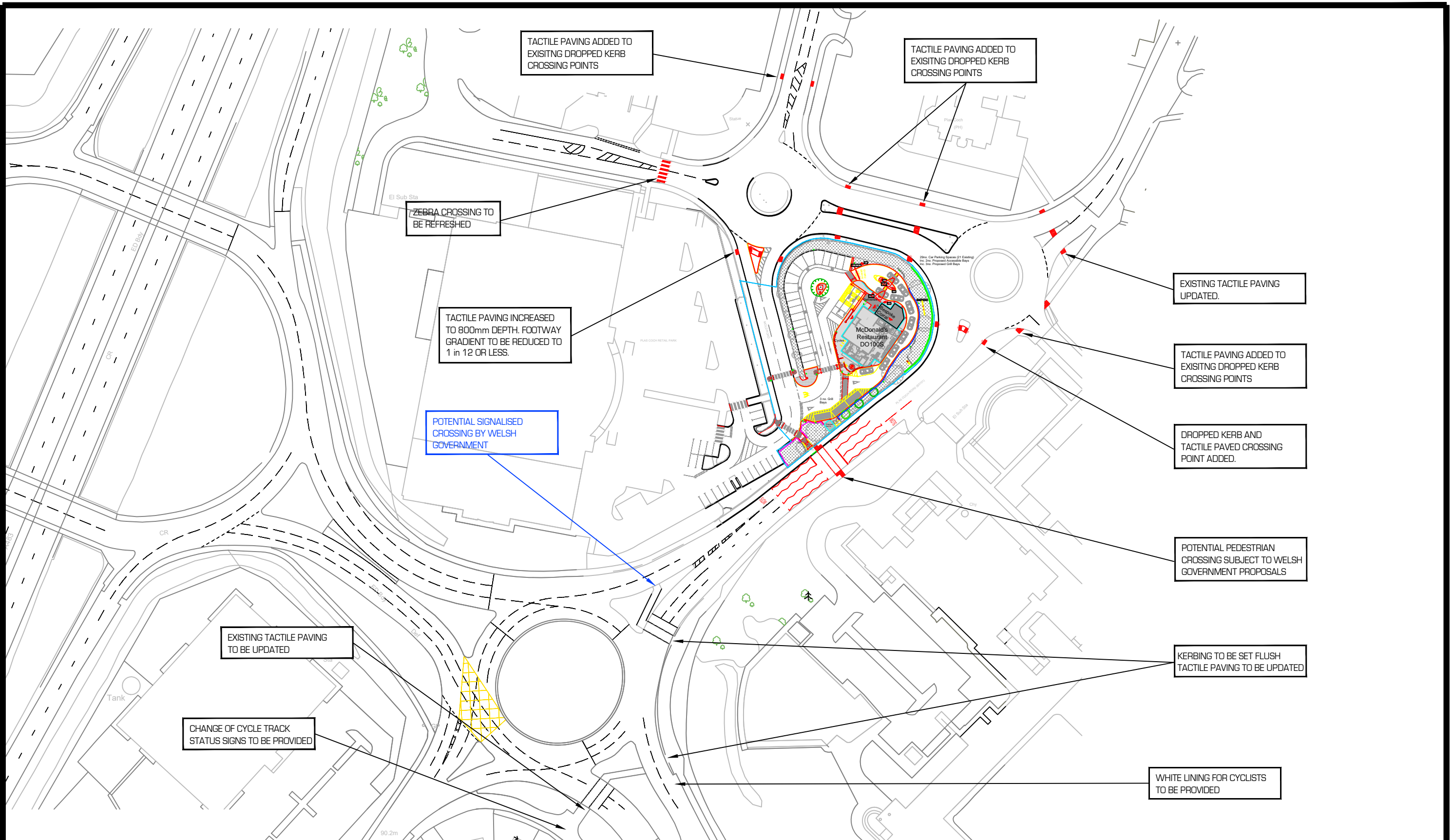
Llywodraeth Cymru
Welsh Government

Proposed Scheme for Junction 5 (Plas Coch Roundabout / Mold Road)



APPENDIX 1.0
WELSH GOVERNMENT
JUNCTION IMPROVEMENTS

PROPOSED HIGHWAY IMPROVEMENTS



ADL
TRAFFIC &
HIGHWAYS

ADL House
The Oaklands Business Park
Yate, Bristol
BS37 5NA
Tel : 01454 332100
Fax : 01454 327983
E-Mail : CAD@ADLTRAFFIC.CO.UK

NOTES

1. PRELIMINARY DESIGN PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY. ALL DETAILS ARE SUBJECT TO INCLUDING CHECKING STATUTORY SERVICE APPARATUS.
 2. DO NOT SCALE FROM THIS DRAWING.
 3. BACKGROUND PLAN IS BASED UPON 7391_AEW_8104_1004B.
 4. ALL DETAILS TO BE CONFIRMED ON SITE AND ON A TOPOGRAPHICAL SURVEY.
 5. ALL TRACKS ASSUME GRADIENTS AND CAMBERS DO NOT EXCEED 1:60 AND 1:40 RESPECTIVELY OTHERWISE VEHICLE MANOEUVRABILITY MAY BE AFFECTED.
 6. ALL LAND OWNERSHIP DETAILS, EXTENT OF ADOPTED HIGHWAY AND RIGHTS OF WAY TO BE CONFIRMED.
 7. ASSUMES ALL LANDSCAPING CAN BE ALTERED AND NO TREES ARE SUBJECT TO TPO.
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AMENDMENTS

REF.	DATE	DESCRIPTION

APPENDIX 2.0 PROPOSED HIGHWAY IMPROVEMENTS

ADL Job No. 4171

Project
Proposed McDonald's Restaurant
Plas Coch, Wreham

Title
Proposed Local
Improvements

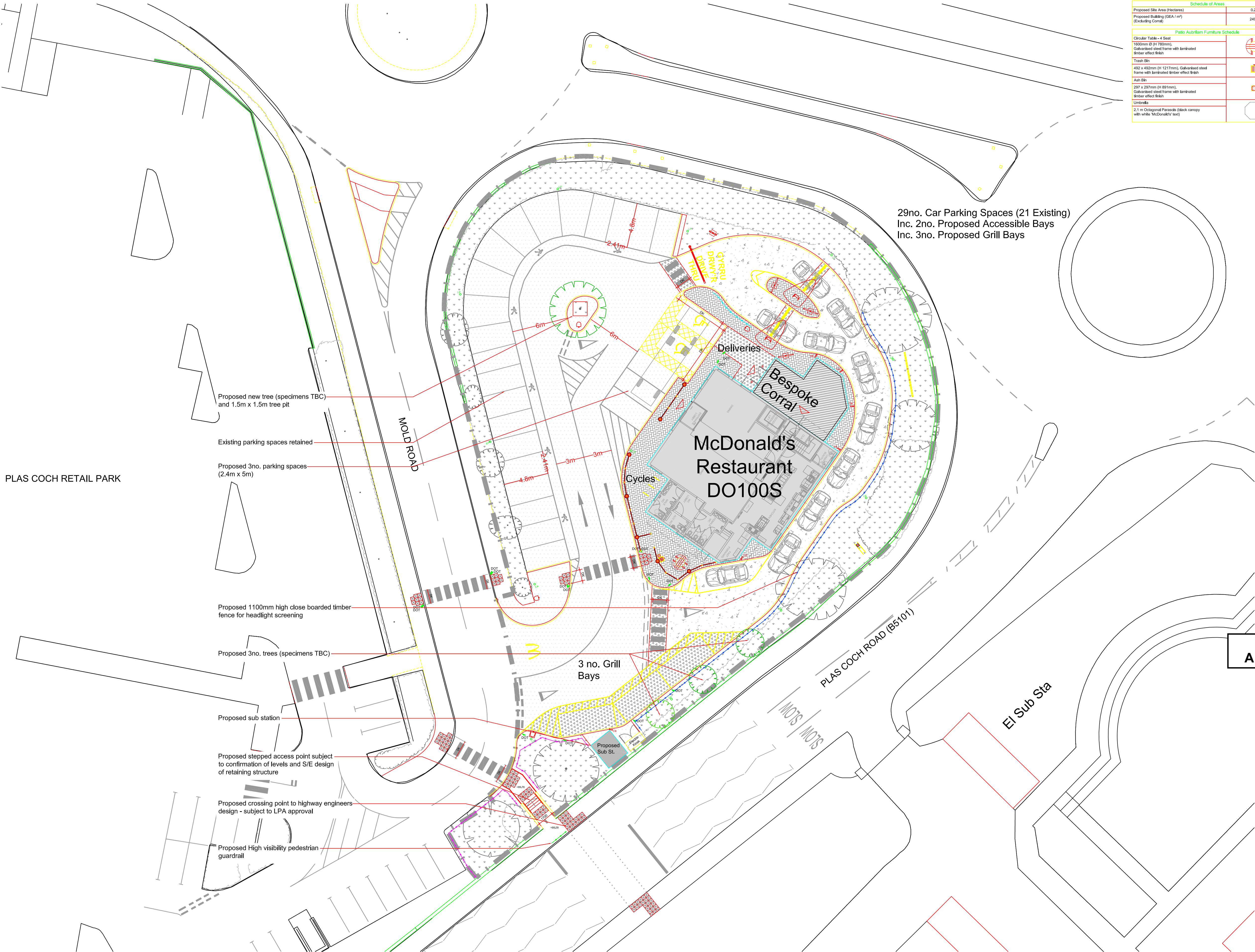
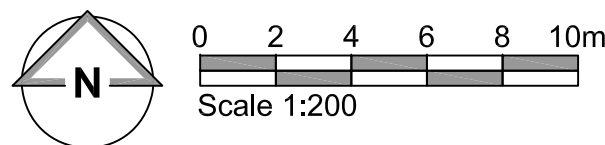
Date 05.11.20 Drawn PGL

Checked Date Approved Date

Scale 1:500@A3 Drg No. 4171-08 Rev. A

PROPOSED PEDESTRIAN CROSSING

ARCHITECT'S SITE LAYOUT



Proposed Schedule of Parking	
Accessible Bays	02
Grill Bays	03
General Bays	24
Total Parking Bays	29

Schedule of Areas	
Proposed Site Area (Hectares)	0.25
Proposed Building (GEA / m²) (Excluding Corral)	249.4

Patio Aurbifram Furniture Schedule	
Circular Tables - 4 Seat 1500mm Ø (H 740mm) Galvanised steel frame with laminated timber effect finish	
Trash Bin 492 x 492mm (H 1217mm). Galvanised steel frame with laminated timber effect finish	
207 x 207mm (H 801mm). Galvanised steel frame with laminated timber effect finish	
Umbrella 2.1 m Octagonal Parasole (black canopy with white McDonald's text)	

- NOTES
- All dimensions and levels are to be checked on site.
 - Any discrepancies are to be reported to the architect before any work commences.
 - This drawing shall not be scaled to ascertain any dimensions. Work to figured dims only.
 - This drawing shall not be reproduced without express written permission from AEW.
 - Title overlay drawings and ownership boundaries are produced using all reasonable endeavours. AEW cannot be responsible for the accuracy or scale discrepancy of base plans supplied to them.
 - All works are to be undertaken in accordance with Building Regulations and the latest British Standards.
 - All proprietary materials and products are to be used strictly in accordance with the manufacturers recommendations.

CDM 2015

Client notified of duties: **at design workshops.**

Principal Designer: **TBC**

Unless noted below, all known hazards have been highlighted on the drawing:

Drawing Based on: Glanville's Survey Drawing no. 81901104/101
Dated: January 2019 and Haydens Tree Survey Drawing no:7215-D-CP Dated:21/01/19

- Scale for planning purposes only.
- Extent of McDonald's Demise Indicated Thus:

Proposed Site Finishes	
Tarmacadam - Car Park	
Imprinted Concrete To Drive-Thru Lane: An-Entrained Concrete With Full Layer Works, Hardening Agent & Curing System Through Colour Concrete Grey, London Cobble Pattern.	
Marshall's 200mm x 100mm Charcoal Keyblock Paving - Patio	
Tarmacadam - Footpaths - Charcoal	
Turf & Low Level Shrubs - Soft Landscaping	
Brushed Concrete - Drive Thru Lanes w/ Road Markings and Delivery Route	
1100mm High Timber Close Boarded Fence	
1100mm High Timber Post and Rail Fence	
600mm High Timber Knee Rail Fence	
1000mm High visibility pedestrian guardrail	
Target Bin	
Cranked Bollards - McDonald's Standard Cranked Bollard Painted White	
Tactile Bloor Paving	
Bin Indicative Lighting Column - Positions subject to confirmation by MSE consultant	

General Site Proposal Notes:

DOT denotes Department of Transport Signs. For Signage type refer to AEW drawing no. 7391_AEW_8104_1008

DK denotes drop kerb to be installed

All drive thru related road markings to be in yellow thermoplastic material

Car park related road markings to be in white thermoplastic material

Standard parking bays to be finished in white thermoplastic material

All junction road markings to be finished in white thermoplastic material

Accessible parking bays to be finished in yellow thermoplastic material to current Part M standards with relevant DOT signage and drop kerbs as indicated

Parked order bays to be lined in yellow thermoplastic material with relevant DOT signage

All pedestrian crossings set out in white thermoplastic material. Tactile paving where crossing leads to safe destination

Drop kerbs to be installed along delivery routes

For more detailed landscape design please refer to Vector Landscape Designers drawing no 17229-VL-MCD-01 Rev A

APPENDIX 4.0 ARCHITECT'S SITE LAYOUT

B	01/12/20	JJ	TSS
Layout updated to show 1100mm high close boarded fence to DT lane for head light screening. Whittelling in car park amended to increase size of parking bays.			
A	24/11/20	JJ	TSS
Crossing point introduced towards south of site as per ADL's highways design.			
-	29/10/20	JJ	TSS
Initial Issue			
REV	Date	Drawn by :-	Checked by :-
Status	Purpose of Issue		
S2	For Information		
drawing stage	Planning		
client			

McDonald's Restaurants Ltd			
project		store	
Plas Coch Retail Park Wrexham		8104	
drawing title			
Proposed Site Plan			
date	29/10/20	drawn	JJ
scale@A1	1:200	checked	TSS

Proposed Site Plan