



Adran yr Economi a'r Seilwaith
Department for Economy and Infrastructure

Llywodraeth Cymru
Welsh Government

The M4 Motorway (Junction 23 (East of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and The M48 Motorway (Junction 23 (East of Magor) Connecting Road) Scheme 201-

The M4 Motorway (Junction 23 (East of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and The M48 Motorway (Junction 23 (East of Magor) Connecting Road) (Amendment) Scheme 201-

The London to Fishguard Trunk Road (East of Magor to Castleton) Order 201-

The M4 Motorway (West of Magor to East of Castleton) and the A48(M) Motorway (West of Castleton to St Mellons)(Variation of Various Schemes) Scheme 201-

The M4 Motorway (Junction 23 (East of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and the M48 Motorway (Junction 23 (East of Magor) Connecting Road) and The London to Fishguard Trunk Road (east of Magor to Castleton) (Side Roads) Order 201-

The Welsh Ministers (The M4 Motorway (Junction 23 (East of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and the M48 Motorway (Junction 23 (East of Magor) Connecting Road) and the London to Fishguard Trunk Road (East of Magor to Castleton)) Compulsory Purchase Order 201-

The M4 Motorway (Junction 23 (East Of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and The M48 Motorway (Junction 23 (East Of Magor) Connecting Road) (Supplementary) Scheme 201-

The Welsh Ministers (The M4 Motorway (Junction 23 (East Of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and The M48 Motorway (Junction 23 (East Of Magor) Connecting Road) and The London to Fishguard Trunk Road (East of Magor to Castleton)) Supplementary Compulsory Purchase Order 201-

Appendices to Proof of Evidence

Ben Sibert , BEng CEng FICE MIStructE MCIHT

Welsh Government, Engineering Design

Document Reference: WG 1.5.3 |

Appendix A – Land Owner Objection Plans

Drawing M4CaN-DJV-LSI-ZG_GEN-DR-YL-1581 – Plan of Land Interest Objectors

Drawing M4CaN-DJV-LSI-ZG_GEN-DR-YL-1582 – Plan of Land Interest Objectors – Newport Docks Sheet 1 of 2 - North

Drawing M4CaN-DJV-LSI-ZG_GEN-DR-YL-1583 – Plan of Land Interest Objectors – Newport Docks Sheet 2 of 2 - South

Appendix B – Motorway Rest Areas

Drawing M4CaN-DJV-HGN-ZG-GEN-SK-CH-0043 – Existing Rest Areas along the M4/M5.

Drawing M4CaN-DJV-HGN-ZG-GEN-SK-CH-0044 – Rest Areas along the M4/M5 with the proposed Scheme.

File Note M4CaN-DJV-GEN-ZG-GEN-FN-TR-0004 – Schedule of Frequencies of Rest Areas.

Appendix C – Road Lighting

Drawing M4CaN-DJV-HGN-ZG-GEN-SK-CH-0045 – Existing and Proposed Road Lighting Extents.

File Note M4CaN-DJV-GEN-ZG-GEN-FN-LE-0001 – Schedule of Road Lighting.

Appendix D – Schedule of Intelligent Transport Systems

File Note M4CaN-DJV-HAC-ZG_GEN-FN-CH-0001

Appendix E – Demolition of Property

File Note M4CaN-DJV-LSI-ZG_GEN-FN-YL-0011 – Affected Residential Properties

File Note M4CaN-DJV-LSI-ZG_GEN-FN-YL-0012 – Affected Commercial Properties

Appendix F – Summary of ABP Land Areas in the CPO

File Note M4CaN-DJV-LSI-Z3_GEN-FN-YL-0001 – Total ABP land required for the scheme

Drawing M4CaN-DJV-LSI-ZG_GEN-DR-YL-1639 – ABP Land Area

Appendix A – Land Owner Objection Plans

Drawing M4CaN-DJV-LSI-ZG_GEN-DR-YL-1581 – Plan of Land Interest Objectors

Drawing M4CaN-DJV-LSI-ZG_GEN-DR-YL-1582 – Plan of Land Interest Objectors – Newport Docks Sheet 1 of 2 - North

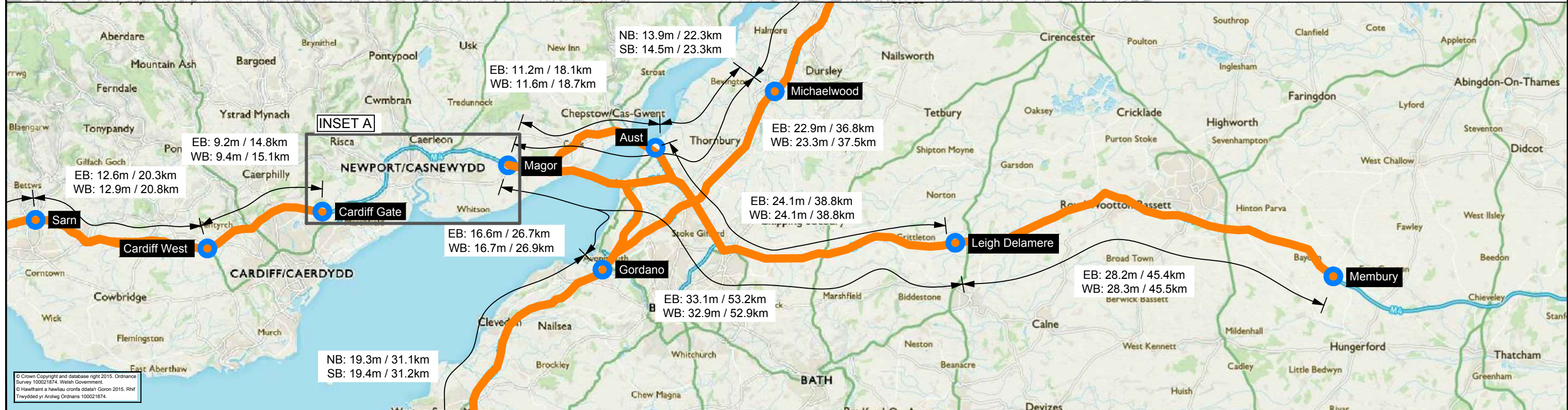
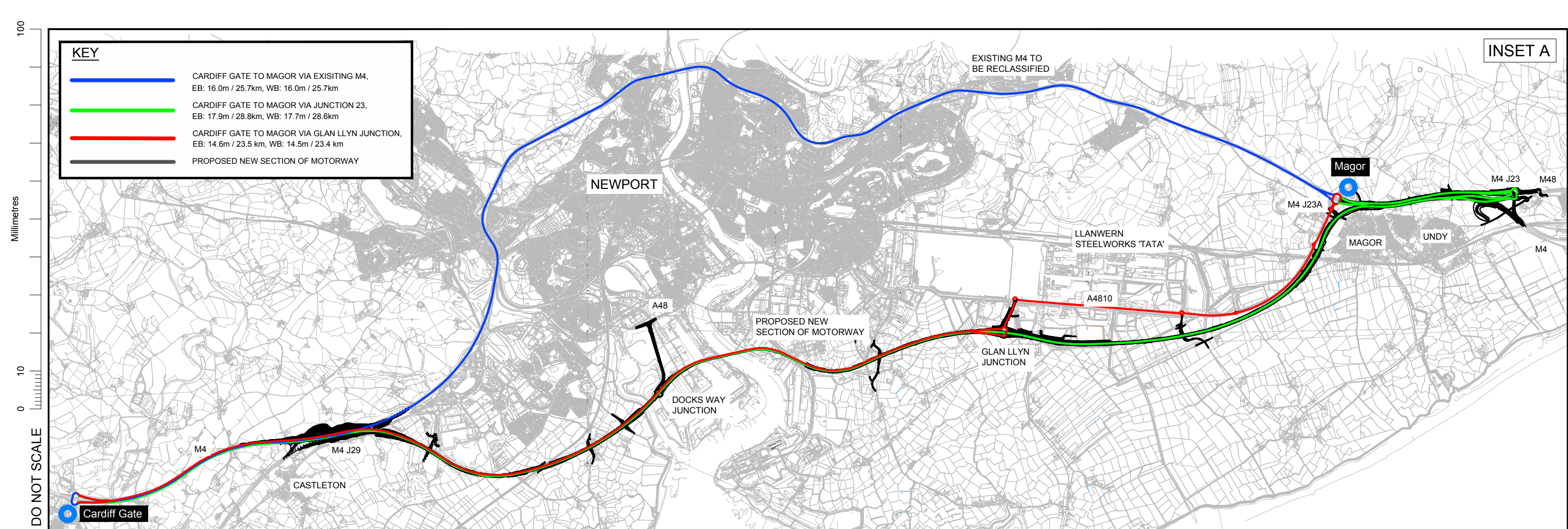
Drawing M4CaN-DJV-LSI-ZG_GEN-DR-YL-1583 – Plan of Land Interest Objectors – Newport Docks Sheet 2 of 2 - South

Appendix B – Motorway Rest Area Frequency and Access

Drawing M4CaN-DJV-HGN-ZG-GEN-SK-CH-0043 – Existing Rest Areas along the M4/M5.

Drawing M4CaN-DJV-HGN-ZG-GEN-SK-CH-0044 – Rest Areas along the M4/M5 with the proposed Scheme.

File Note M4CaN-DJV-GEN-ZG-GEN-FN-TR-0004 – Schedule of Frequencies of Rest Areas.



NOTES:

- DISTANCES ALONG EXISTING ROUTES ARE CALCULATED FROM GOOGLE MAPS.
- DISTANCES ALONG PROPOSED ROUTES HAVE BEEN CALCULATED USING M4 CORRIDOR AROUND NEWPORT HIGHWAY MODEL.

KEY:

- MOTORWAY REST AREA

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction	NONE
Maintenance / Cleaning	NONE
Use	NONE
Decommissioning / Demolition	NONE

P01	09/12/16	First Issue	BEB	CCR	BCS
Rev.	Date	Description	By	Chk'd	App'd

Drawing Status	FOR COSTING	Suitability	D1
Project Team			
Client			



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Welsh Government

Project Title	M4 CORRIDOR AROUND NEWPORT
Drawing Title	REST AREAS ALONG THE M4/M5 WITH THE PROPOSED SCHEME
Scale	NTS
Original Size	A3
Drawing Number	
Project	M4CaN - DJV - HGN - ZG_GEN - SK - CH - 0044
Location	
Type	
Role	
Number	
Authorised	BCS
Date	09/12/16
Revision	P01

File Note

Project title M4 Corridor around Newport

cc

File reference

M4CaN-DJV-GEN-ZG_GEN-FN-TR-0004

Date

29 November 2016

Subject Schedule of Frequencies of Motorway Rest Areas on the M4/M5

1 Introduction

This File Note summarises in the table in Section 2, distances between Motorway Rest Areas on the motorway network within 50 miles/80km of the Scheme.

The existing situation figures have been calculated using the route planner function of Google Maps on 20th September 2016. Start/end locations have been determined by utilising the Google Maps search function for each rest area.

The proposed situation gives distances between rest areas, with the Scheme in place. Journeys in black text are those not affected by the proposed Scheme and have been calculated using the route planner function of Google Maps as described above. Journeys in red text are those affected by the proposed Scheme and have been calculated using both Google Maps and the Scheme layout plans.

This file note does not provide details of journey times, which will be provided from the traffic forecasting model.

Google's route planner function has been used as a comparison basis due to the extent of rest areas within 50 miles/ 80 km being remote from the Scheme.

File Note

2 Frequency of Rest Areas

	Existing		Proposed		
	Distance (m)	Distance (km)	Distance (m)	Distance (km)	Comment
M4 Westbound					
Membury Services West to Leigh Delamere Services West	28.3	45.5	28.3	45.5	Remote from the Scheme
Leigh Delamere Services West to Aust Services	24.1	38.8	24.1	38.8	Remote from the Scheme
Aust to Magor Services	11.5	18.5	11.6	18.7	Changes due to the new route through J23.
Leigh Delamere Services West to Magor Services	32.9	52.9	32.9	52.9	No significant change: free flow link around J23.
Magor Services to Cardiff Gate Services via existing M4	16.0	25.7	16.0	25.7	No change to existing route length.
Magor Services to Cardiff Gate Services via Glan Llyn	N/A	N/A	14.5	23.4	New route
Magor Services to Cardiff Gate Services via J23	N/A	N/A	17.7	28.6	New route
Cardiff Gate Services to Cardiff West Services	9.4	15.1	9.4	15.1	Remote from the Scheme
Cardiff West Services to Sarn Park Services West	12.9	20.8	12.9	20.8	Remote from the Scheme
Sarn Park Services West to Swansea West Services	25.8	41.5	25.8	41.5	Remote from the Scheme
M5 Northbound onto M4 Westbound					
Taunton Deane Services North to Bridgewater Services	11.7	18.8	11.7	18.8	Remote from the Scheme
Bridgewater Services to Sedgemoor Services North	12.9	20.8	12.9	20.8	Remote from the Scheme
Sedgemoor Services North to Gordano Services	19.3	31.1	19.3	31.1	Remote from the Scheme
Gordano Services to Magor Services	16.7	26.9	16.7	26.9	No significant change: free flow link around J23.
M5 Southbound onto M4 Westbound					
Strensham Services South to Gloucester Services South	18.3	29.5	18.3	29.5	Remote from the Scheme
Gloucester Services South to Michaelwood Services South	14.7	23.7	14.7	23.7	Remote from the Scheme
Michaelwood Services South to Aust Services	14.5	23.3	14.5	23.3	Remote from the Scheme
Michaelwood Services South to Magor Services	23.3	37.5	23.3	37.5	No significant change: free flow link around J23.

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	Existing		Proposed		
	Distance (m)	Distance (km)	Distance (m)	Distance (km)	Comment
M4 Eastbound					
Swansea West Services to Sarn Park Services East	25.2	40.6	25.2	40.6	Remote from the Scheme
Sarn Park Services East to Cardiff West Services	12.6	20.3	12.6	20.3	Remote from the Scheme
Cardiff West Services to Cardiff Gate Services	9.2	14.8	9.2	14.8	Remote from the Scheme
Cardiff Gate Services to Magor Services via existing M4	16.0	25.7	16.0	25.7	No change to existing route length.
Cardiff Gate Services to Magor Services via Glan Llyn	N/A	N/A	14.6	23.5	New route
Cardiff Gate Services to Magor Services via J23	N/A	N/A	17.9	28.8	New route
Magor services to Aust Services	11.2	18.0	11.2	18.1	No significant change: dedicated east bound lane around the north of J23 gyratory.
Aust Services to Leigh Delamare Services East	24.1	38.8	24.1	38.8	Remote from the Scheme
Magor Services to Leigh Delamere Services East	32.9	52.9	33.1	53.2	Increase in journey distance as a result of route through traffic signalised J23 to the M4 motorway.
Leigh Delamere Services East to Membury Services East	28.2	45.4	28.2	45.4	Remote from the Scheme
M4 Eastbound onto M5 Northbound					
Magor Services to Michaelwood Services North	22.7	36.5	22.9	36.8	Increase in journey distance as a result of route through traffic signalised J23 to the M4 motorway.
Michaelwood Services to Gloucester Services North	15.1	24.3	15.1	24.3	Remote from the Scheme
Gloucester Services North to Strensham Services North	19.1	30.7	19.1	30.7	Remote from the Scheme
Aust Services East to Michaelwood services North	13.9	22.3	13.9	22.3	Remote from the Scheme
M4 Eastbound onto M5 Southbound					
Magor Services to Gordano Services	16.4	26.4	16.6	26.7	Increase in journey distance as a result of route through traffic signalised J23 to the M4 motorway.
Gordano Services to Sedgemoor Services South	19.4	31.2	19.4	31.2	Remote from the Scheme
Sedgemoor Services South to Bridgewater Services	13.1	21.1	13.1	21.1	Remote from the Scheme
Bridgewater Services to Taunton Deane Services South	11.8	19.0	11.8	19.0	Remote from the Scheme

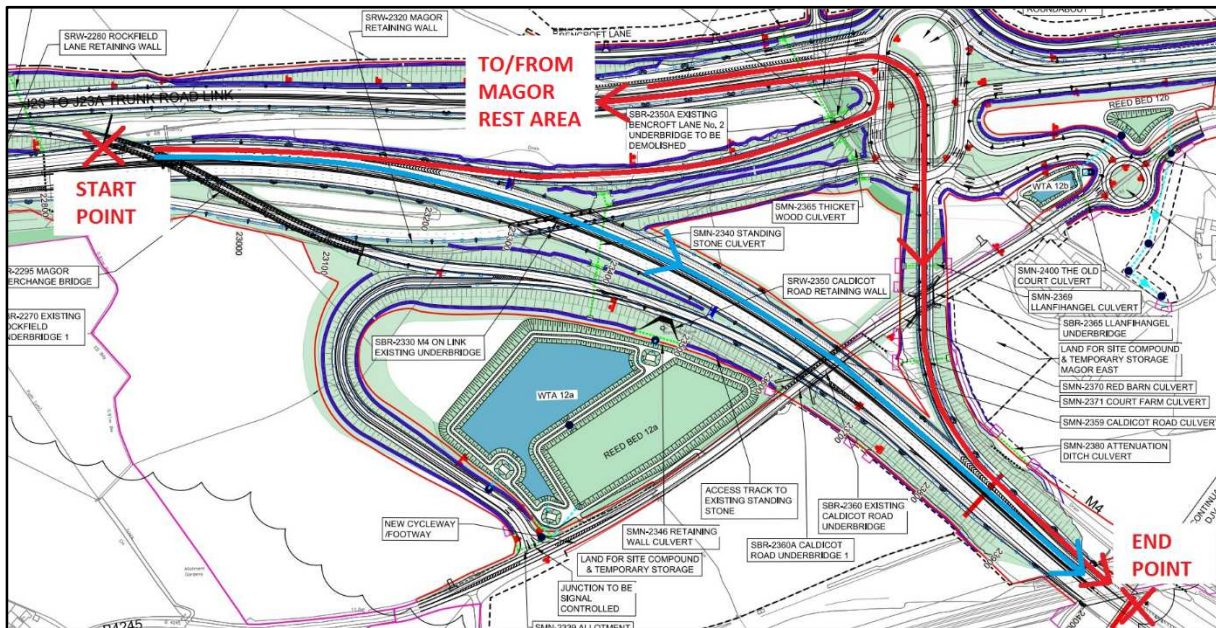
File Note

29 November 2016

3 Details of overall detour using the junction 23 route to Magor rest area

3.1 Eastbound

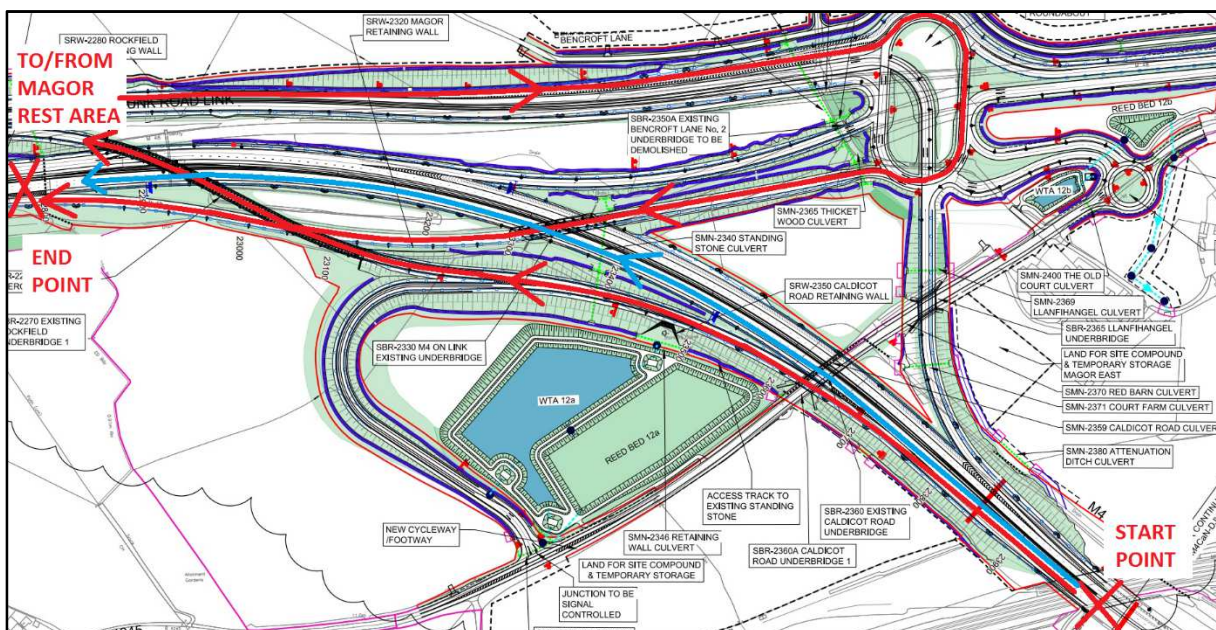
An eastbound road user on the proposed new motorway visiting Magor rest area via junction 23 (red route shown below) would need to make an additional detour of 6.5km compared to a road user carrying straight on through on the proposed new motorway (blue route shown below), due to the need to U-turn at junction 23.



Eastbound route to Magor rest area via junction 23

3.2 Westbound

A westbound road user on the proposed new motorway visiting Magor rest area via junction 23 (red route shown below) would need to make an additional detour of 6.5km compared to a road user carrying straight on through on the proposed new motorway (blue route shown below), due to the need to U-turn at junction 23.



Westbound route to Magor rest area via junction 23

File Note

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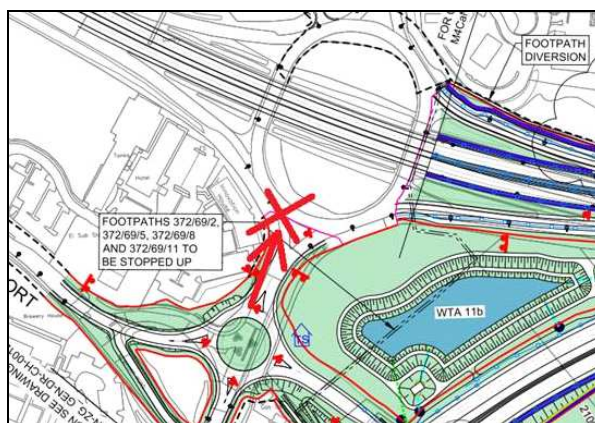
4 Details of distance off the motorway using the Glan Llyn junction route to Magor rest area

4.1 Eastbound

For eastbound road users on the proposed new motorway arriving at Magor rest area, there is the option to use the proposed new junction at Glan Llyn and the A4810 route which avoids the need for a U turn movement at J23. This route would include 6.6km off the motorway to link Glan Llyn junction to junction 23A, measured between the points shown below.



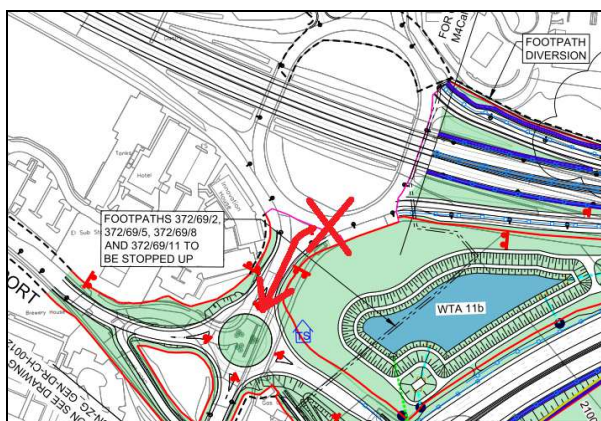
Westbound route via Glan Llyn: Start point



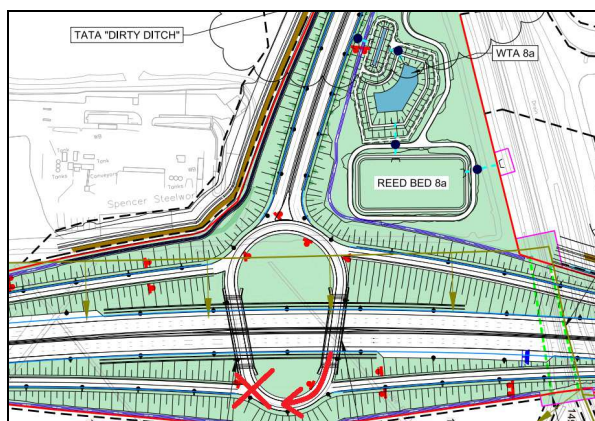
Westbound route via Glan Llyn: End point

4.2 Westbound

For westbound road users departing from Magor rest area going to the proposed new motorway, there is the option to follow the same route as described in Section 4.1 above. This route would include 6.7km off the motorway to link junction 23A to Glan Llyn junction, measured between the points shown below.



Eastbound route via Glan Llyn: Start point



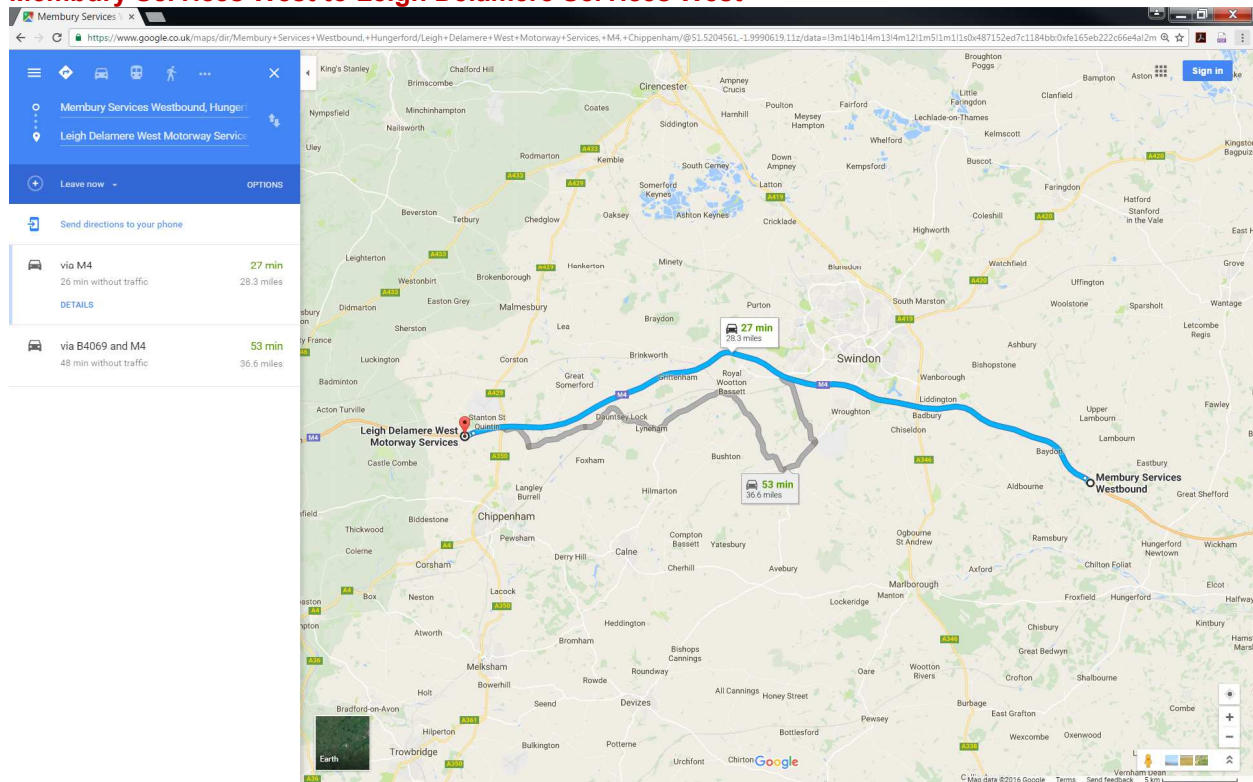
Eastbound route via Glan Llyn: End point

File Note

29 November 2016

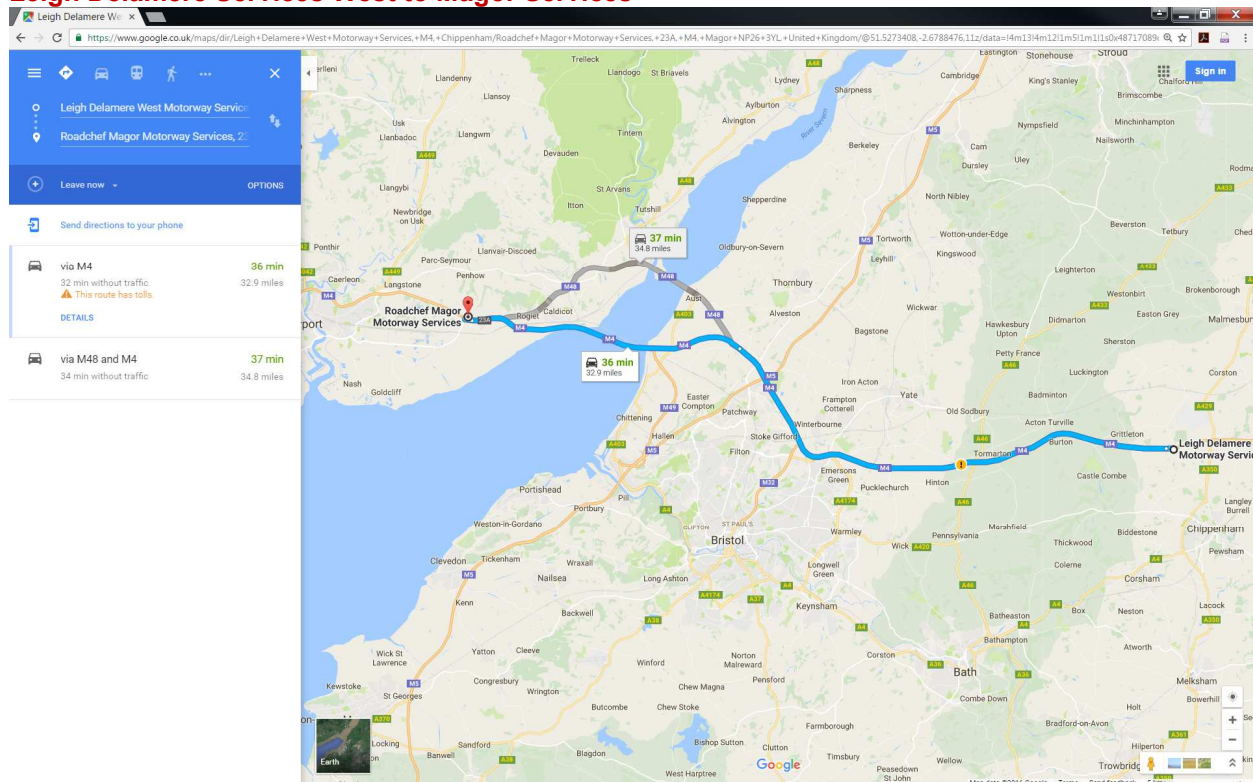
Appendix A – Screenshots of Route Calculations (Google Maps Route Planner)

Membury Services West to Leigh Delamere Services West



Map data ©2016 Google

Leigh Delamere Services West to Magor Services

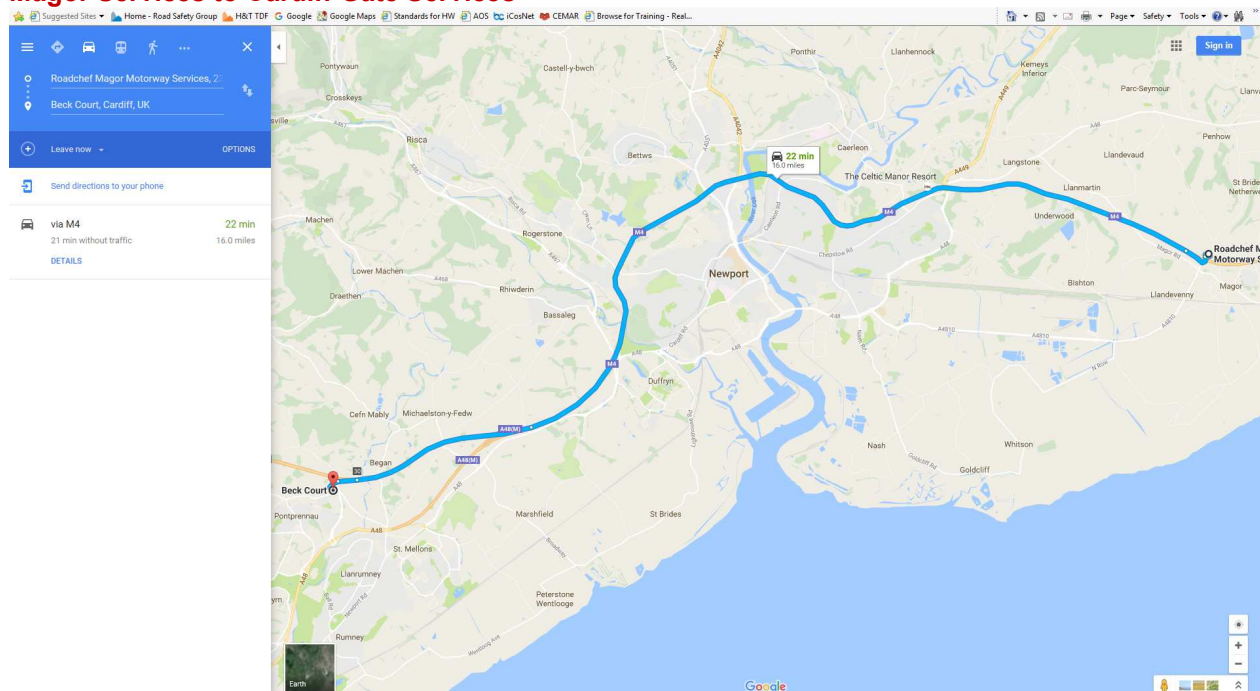


Map data ©2016 Google

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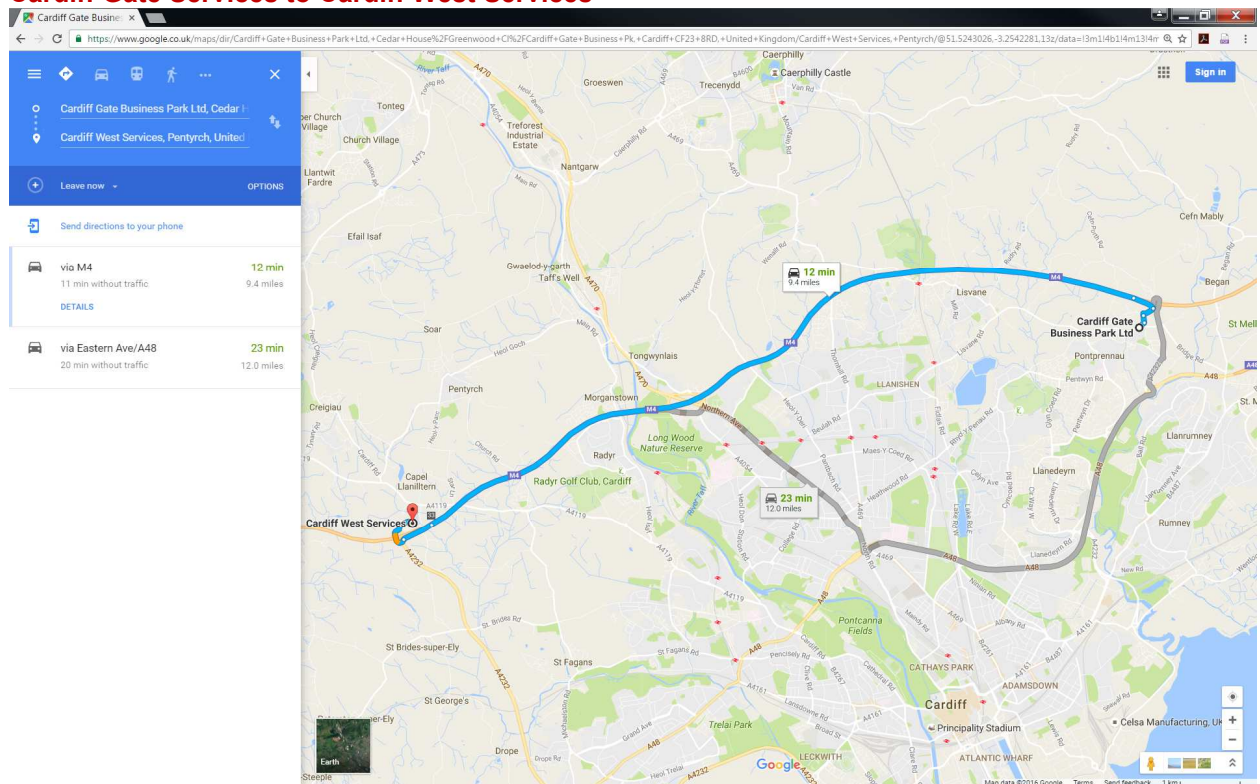
29 November 2016

Magor Services to Cardiff Gate Services



Map data ©2016 Google

Cardiff Gate Services to Cardiff West Services

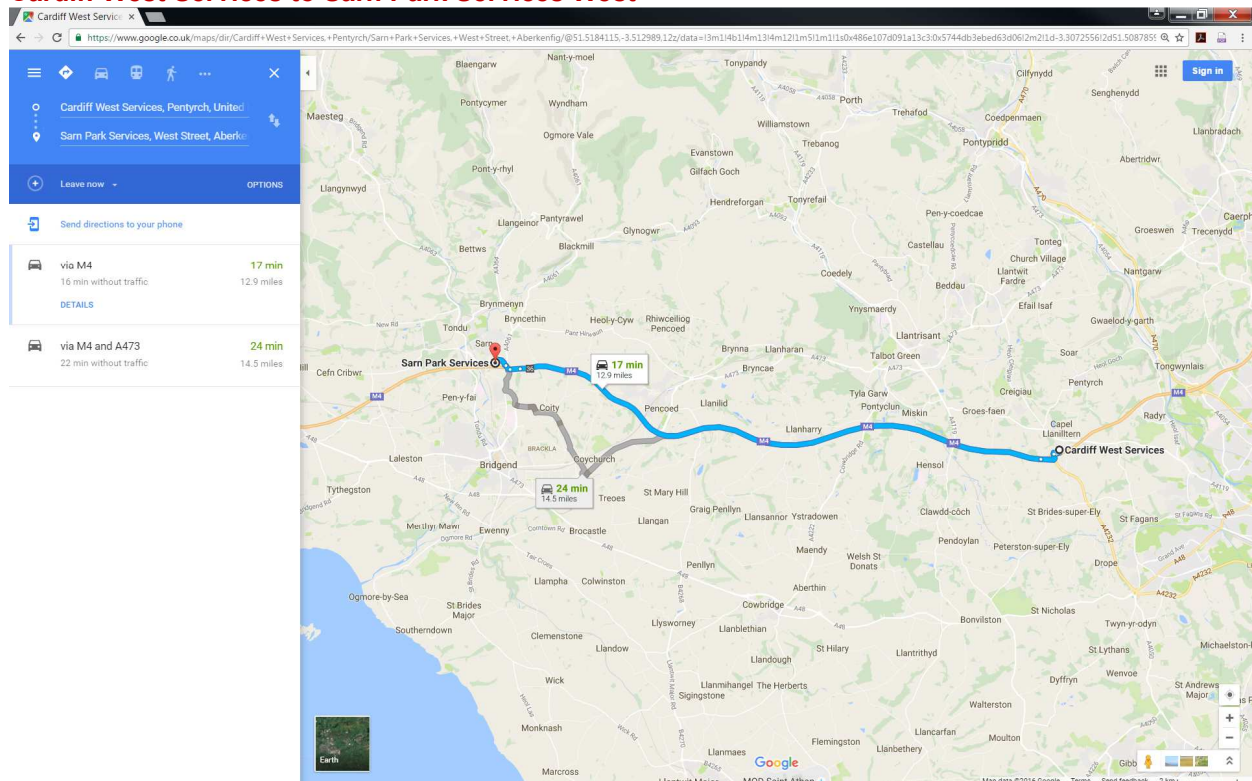


Map data ©2016 Google

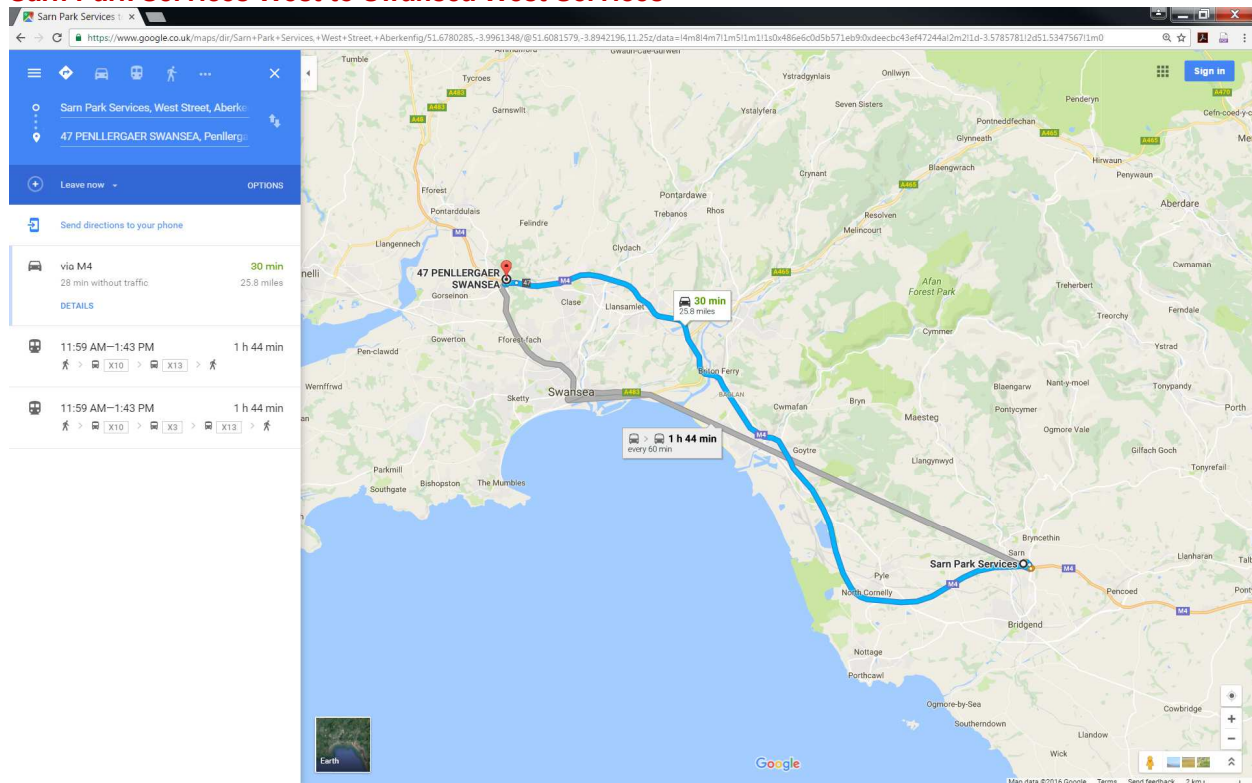
File Note

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Cardiff West Services to Sarn Park Services West



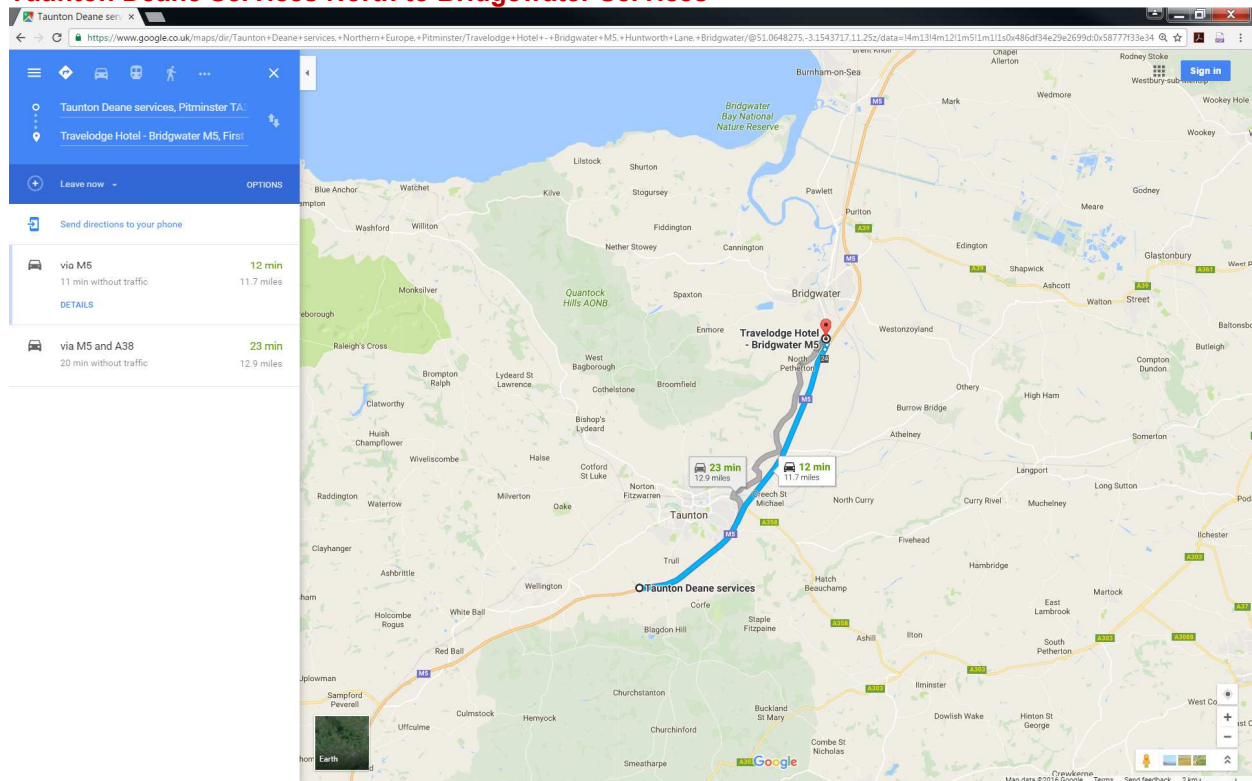
Sarn Park Services West to Swansea West Services



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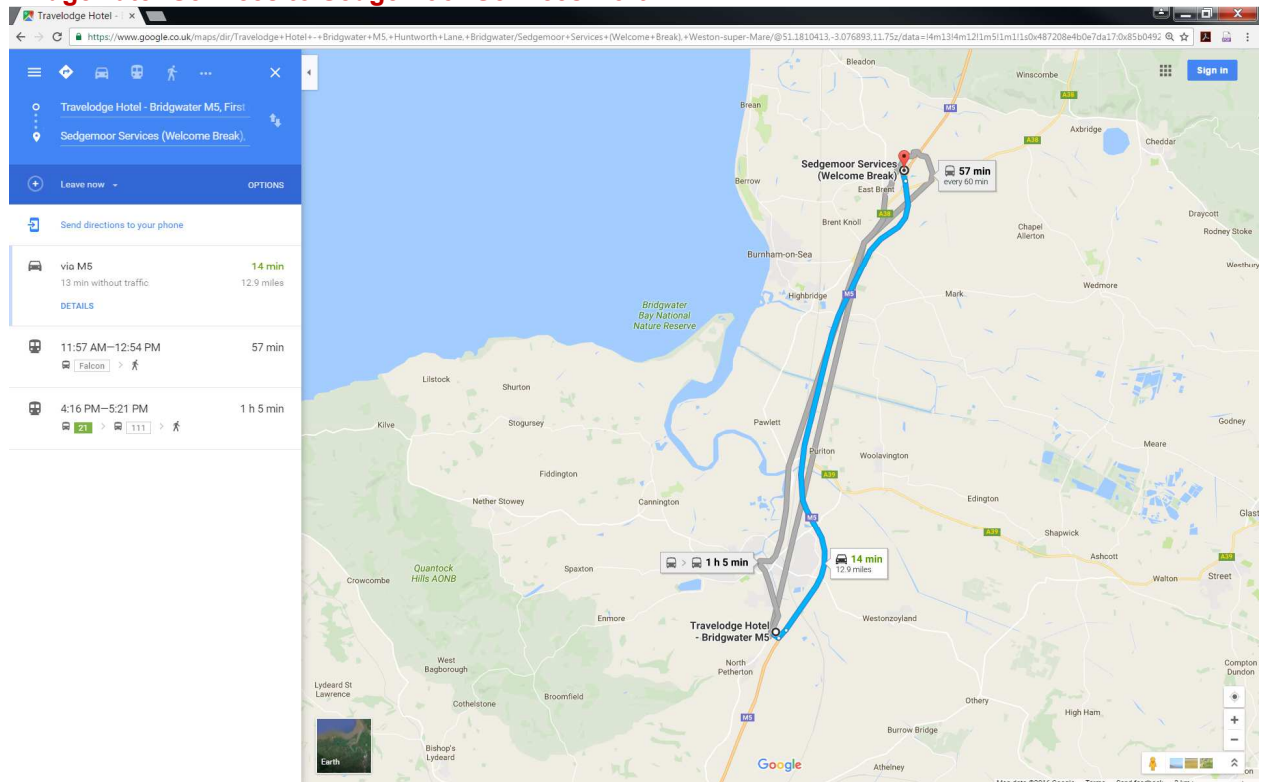
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Taunton Deane Services North to Bridgewater Services



Map data ©2016 Google

Bridgewater Services to Sedgemoor Services North

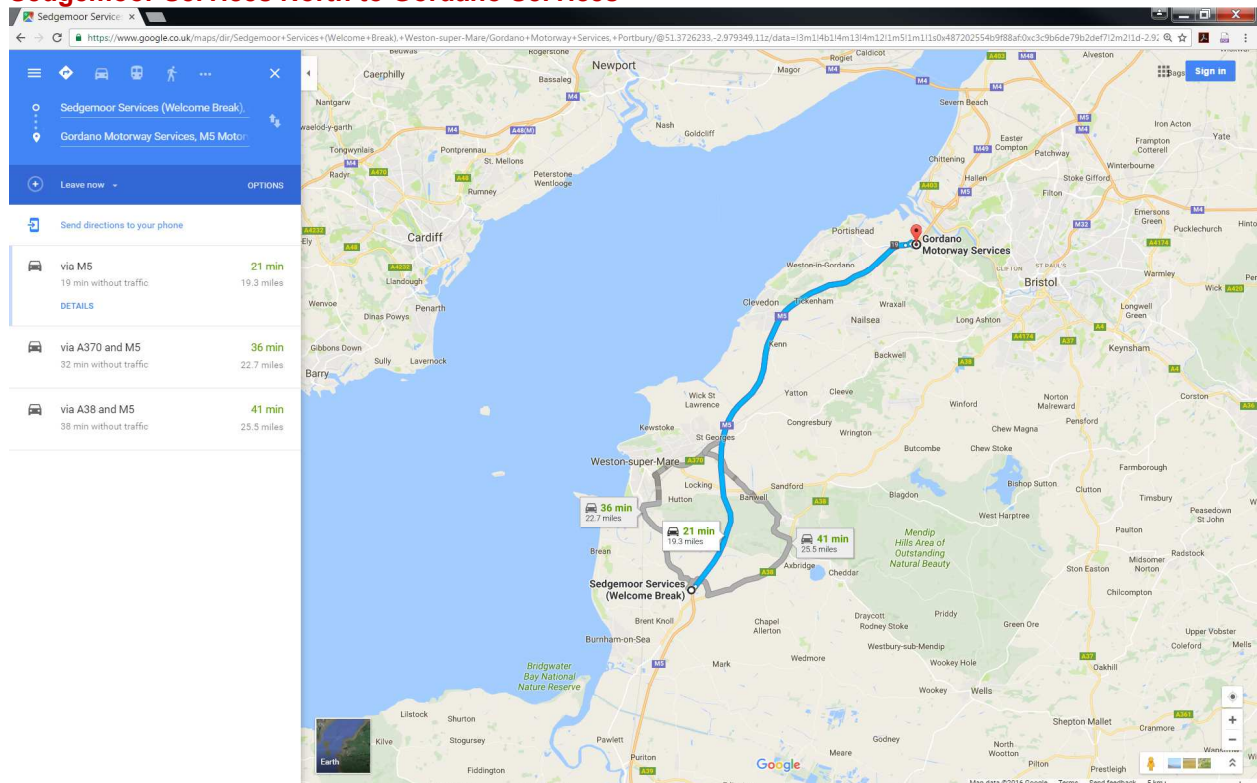


Map data ©2016 Google

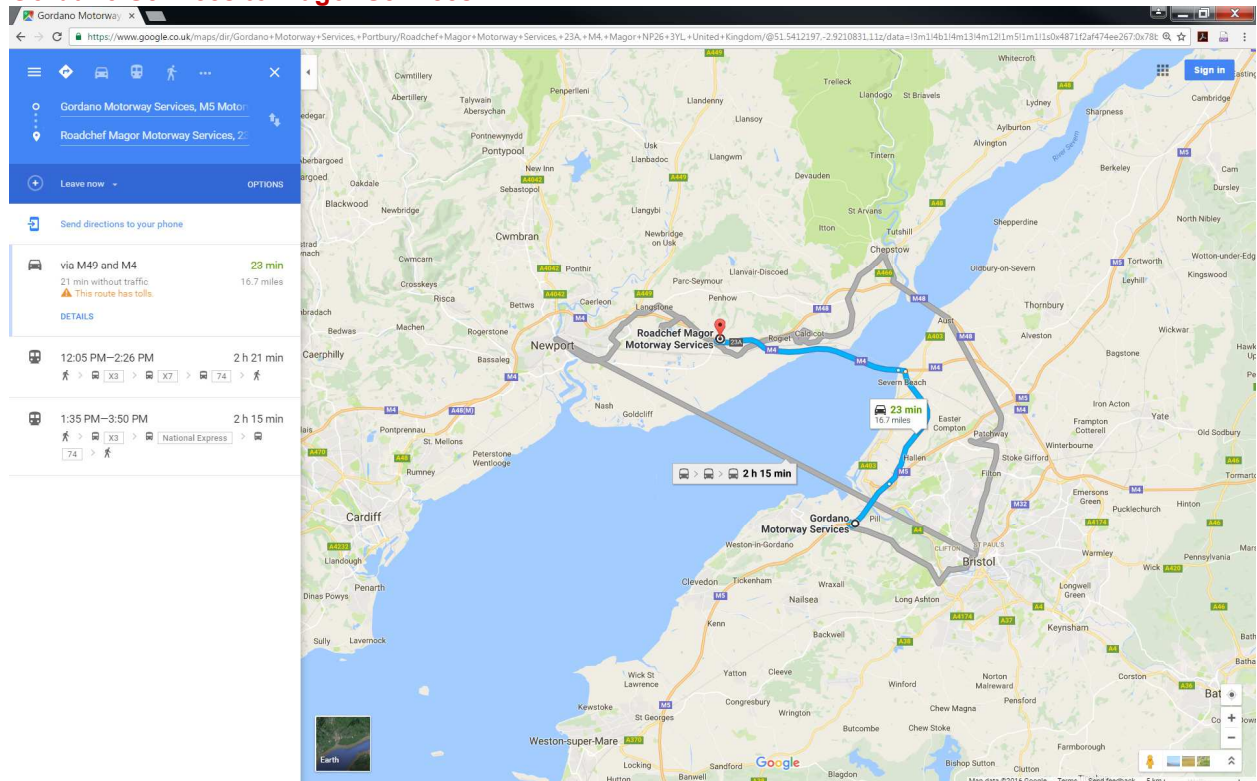
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29 November 2016

Sedgemoor Services North to Gordano Services



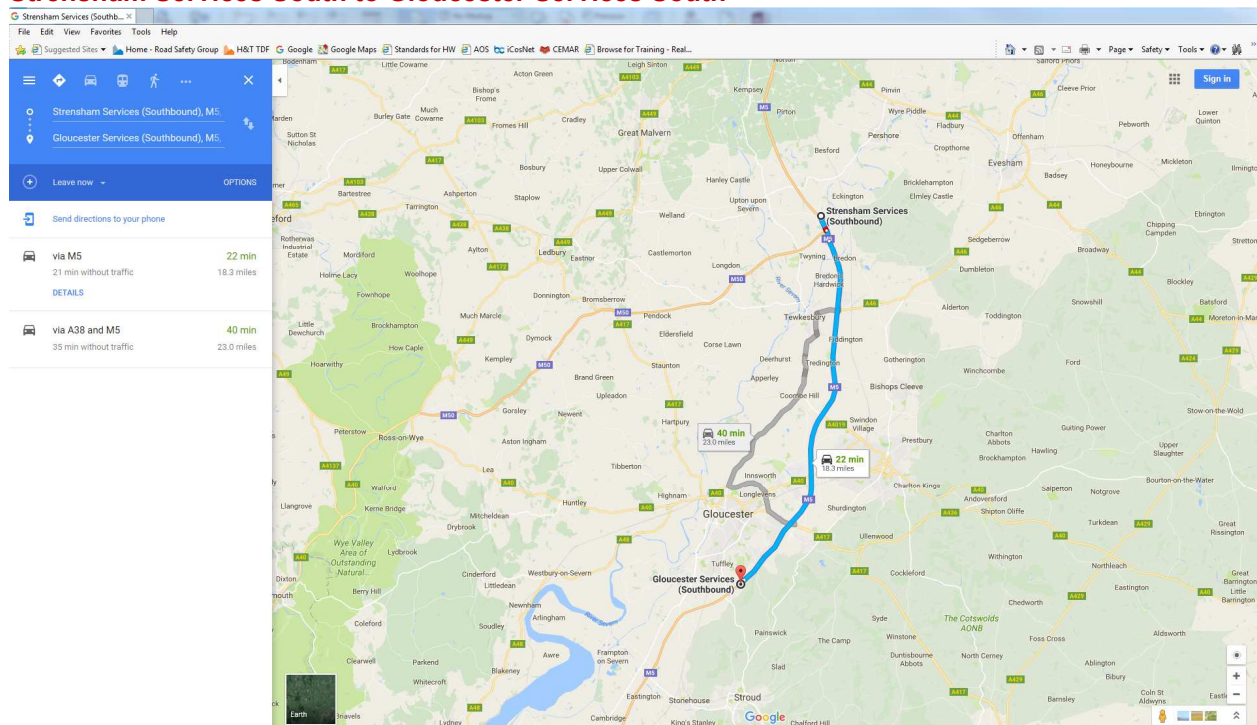
Gordano Services to Magor Services



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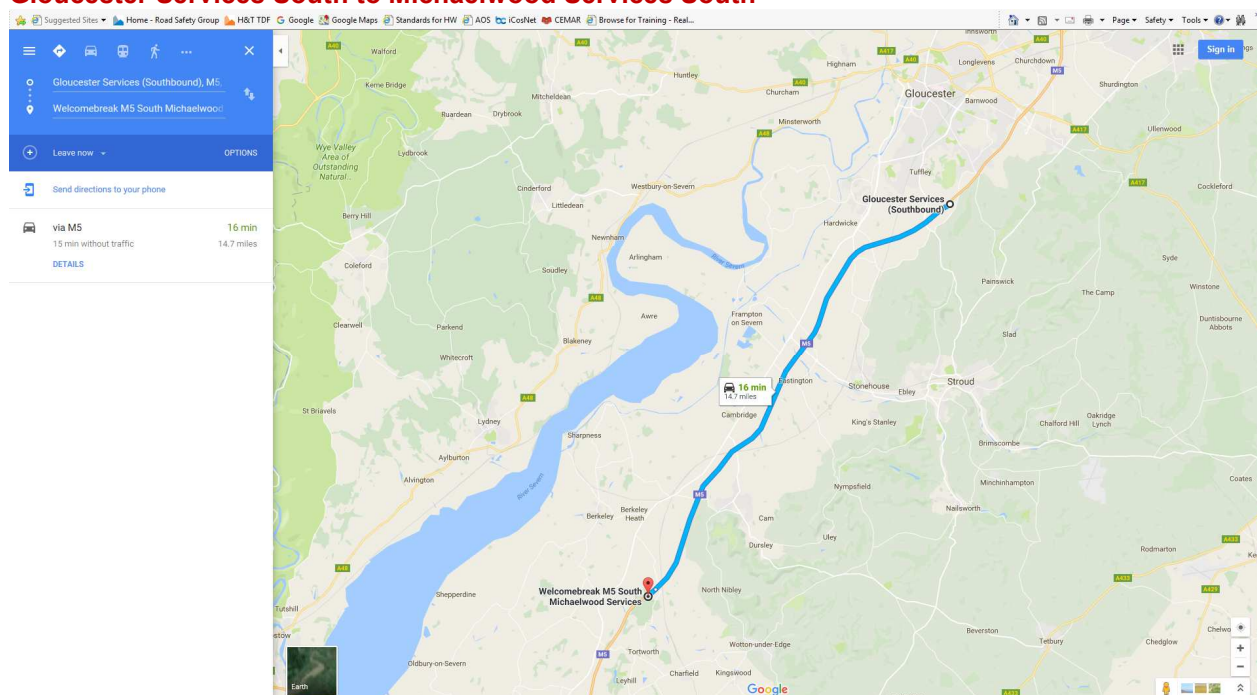
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Strensham Services South to Gloucester Services South



Map data ©2016 Google

Gloucester Services South to Michaelwood Services South

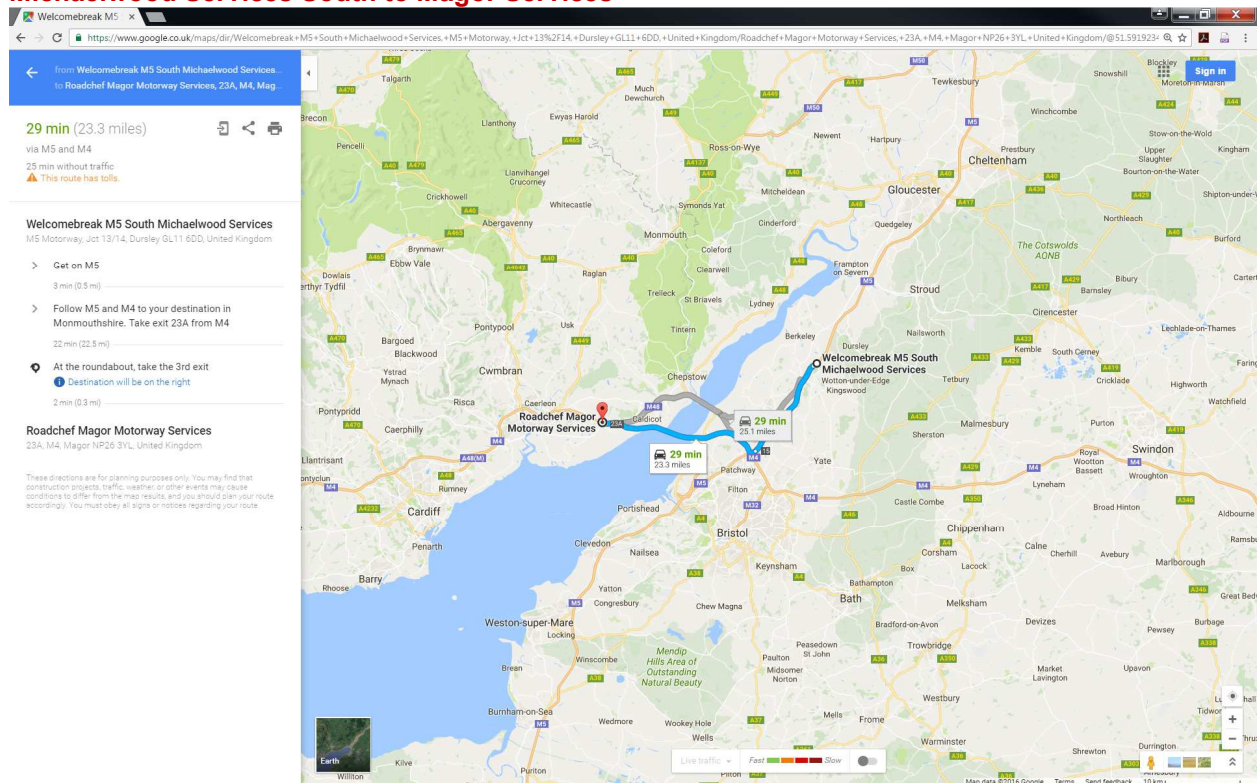


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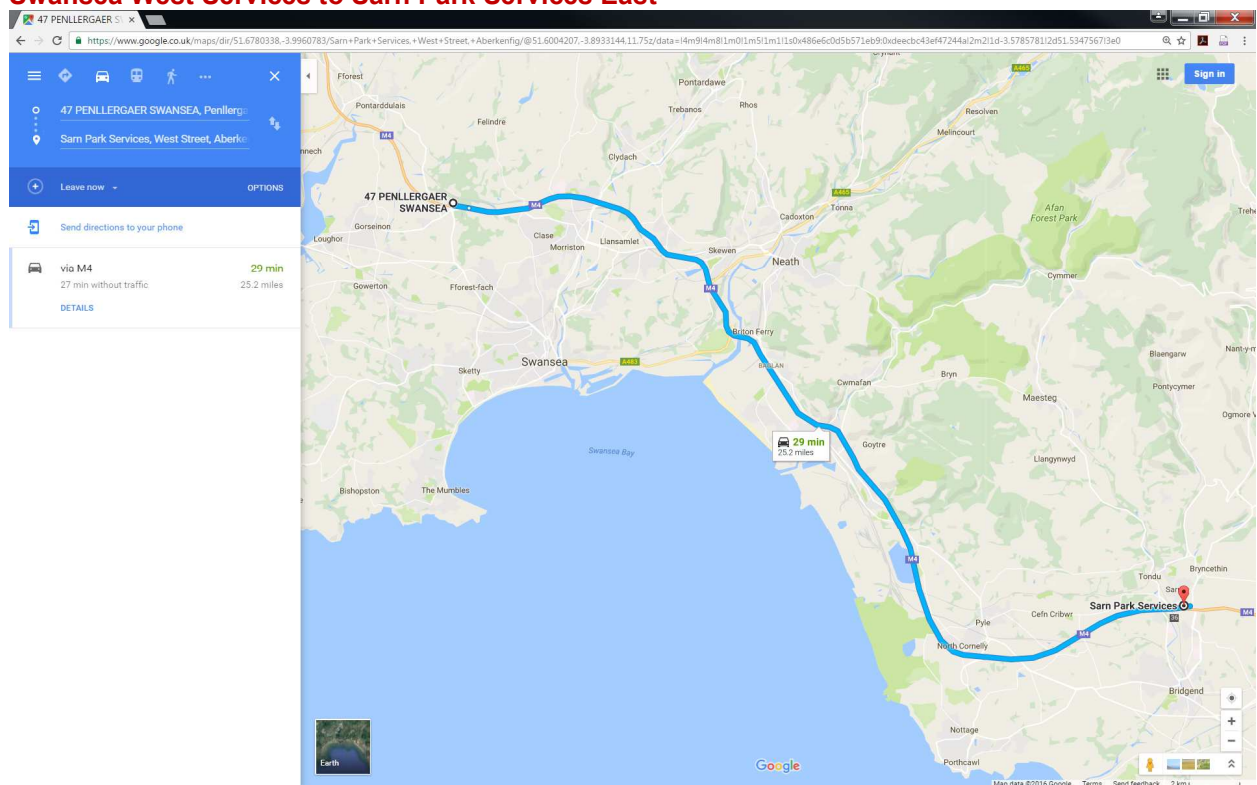
29 November 2016

Michaelwood Services South to Magor Services



Map data ©2016 Google

Swansea West Services to Sarn Park Services East

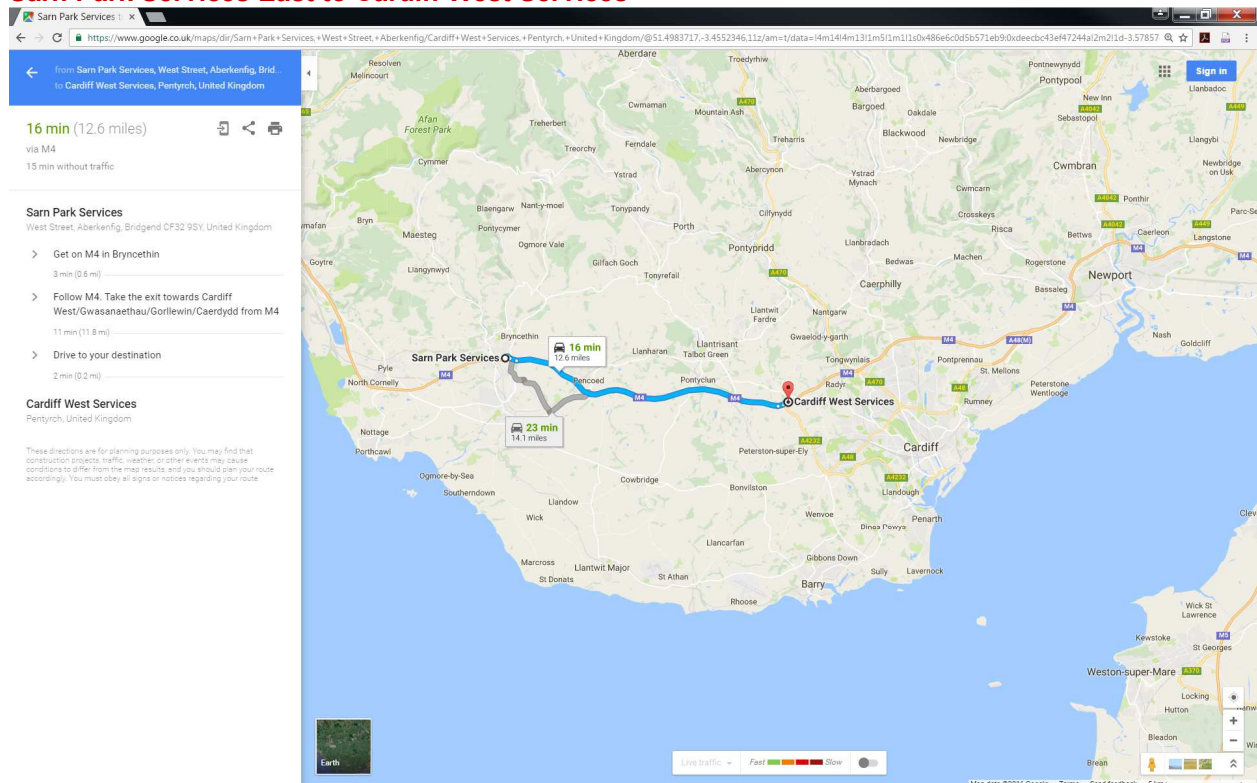


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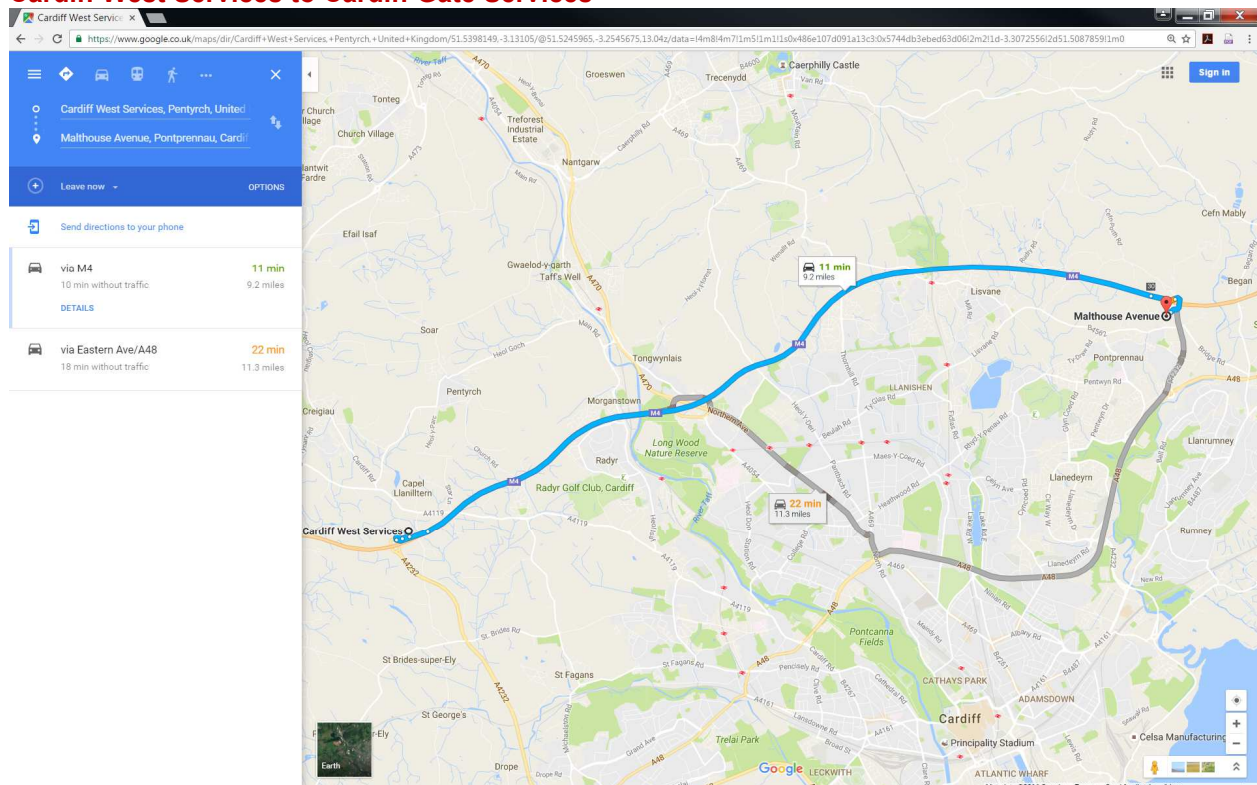
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Sarn Park Services East to Cardiff West Services



Map data ©2016 Google

Cardiff West Services to Cardiff Gate Services

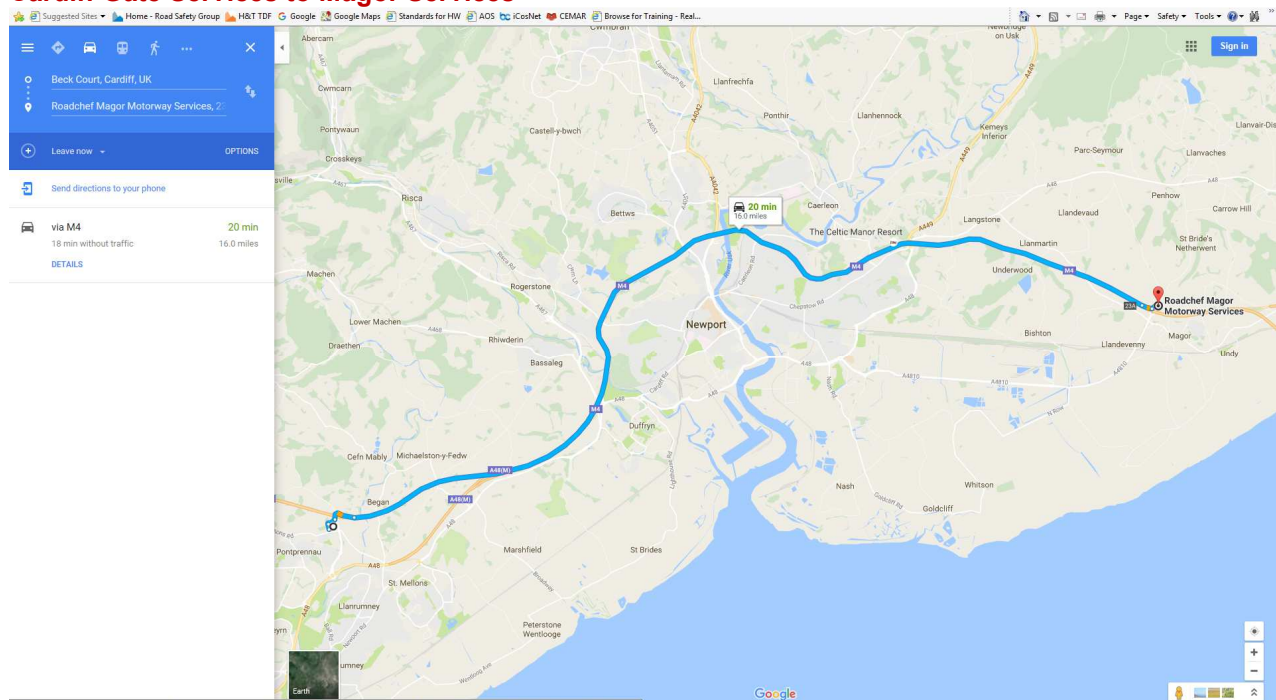


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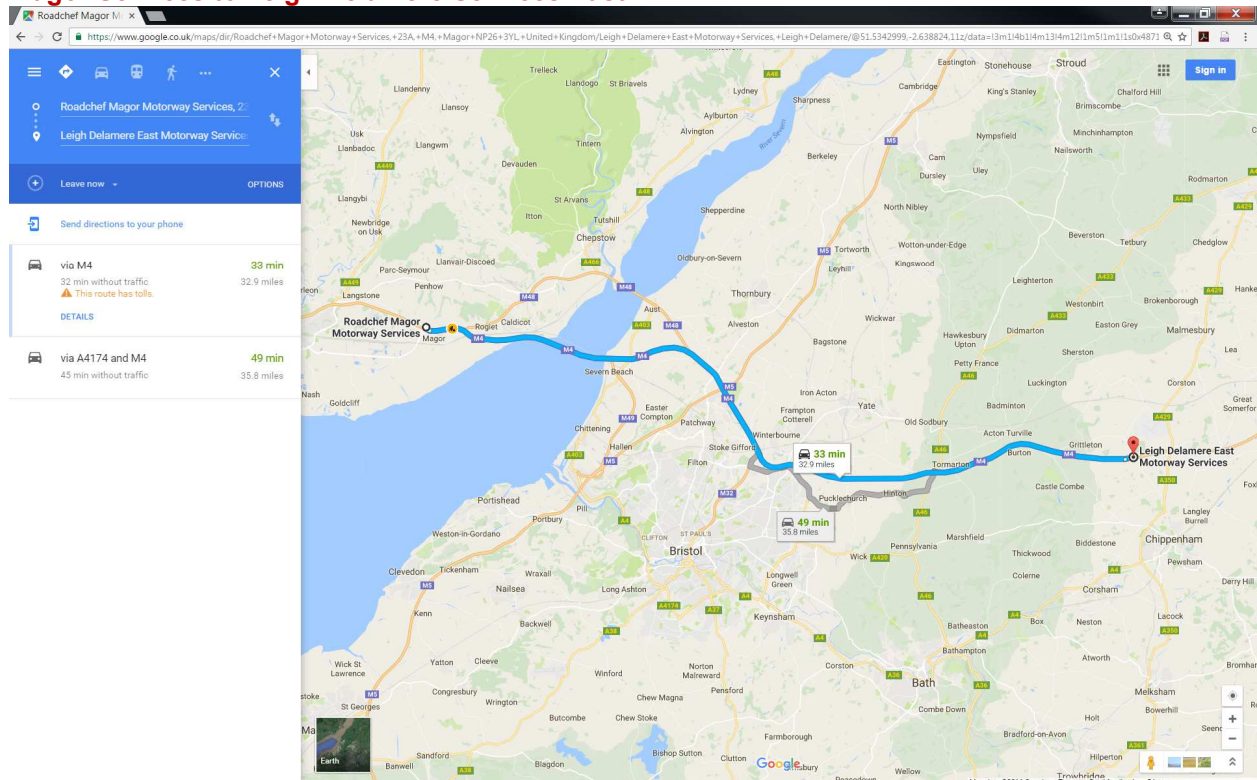
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Cardiff Gate Services to Magor Services



Map data ©2016 Google

Magor Services to Leigh Delamere Services East

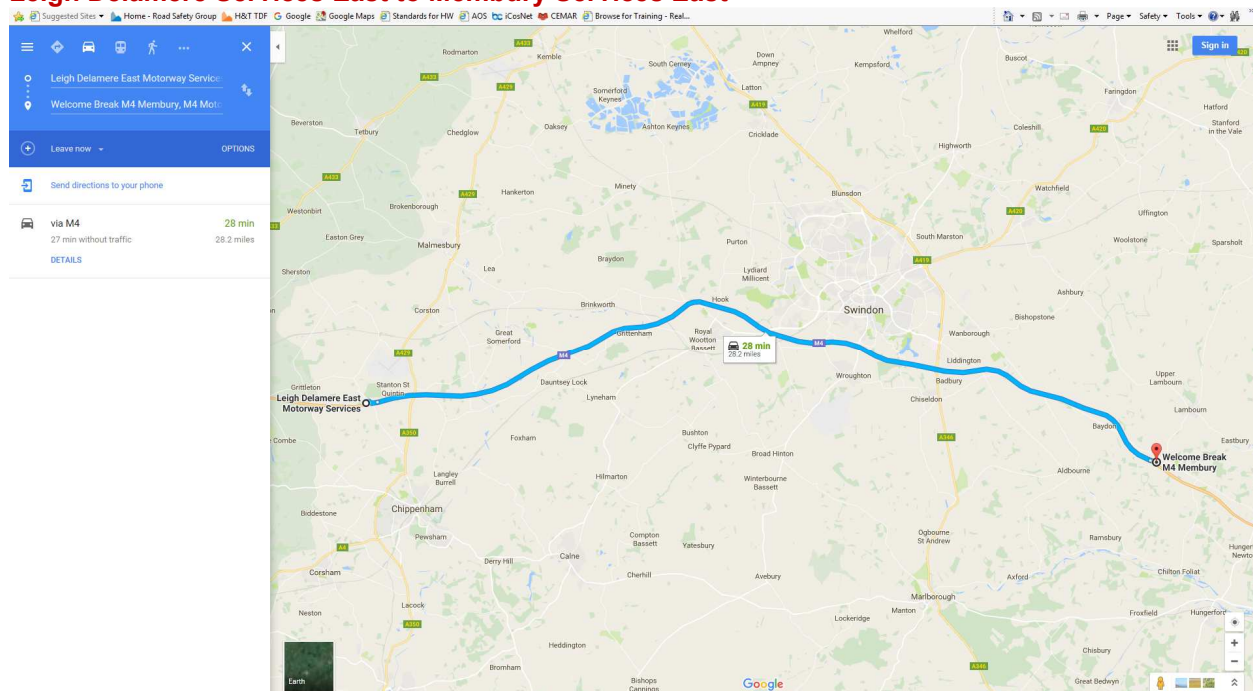


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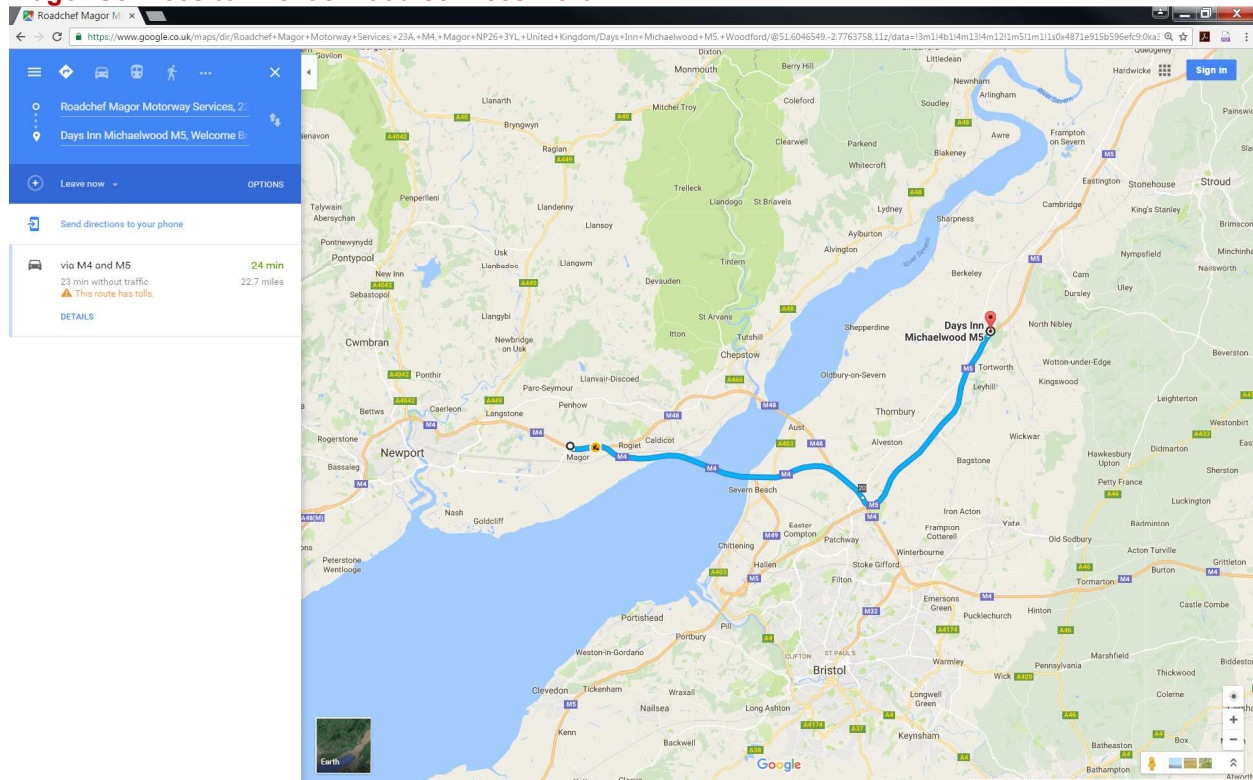
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Leigh Delamere Services East to Membury Services East



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Magor Services to Michaelwood services North

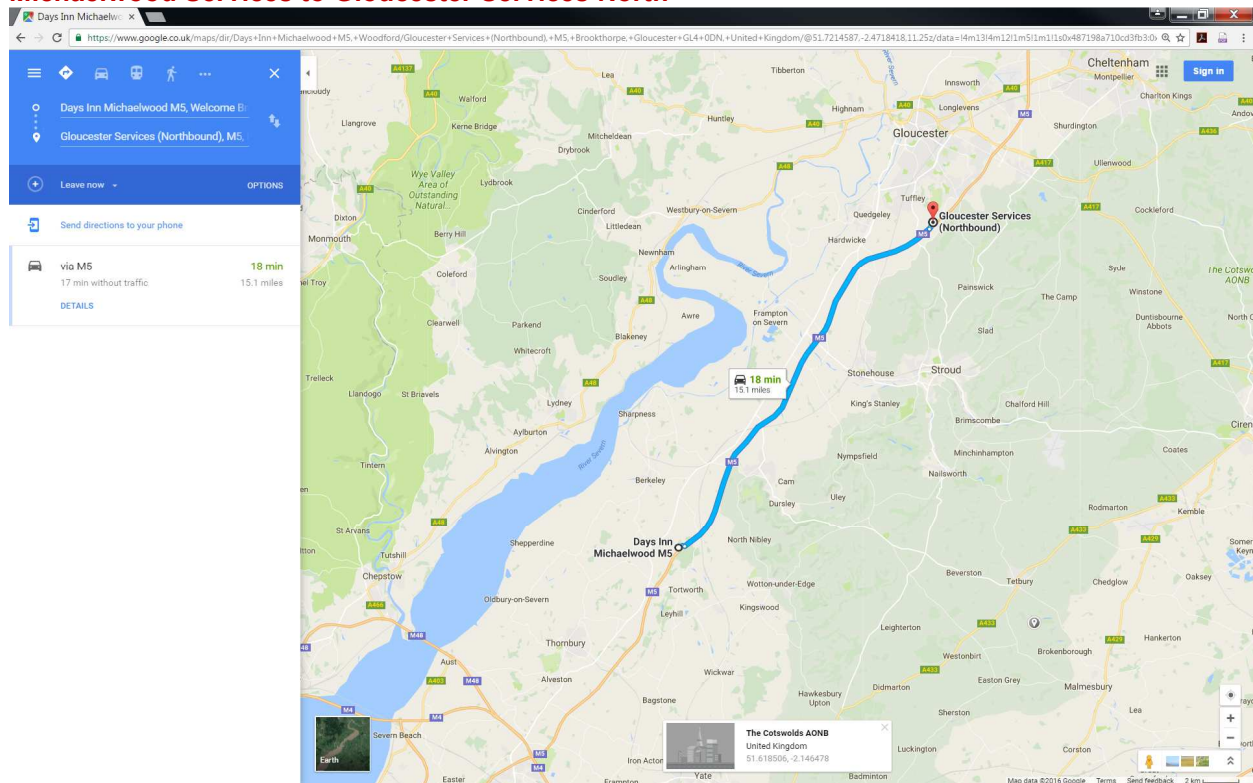


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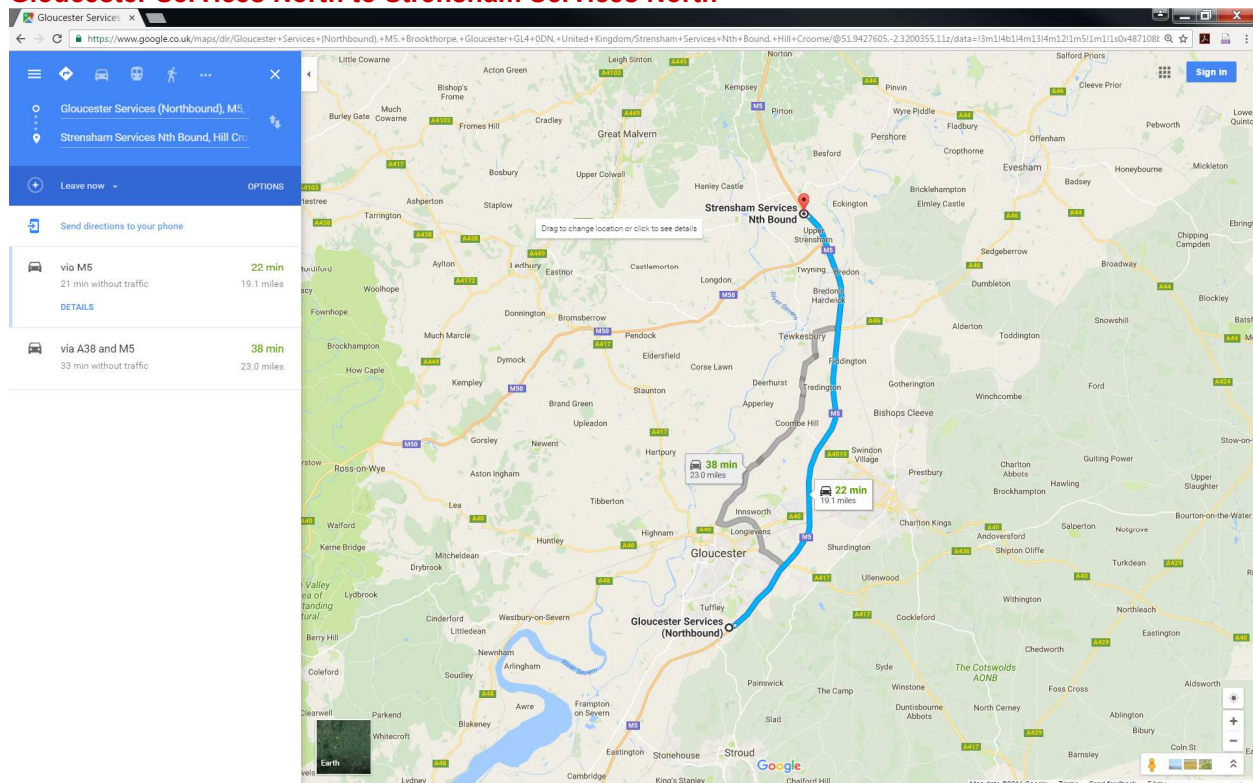
29 November 2016

Michaelwood Services to Gloucester Services North



Map data ©2016 Google

Gloucester Services North to Strensham Services North

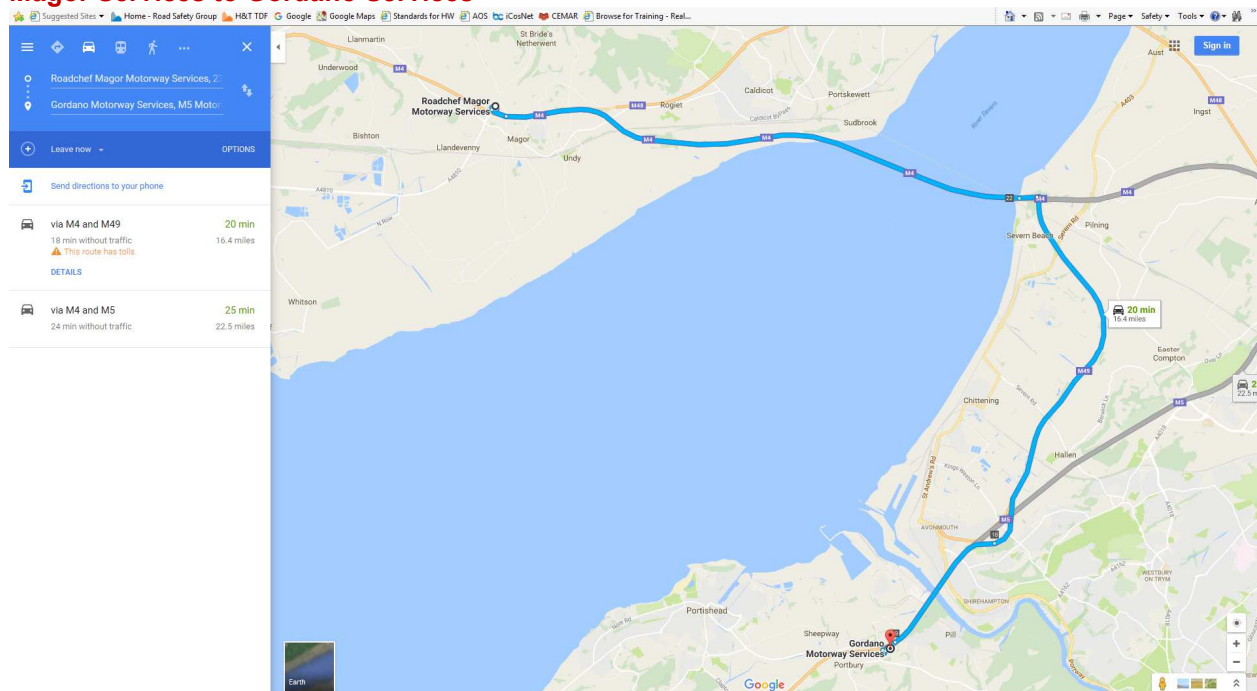


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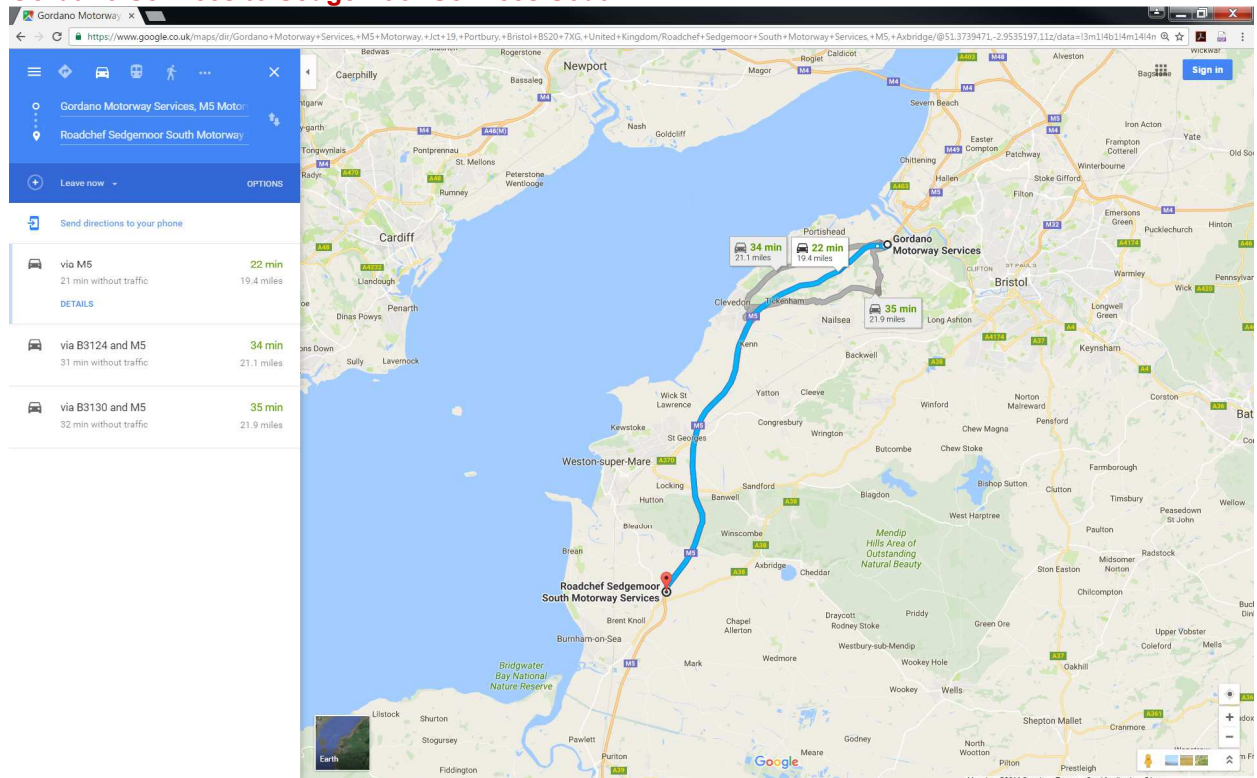
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Magor Services to Gordano Services



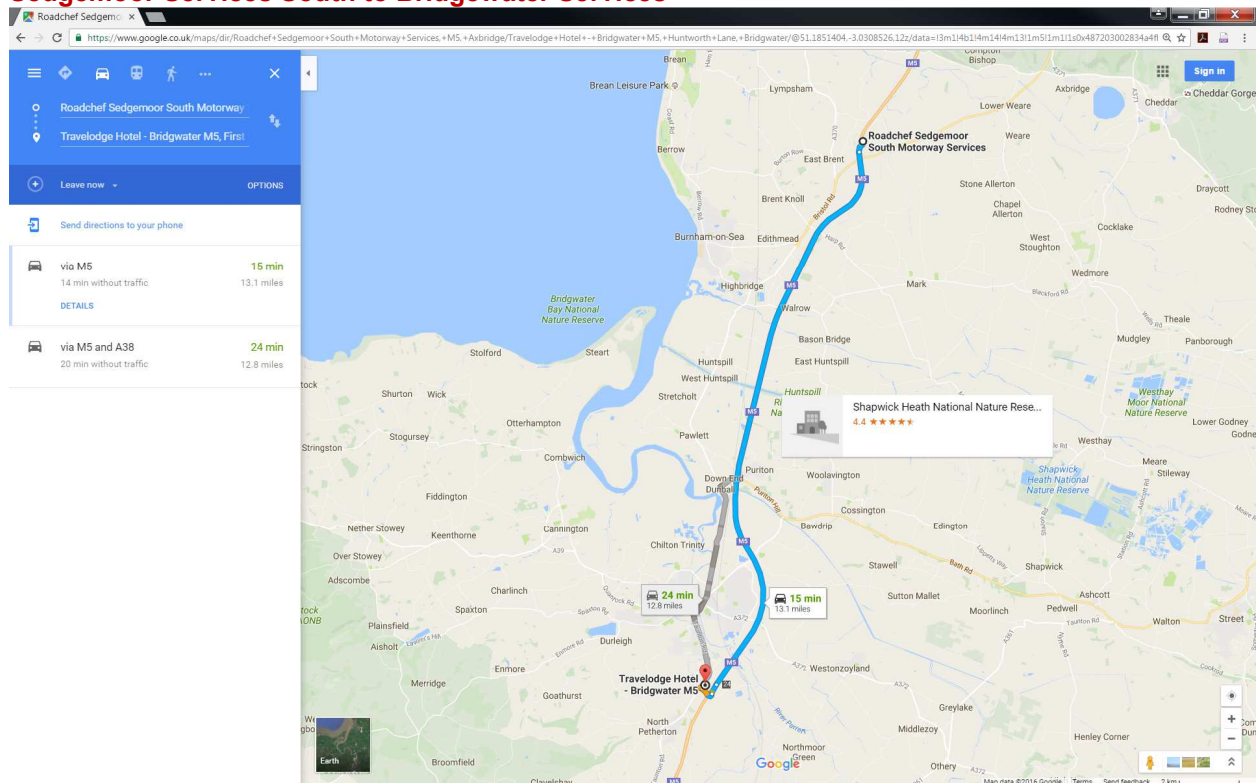
Gordano Services to Sedgemoor Services South



File Note

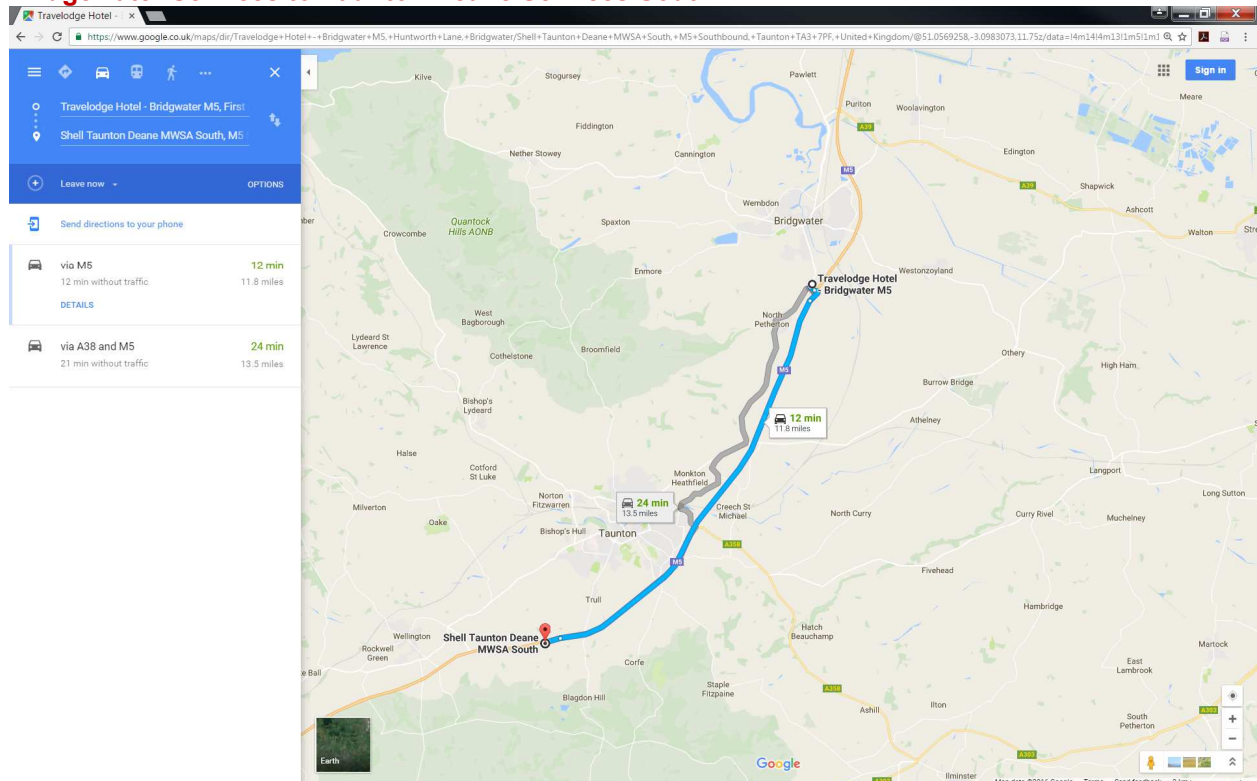
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Sedgemoor Services South to Bridgewater Services



Map data ©2016 Google

Bridgewater Services to Taunton Deane Services South

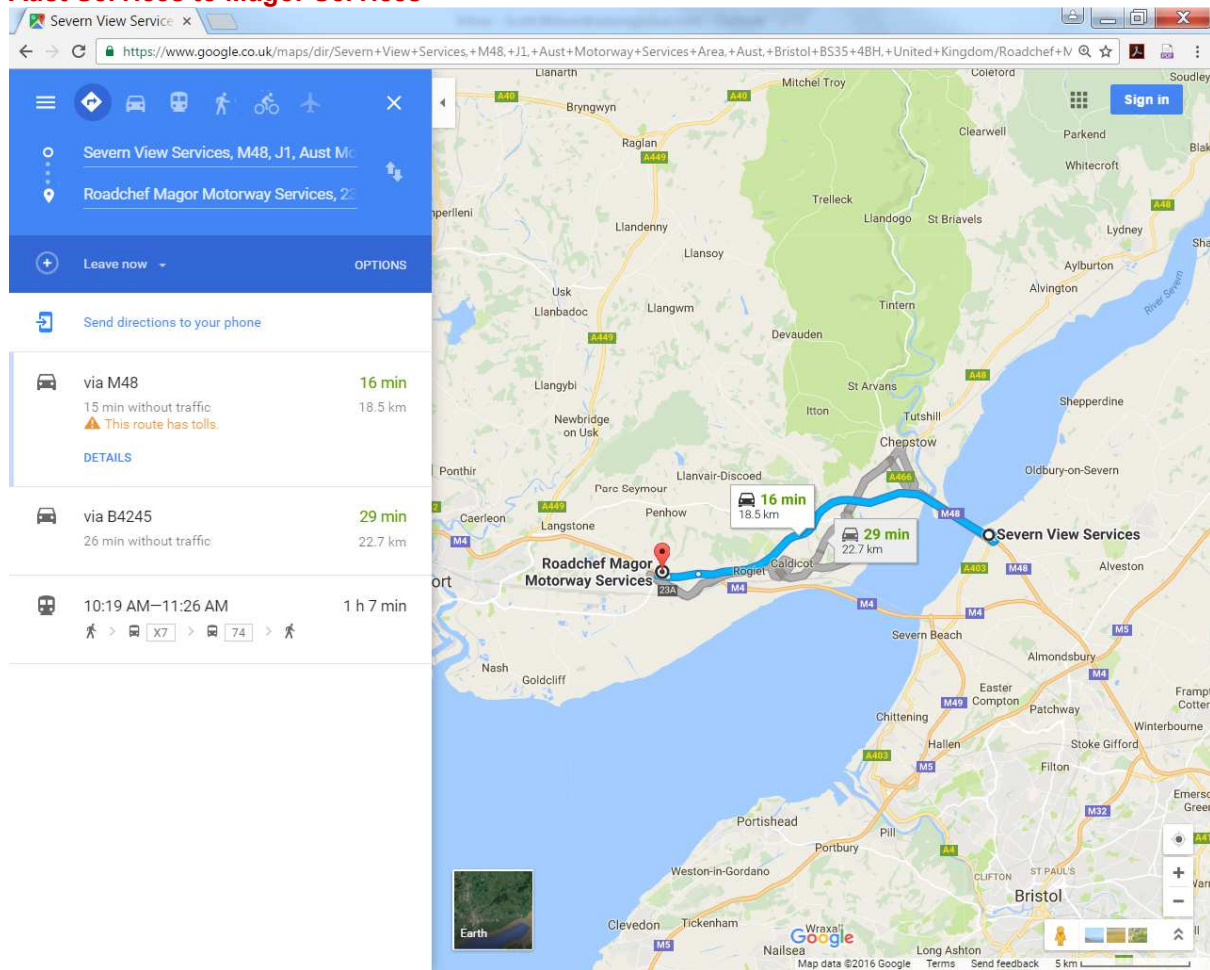


Map data ©2016 Google

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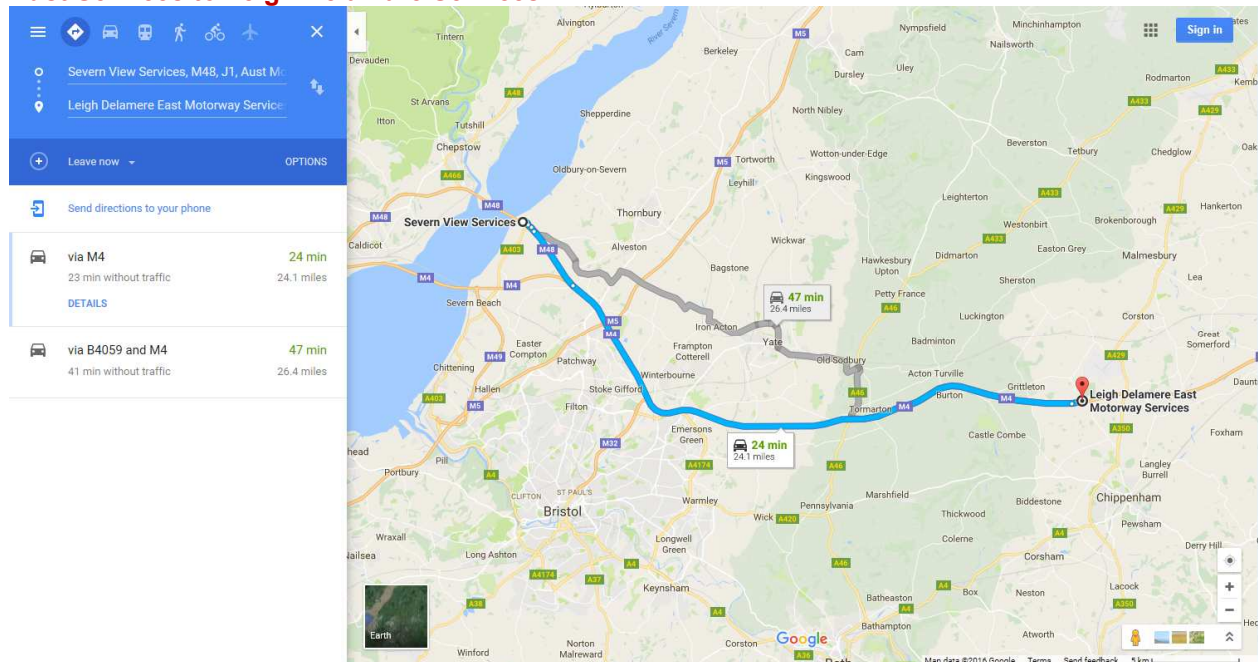
29 November 2016

Aust Services to Magor Services



Map data ©2016 Google

Aust Services to Leigh Delamare Services

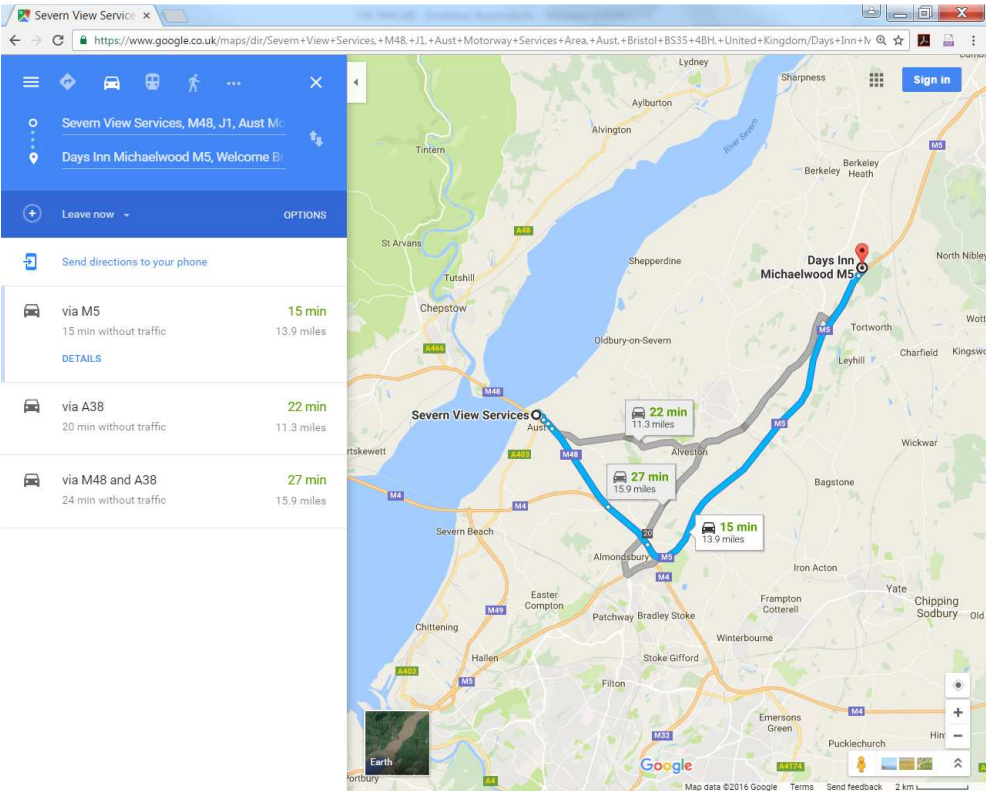


Map data ©2016 Google

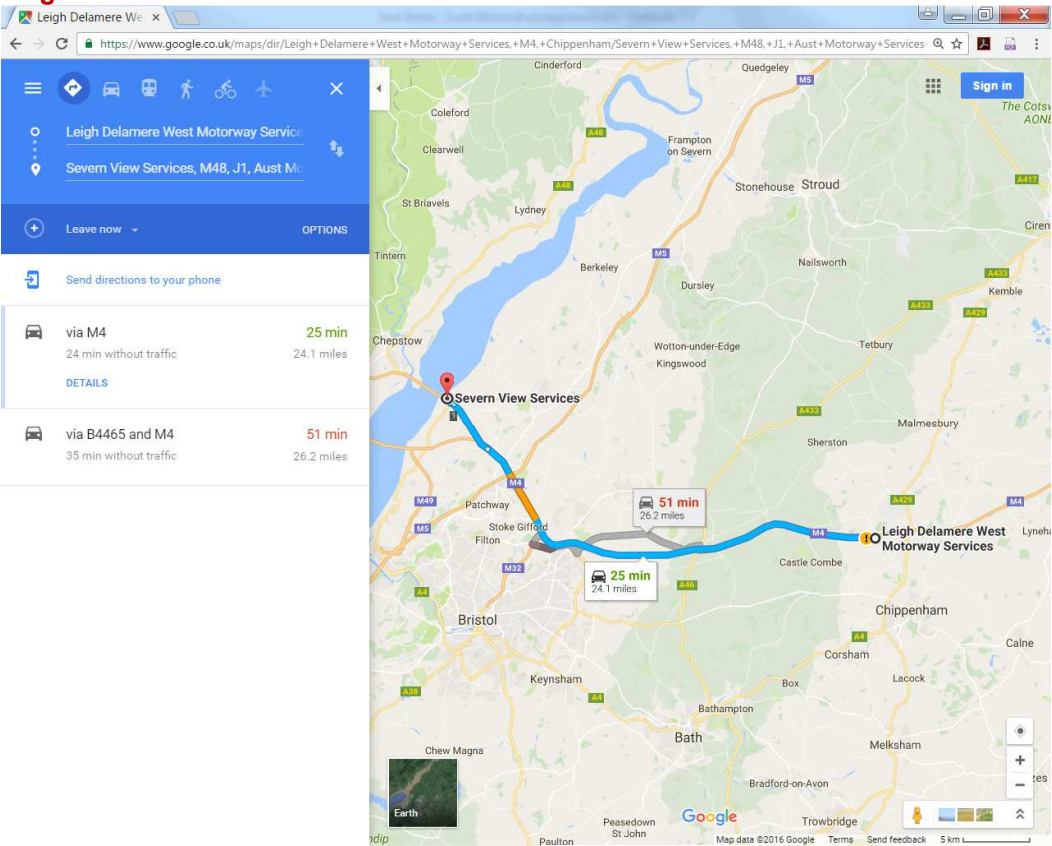
File Note

29 November 2016

Aust Services to Michaelwood Services



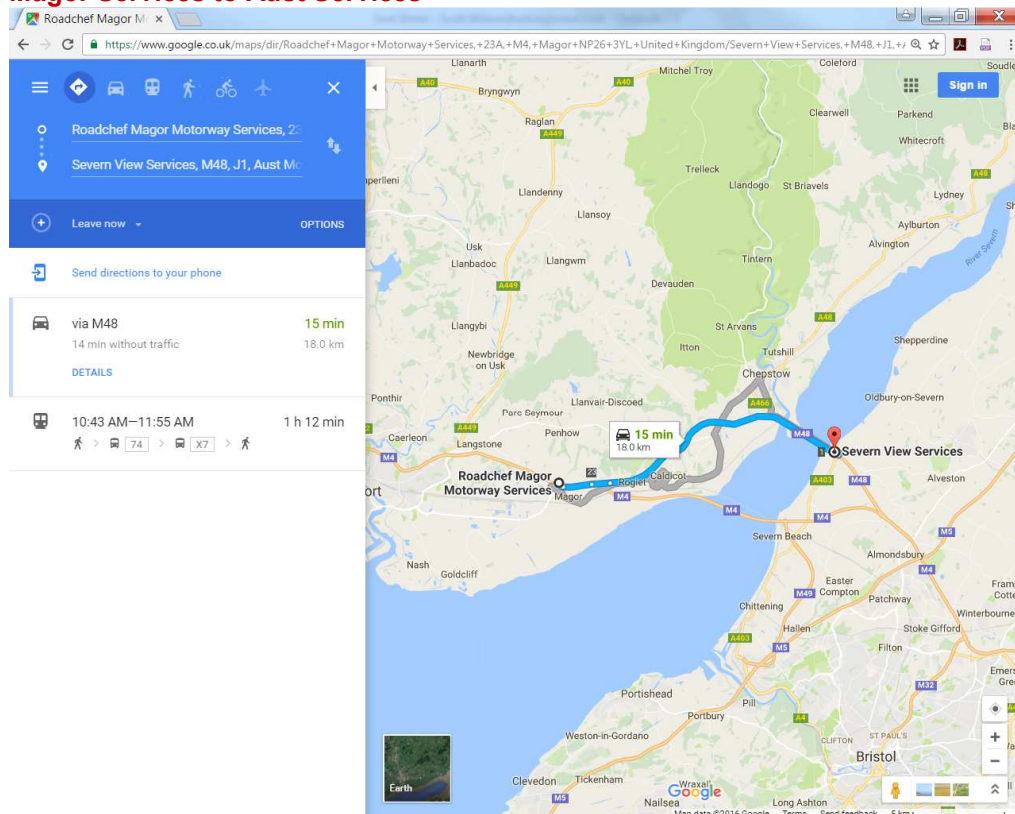
Leigh Delamare Services to Aust Services



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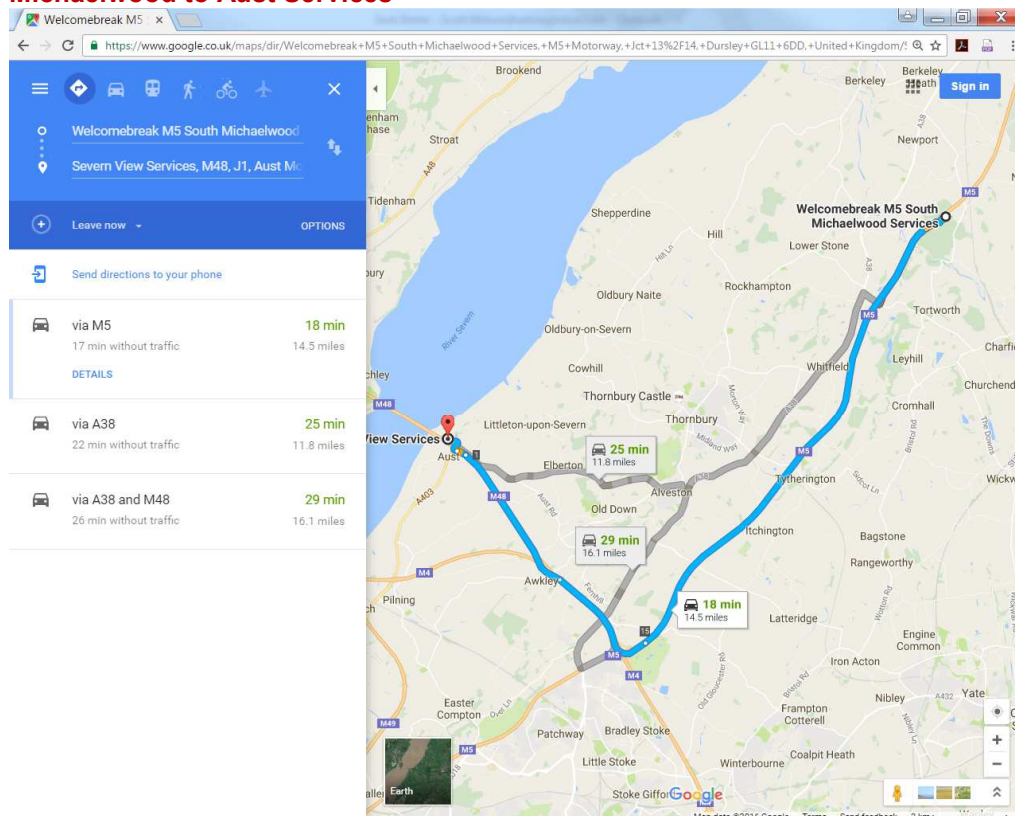
29 November 2016

Magor Services to Aust Services



Map data ©2016 Google

Michaelwood to Aust Services



Map data ©2016 Google

File Note

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Appendix C – Extent of road lighting

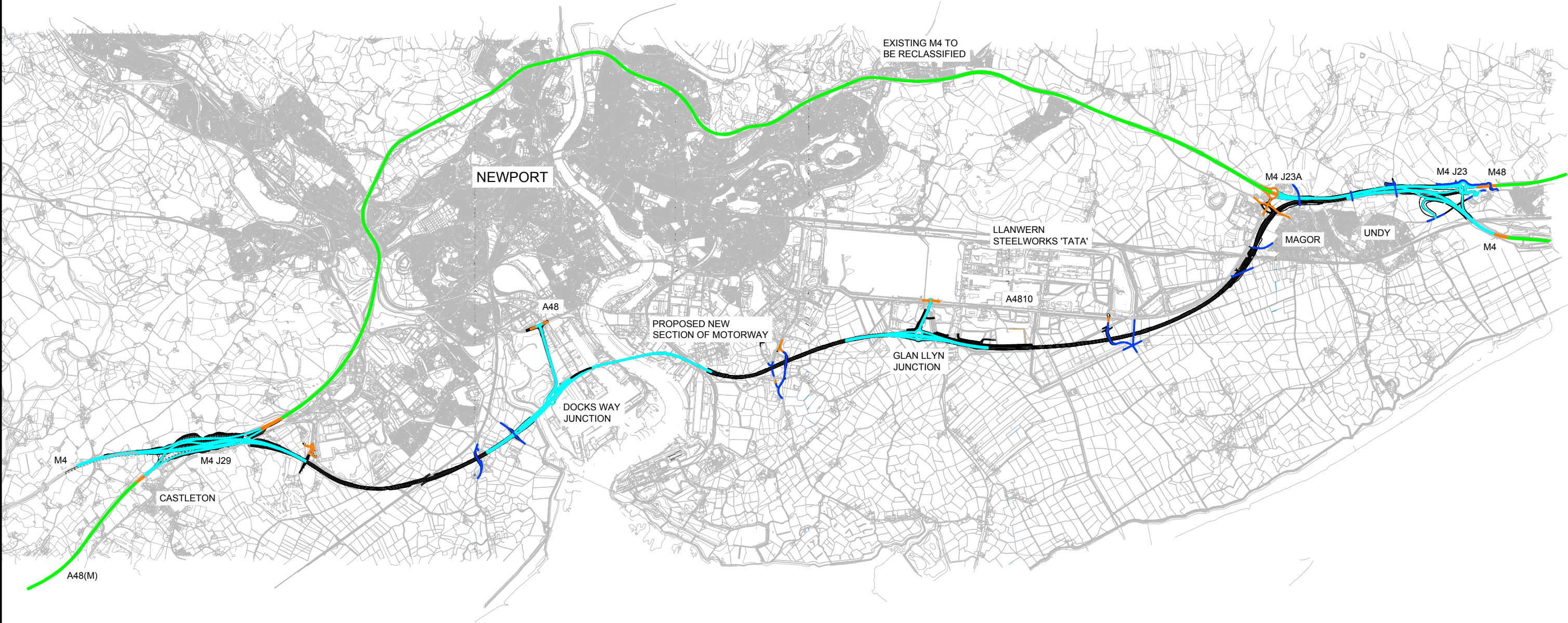
Drawing M4CaN-DJV-HGN-ZG-GEN-SK-CH-0045 – Existing and
Proposed Road Lighting Extents.

File Note M4CaN-DJV-GEN-ZG-GEN-FN-LE-0001 – Schedule of Road
Lighting

100
Millimetres

10
0

DO NOT SCALE



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KEY

- PROPOSED ROAD LIGHTING
- TIE-IN ROAD LIGHTING
- UNLIT SIDE ROADS
- EXISTING ROAD LIGHTING

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction

NONE

Maintenance / Cleaning

NONE

Use

NONE

Decommissioning / Demolition

NONE

P01

09/01/17

First Issue

AJD

CCR

BCS

Rev.

Date

Description

By

Chk'd

App'd

Drawing Status

FOR COSTING

Suitability

D1

Project Title

M4 CORRIDOR AROUND NEWPORT

Project Team

Drawing Title

EXISTING AND PROPOSED ROAD LIGHTING EXTENTS

Scale

NTS

Designed / Drawn

AJD

Checked

CCR

Approved

BCS

Authorised

BCS

Original Size

A3

Date

09/11/16

Date

09/11/16

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Revision

P01



Llywodraeth Cymru
Welsh Government

File Note

Project title M4 Corridor around Newport

File reference

M4CaN-DJV-GEN-ZG_GEN-FN-LE-0001

Date

20 September 2016

Subject Schedule of Proposed Road Lighting

1 Introduction

This File Note sets out the extents of proposed road lighting as part of the preliminary design of the M4 Corridor around Newport scheme.

2 Lighting Extents

A Project Appraisal Report, in accordance with DMRB TA49/07 Appraisal of New and Replacement Lighting on the Strategic Motorway and All Purpose Trunk Road Network has **not** been performed on this scheme as the project cost is in excess of £10M.

The introduction notes for a PAR state the following; *'PAR is a mandatory requirement for all Highways Agency improvement projects costing under £10M. Improvements costing in excess of £10M will be either major schemes promoted by MP Directorate, or technology schemes promoted by NDD Directorate. The appraisal reporting requirements for such schemes involves the production of specialised reports and PAR cannot be used as the reporting mechanism.'*

Therefore, the DMRB Stage 2 Assessment: Volume 1 (July 2014) for the Scheme proposed lighting at the following locations:

- On the approaches to and throughout the proposed Castleton Interchange.
- On the approaches to the proposed Docks Way Junction, and over the full extent of the River Usk crossing.
- On the approaches to and throughout the proposed Glan Llyn Junction along the mainline.

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- On the new link road connecting the proposed new section of motorway with the A4810, including the junction with the A4810 and approaches.
- On the approaches to and throughout the proposed Magor Interchange.
- On the approaches to and throughout the proposed M48 roundabout.

The lighting through the junctions has been extended along the mainline to a length of approximately 443m (1.5 times the desirable minimum stopping site distance of 295m for a 120kph design speed) from the end of taper of the longest slip in accordance with TD34/07.

3 Schedule of Proposed Road lighting

Ref	Carriageway	Chainage (m) / Reference		Notes
		From	To	
Castleton Interchange				
1	M4 Eastbound Carriageway	1112	4622	To the east of J29, lighting on the proposed new motorway extends 443m, or 1.5 x SSD, east of the proposed M4 westbound diverge. To the west of J29, lighting extends westwards by approximately 1400m to a distance of 443m, or 1.5 x SSD, west of the proposed M4 eastbound diverge.
2	M4 Westbound Carriageway	4622	1112	As above.
3	M4 Eastbound Diverge & Interchange Link	1535	Existing Lighting on Ex. M4	Tie-in with lighting on existing M4 to the east.
4	Ex. M4 Westbound Carriageway	Existing Lighting on Ex.M4	2140	Tie-in with lighting on existing M4 to the east.
5	M4 Westbound Diverge & Interchange Link	4155	Existing Lighting on A48M	Tie-in with lighting on A48(M) to the west.

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6	A48M Eastbound Carriageway	Existing Lighting on A48M	Existing Lighting on Ex.M4	Tie-in between lighting on A48(M) and existing M4.
7	A48M Westbound Carriageway	Existing Lighting on Ex.M4	Existing Lighting on A48M	Tie-in between lighting on A48(M) and existing M4.
Docks Way Junction Including Usk Crossing				
8	M4 Eastbound Carriageway	7540	11445	The entire length of the River Usk Crossing is lit. The lighting termination is 443m, or 1.5 x SSD, to the west of the Docks Way Junction slip roads.
9	M4 Westbound Carriageway	11445	7540	As above.
10	M4 Eastbound Diverge Slip Road	7830	Docks Way Roundabout	The entire length of the slip road is lit.
11	M4 Eastbound Merge Slip Road	Docks Way Roundabout	9500	The entire length of the slip road is lit.
12	M4 Westbound Diverge Slip Road	9630	Docks Way Roundabout	The entire length of the slip road is lit.
13	M4 Westbound Merge Slip Road	Docks Way Roundabout	7840	The entire length of the slip road is lit.
14	Docks Way Roundabout	Docks Way Roundabout	N/A	The Docks Way Roundabout gyratory is lit.
15	Docks Way Junction Link Road Northbound	Docks Way Roundabout	Southern Distributor Road Junction	Tie-in with lighting on Southern Distributor Road. The entire length of the Docks Way Link Road is lit.
16	Docks Way Junction Link Road Southbound	Southern Distributor Road Junction	Docks Way Roundabout	Tie-in with lighting on Southern Distributor Road. The entire length of the Docks Way Link Road is lit.
Glan Llyn Junction				
17	M4 Eastbound Carriageway	13567	15715	The lighting extends 443m, or 1.5 x SSD, to the west and east of the Glan Llyn Junction slip roads.
18	M4 Westbound Carriageway	15715	13567	As above.
19	M4 Eastbound Diverge Slip Road	14060	Glan Llyn Roundabout	The entire length of the slip road is lit.
20	M4 Eastbound Merge Slip Road	Glan Llyn Roundabout	15170	The entire length of the slip road is lit.
21	M4 Westbound Diverge Slip Road	15260	Glan Llyn Roundabout	The entire length of the slip road is lit.

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22	M4 Westbound Merge Slip Road	Glan Llyn Roundabout	14020	The entire length of the slip road is lit.
23	Glan Llyn Roundabout	Glan Llyn Roundabout	N/A	The Glan Llyn Roundabout gyratory is lit.
24	Glan Llyn Junction Link Road Northbound	Glan Llyn Roundabout	A4810 Roundabout	Tie-in with lighting on A4810. The entire length of the Glan Llyn Link is lit.
25	Glan Llyn Junction Link Road Southbound	A4810 Roundabout	Glan Llyn Roundabout	Tie-in with lighting on A4810. The entire length of the Glan Llyn Link is lit.
J23 and J23A				
26	M4 Eastbound Carriageway	21956	24350	To the west, lighting extends 443m or, 1.5 x SSD, to the west of the J23 slip roads. To the east, lighting would tie-in with the existing M4 lighting.
27	M4 Westbound Carriageway	24350	21956	As above.
28	M4 Eastbound Diverge Slip Road	22935	J23 Roundabout	The entire length of the slip road is lit.
29	M4 Eastbound Merge Slip Road	J23 Roundabout	24153	The entire length of the slip road is lit.
30	M4 Westbound Diverge & Free-flow Link	24000	22370	The entire length of the slip road and free-flow link is lit.
31	J23 to J23A Trunk Road Link Eastbound	J23A Roundabout	J23 Roundabout	The entire length of the J23 to J23A Trunk Road Link is lit.
32	J23 to J23A Trunk Road Link Westbound	J23 Roundabout	J23A Roundabout	The entire length of the J23 to J23A Trunk Road Link is lit.
33	M4 Westbound Merge Slip Road	J23 Roundabout	22430	The entire length of the slip road is lit.
34	M48 Eastbound	J23 Roundabout	Existing Lighting on M48	Tie-in with lighting on existing M48 to the east.
35	M48 Westbound	Existing Lighting M48	J23 Roundabout	Tie-in with lighting on existing M48 to the east.
36	J23 Roundabout	J23 Roundabout	N/A	The J23 Roundabout gyratory is lit.
37	B4235 Roundabout	B4245 Roundabout	N/A	The B4245 Roundabout gyratory is lit.
38	B4235 Roundabout to J23 Roundabout	B4245 Roundabout	J23 Roundabout	The entire length of the J23 Roundabout to B4245 Roundabout Link is lit.

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39	J23 Roundabout to B4245 Roundabout Link Road	J23 Roundabout	B4245 RAB	The entire length of the J23 Roundabout to B4245 Roundabout Link is lit.
40	J23A Eastbound Merge	J23A Roundabout	21370	The entire length of the slip road is lit.
41	J23A Westbound Diverge	21380	J23A Roundabout	The entire length of the slip road is lit.

Appendix D – Schedule of Intelligent Transport Systems File Note M4CaN-DJV-HAC-ZG_GEN-FN-CH-0001

File Note

Project title M4 Corridor around Newport

File reference

Date

18 January 2017

Subject Summary of ITS

1 Summary of ITS

1.1 Gantry Mounted Signs and Signals

1.1.1 Detail of provision and function

The signalling shall be provided by Advanced Matrix Indicators which are capable of displaying mandatory speed limits, lane divert arrows and lane closure red X symbols. Lane signalling shall be located on overhead portal gantries.

Message signs shall be capable of displaying mandatory speed limits, driver information messages, and lane control symbols. Message signs shall be located on portal gantries and standalone cantilever gantries throughout the scheme.

1.1.2 Frequency and equipment totals

Signs and signals are located on the approach to junctions in conjunction with advanced directional signage based on requirements of IAN 161/15 and are located at inter junction based on the visibility requirements of the standard which produces a spacing of sign and signalling of between 600m to 1km throughout.

Cantilever Gantry Structure = 36No

Portal Gantry Structure = 13No

Superspan Gantry Structure = 5No

Advanced Motorway Indicators = 74No

MS4 = 57No

1.2 CCTV

1.2.1 Detail of provision and function

CCTV cameras are to be provided throughout the scheme to provide full surveillance coverage of the road network, the cameras are provided such that there are no areas through the scheme which cannot be seen by a pan tilt and zoom camera.

Cameras are used by the traffic control centre to monitor the network and alert and direct the emergency services during incidents.

Cameras shall be mounted on gantries and 15m high masts.

1.2.2 Frequency and equipment totals

Due to the constraints of the CCTV camera focal length cameras will be positioned at a maximum frequency of 1km along the route.

CCTV Pan, Tilt and Zoom (PTZ) Type Units = 25No

File Note

18 January 2017

1.3 Detection Loops (MIDAS)

1.3.1 Detail of provision and function

Detection loops shall be provided throughout the scheme. The induction loops are installed in the road surface and are able to detect traffic flow and alert the signalling systems if congestion is detected. Once alerted the signals and signs set automatically to alert oncoming traffic of queuing traffic, the system is designed to help prevent secondary incidents.

1.3.2 Frequency and equipment totals

Detection loops are installed on slip roads and at a frequency of 500m throughout the scheme in all running lanes.

Loop detector sites (3lane) = 106No

Loop Detector sites (2 lane) = 16No

1.4 Journey Time Information Systems

1.4.1 Detail of provision and function

The motorway network shall be monitored using journey time equipment which uses Automatic Number Plate Recognition (ANPR) technology. These cameras shall be installed on both masts and gantries throughout the scheme covering entry and exit points. These cameras monitor journey times between nodes on the network and relay this information back to the traffic control centre. This provides the traffic centre information on incidents and provides information which can be relayed to the travelling public via the message signs.

1.4.2 Frequency and equipment totals

ANPR cameras are located on the entry and exit points at each slip road on the scheme and on the entry and exit points mounted on gantries at either end of the scheme.

ANPR Camera site = 10No

1.5 Emergency Roadside Telephones

1.5.1 Detail of provision and function

Telephones are provided throughout the scheme in pairs at each location across the carriageway. Telephones shall be accessible at all times and are for the public to use in times of emergency. The telephones are linked to the traffic control centre who shall provide required assistance.

1.5.2 Frequency and equipment totals

Telephones are located in verge at a frequency of 1.5km throughout the scheme.

Telephones = 54No

1.6 Weather detection systems

1.6.1 Detail of provision and function

The weather detection equipment shall include sensors to detect the following

- Wind speed and direction
- Humidity and temperature
- Visibility and present weather
- Precipitation type, intensity and accumulation
- Estimated depth of snow

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- Remote surface state sensing to detect water, ice, slush, snow or frost

The sensors shall provide information to the traffic control centre and maintenance organisation to provide action if require, ie set signs in heavy fog, deploy snow ploughs in heavy snow.

1.6.2 Frequency and equipment totals

Weather stations are to be located in areas determined by WG based on specialist meteorological advice.

Weather stations = 2No

1.7 Enforcement

1.7.1 Detail of provision and function

Enforcement shall be provided on the scheme by the Highways Agency Digital Enforcement and Compliance System v3 (HADECS3). The system uses a combination of radar and camera technology to register speeding offences. The HADECS3 system is used in conjunction with the Variable Mandatory Speed signals and is used to encourage compliance.

1.7.2 Frequency and equipment totals

Enforcement sites shall be located in agreement with local Enforcement Authority.

Live Enforcement Sites = 2No

Non-Live Enforcement sites = 2No

File Note

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Appendix E – Demolition of Property

File Note M4CaN-DJV-LSI-ZG_GEN-FN-YL-0011 – Affected Residential Properties

File Note M4CaN-DJV-LSI-ZG_GEN-FN-YL-0012 – Affected Commercial Properties

File Note

Project title M4 Corridor around Newport

File reference

M4CaN-DJV-LSI-ZG_GEN-FN-YL-0011

Date

28 November 2016

Subject Affected residential properties, including those with gardens affected

Summary table of Residential Properties Affected.

Number of properties:	
Affected (Total):	17
WG Ownership affected:	10
Demolished (Total):	12
WG Ownership Demolished:	8

Affected – Residential properties where part of property or garden are included within the draft Compulsory Purchase Order (CPO)

List of all Properties.

For clarity:

Rows in bold font are in the ownership of the Welsh Government

Properties demolished have the word DEMOLISHED in uppercase in the description for use of land.

File Note

28 November 2016

Property/location	Owner/Occupier	Effect of the Scheme
The Croft, Coedkernew, Newport. CPO Sheet 1 Plot 1/18	Freehold: Mr Alan Rees Gill and Mrs Sylvia June Gill	Land take to the rear of the property including outbuildings and garden. CPO MOD 58
Spring Cottage, Coedkernew, Newport. CPO Sheet 1 Plot 1/17	Freehold: Welsh Ministers Currently vacant	Land take to the rear of the property including garden and access track. CPO MOD 39
The Conifers, Coedkernew, Newport. CPO Sheet 2 Plot 2/1m	Freehold: Welsh Ministers Tenanted: Mr Gareth Davies, Mr Robert Robinson & Mr Simon Mackay.	Field and garden to rear of property partially taken for the Scheme. Access track affected. Property to be DEMOLISHED. CPO MOD 7
Longhouse Farm, Coedkernew, Newport. CPO Sheet 2 Plot 2/1e	Freehold: Welsh Government Tenant : Mrs Aisha Al'Sulaiti	Field to rear of property partially taken for the Scheme. Access track affected. CPO MOD 7
White Cottage, Newport Road, Coedkernew, Newport. CPO Sheet 2 Plot 2/3	Freehold: Welsh Ministers Currently vacant	Land is required for the construction of the new highway. Property to be DEMOLISHED. CPO MOD 35
San Remo, Coedkernew, Newport. CPO Sheet 2 Plot 2/6	Freehold: Welsh Government Currently vacant	Land is required for the construction of the new highway. Property to be DEMOLISHED. CPO MOD 37
The Glen, Coedkernew, Newport. CPO Sheet 2 Plot 2/7	Freehold: Welsh Ministers Currently Vacant.	Land is required for the construction of the new highway. Property to be DEMOLISHED. CPO MOD 36

File Note

28 November 2016

Property/location	Owner/Occupier	Effect of the Scheme
Quarry Cottage, Coedkernew, Newport. CPO Sheet 2 Plot 2/10	Freehold: The estate of Mrs Patricia June Waters (Deceased) Welsh Government had accepted a blight application on the property, currently at probate.	Land is required for the construction of the new highway. Property to be DEMOLISHED. CPO MOD 40
The Old Rectory Coedkernew, Newport. CPO Sheet 2 Plot 2/12	Freehold: Paul and Karen Clatworthy.	Part of garden required to lay drainage pipes. Easements, Essential Licence and Title. Proposed CPO modification moves drainage out of garden. This would remove the garden from CPO. CPO MOD 8
Myrtle House, Pound Hill, Coedkernew, Newport. (Including Field) CPO Sheet 2 Plot 2/17	Freehold: Mrs Teresa Catherine Frances Allen Trustees: Mr Charles Martin Frederick Allen & Mr Raymond Edward Andrew Allen	Land is required for the construction of the new highway. Property to be DEMOLISHED.
Berryhill Cottage, Coedkernew, Newport. Including Fields and adjoining land CPO Sheet 2 Plot 2/21	Freehold: Mr. Anthony Holwell	Land is required for the construction of the new highway. Property to be DEMOLISHED.
Berryhill Farm, Coedkernew, Newport Farm, Farm buildings and Farm House. CPO Sheet 3 Plot 3/1a	Freehold: Welsh Ministers Tenant: Mr Brian Clatworthy.	Farm land and property required for essential mitigation areas. Property to be DEMOLISHED.
Barecroft House, Barecroft Common, Magor CPO Sheet 15 Plot 15/1a	Freehold: Welsh Ministers Residential property with grazing land Mr Alan Ludlow	Land required for the new highway. Property to be DEMOLISHED.

File Note

28 November 2016

Property/location	Owner/Occupier	Effect of the Scheme
Woodland House, Newport Road, Magor (Magor Vicarage). CPO Sheet 15 Plot 15/1ad	Freehold: Welsh Ministers Tenants: Mr David Child & Mrs Wendy Child	Land required for the new highway. Property to be DEMOLISHED.
Undy House, Magor. CPO Sheet 16 Plot 16/1h	Freehold: Welsh Ministers Currently Vacant	Land required for the new highway. Property to be DEMOLISHED.
The Beeches / Rowan House, Magor, NP26 3HG (Also residential caravan park) CPO Sheet 16 Plots 16/7 series	Freehold: Mr Llewellyn Morgan Pritchard	Land is required for the construction of the new highway. New Private Means of Access. CPO MOD 3
Dunline Knollbury Magor Monmouthshire NP26 3BX CPO Sheet 16 Plot 16/10	Freehold: Mr Robert Scott and Mrs Janet Elizabeth Mcleod. Welsh Government have accepted a blight application and are in process of acquiring (completion expected early 2017)	Land required for the new highway. Property to be DEMOLISHED. CPO MOD 42 (upon completion)

File Note

Project title M4 Corridor around Newport

File reference

M4CaN-DJV-LSI-ZG_GEN-FN-YL-0012

Date

11 January 2017

Subject Affected Commercial Properties

Introduction

This note identifies commercial property and commercial buildings that are to be demolished or affected by the Scheme.

For clarity, "Affected" in the context of this note refers to Commercial properties (buildings and operational land) where part or whole of property are included within the published draft Compulsory Purchase Order (CPO).

Summary table of commercial buildings affected.

Number of Buildings:	CPO published March 2016	Current Scheme (Jan 2017)
Affected (Total):	53	49
Demolished (Total):	43	39
Partially Demolished (Total):	4	3
Relocated (Total):	2	2
Remaining (Total):	4	5

For the current Scheme (Jan 2017), it is assumed that all proposed modifications to the draft CPO are accepted and are incorporated into the CPO if made. Reference to the proposed modifications is made in the affect commercial properties table below.

Detailed table of affected commercial property

For ease of reference, locations of buildings listed in the table below are shown on figures included at the end of this note. Commercial buildings demolished have the word DEMOLISHED in uppercase in the description for use of land.

draft CPO Plot no	Building Reference number	Owner/ Leaseholder/ Tenant	Effect of Scheme on property
sheet 3 CPO	n/a	Freehold - Quinn Radiators	Access to Quinn Radiators is changed as part of the Side Roads Order. No land take or impact to their operational land or buildings.
2/25 and 3/2 series	n/a	Freehold – Mr T Hicks, Parc Golf club	Land take required to construct the new motorway affects the driving range and the pitch and putt. A modification to the CPO has been proposed to reduce the land take and reduce the impact on

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11 January 2017

draft CPO Plot no	Building Reference number	Owner/ Leaseholder/ Tenant	Effect of Scheme on property
			the pitch and putt and remove the impact on the driving range.
1/8 series	n/a	Freehold - UK Healthcare Property	Land take required to the rear of the care home to construct the new Castleton interchange. Buildings and operational land not affected.
7/2s	A0 (figure 1)	Freehold - ABP	Security gate. West gate to be relocated.
7/3p & 7/3ac	A1 (figure 1)	Freehold - ABP Tenant – Reginald Roderick t/a A1 Skips	Building Fully DEMOLISHED as part of the Scheme. Building maybe maintain based on detail designs development – Whole building included in CPO (as Title and Essential Licence)
7/3ac	A2 (figure 1)	Freehold – ABP Tenant - Reginald Roderick t/a A1 Skips	Offices and stores. Building fully DEMOLISHED as part of Scheme.
7/3dn & 7/3u	A3 (figure 1)	Freehold – ABP Leasehold- Baldwins Crane Hire Ltd	Partial demolition of building required (West extension).
7/3dp & 7/3ac	A4 (figure 1)	Freehold – ABP Tenant - New Adventure Travel Ltd.	Partial demolition of building required and adaption of portal structure to retain remaining portion of building. Whole building included in CPO (as Title and Essential Licence)
7/3dq & 7/3y	A5 (figure 1)	Freehold – ABP Leasehold - LDH Plant Ltd.	Partial demolition of building required (West extension). A proposed modification to the CPO has been proposed to maintain the building and all operational equipment.
7/3ae	A6 (figure 2)	Freehold – ABP Tenant – R Williams Transport	Unknown use. Within temporary land required for the Scheme. Building DEMOLISHED as part of Scheme.
7/3ae	A7 (figure 2)	Freehold – ABP Tenant – Laidlaw (2010) Ltd.	Unknown use. Within temporary land required for the Scheme. Building DEMOLISHED as part of Scheme.
7/3ac, 7/3ad, 7/3ag & 7/3af	A8 (figure 2)	Freehold - ABP Tenant - WE Dowds. (special agreement)	Shed No 10 – Partial demolition of building required and adaption to retain remaining portion. (North section of building 35-40m demolished)
7/3ag	A9 (figure 2)	Freehold - ABP Leasehold - Origin UK Operations Ltd.	Shed No 9 - No demolition required, but north facade to be closed changing operational layout. New PMA runs directly north of the building, through Origin's operational yard. Part of building included within CPO to make adaptations to building if required.
7/3w	A10 (figure 2)	Freehold - ABP Leasehold - Hill & Smith Ltd t/a Asset International	Offices and stores. Building DEMOLISHED as part of Scheme.
7/3ae	A11 (figure 2)	Freehold - ABP Tenant – Lynette Givvons t/a Ma's Ba	Café - Building DEMOLISHED as part of Scheme.
7/3ac	A14 (figure 2)	Freehold - ABP Tenant - Scott Timber Ltd	Unknown use. Building DEMOLISHED as part of Scheme.

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draft CPO Plot no	Building Reference number	Owner/ Leaseholder/ Tenant	Effect of Scheme on property
7/3dj & 7/3cb	A12 (figure 3)	Freehold - ABP	Unknown use. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3dj	A13 (figure 3)	Freehold - ABP	Sub Station. Land required temporarily during construction. Building DEMOLISHED as part of Scheme. Maybe maintain based on detail design development
7/3db	B0 (figure 3)	Freehold - ABP	Offices and stores part of Central Workshops. Building DEMOLISHED as part of Scheme.
7/3db	B1 (figure 3)	Freehold - ABP	Derelict - part of Central Workshops. Building DEMOLISHED as part of Scheme.
7/3dk & 7/3cf	B2 (figure 3)	Freehold - ABP	Unknown use- part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3dk & 7/3cf	B3 (figure 3)	Freehold - ABP	Unknown use- part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3dk	B4 (figure 3)	Freehold - ABP	Staff mess and welfare building for dockyard - part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme
7/3dk & 7/3cf	B5 (figure 3)	Freehold - ABP	Unknown use- part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3dk	B6 (figure 3)	Freehold - ABP	Unknown use- part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3dk & 7/3cf	B7 (figure 3)	Freehold - ABP	Unknown use- part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3dk, 7/3ch & 7/3cq	B8 (figure 3)	Freehold – ABP Tenant - Svitzer Marine Ltd.	Unknown use- part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3ch	B9 (figure 3)	Freehold - ABP	Offices and Stores part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3ch & 7/3cj	B10 (figure 3)	Freehold - ABP	Offices and Stores part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3ch, 7/3cq & 7/3cs	B11 (figure 3)	Freehold - ABP	Offices and Stores part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3ch, 7/3cq & 7/3cs	B12 (figure 3)	Freehold - ABP	Offices and Stores part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3ch, 7/3cq, 7/3cs & 7/3ct	B13 (figure 3)	Freehold - ABP	Workshop part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.

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draft CPO Plot no	Building Reference number	Owner/ Leaseholder/ Tenant	Effect of Scheme on property
7/3cm, 7/3cn, 7/3cp & 7/3cu	B14 (figure 3)	Freehold – ABP Leasehold - C.J.N Engineering Ltd.	Workshop part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3cw	B15 (figure 3)	Freehold - ABP	Workshop part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3cw & 7/3da	B16 (figure 3)	Freehold - ABP	Offices and Stores part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3cs	B17 (figure 3)	Freehold - ABP	Offices and Stores part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3da & 7/3cy	B18 (figure 3)	Freehold - ABP	Offices and Stores part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3cq, 7/3cz & 7/3da	B19 (figure 3)	Freehold - ABP	Offices and Stores part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3da & 7/3dc	B20 (figure 3)	Freehold - ABP	Offices and Stores part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
7/3de	B21 (figure 3)	Freehold - ABP	Unknown use- part of Central Workshops. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
8/4e	n/a	Freehold – Newport City Council Leasehold – Hanson Quarry Products Ltd	Part of the operational land used for material handling is required temporarily. A modification to the draft Orders has been proposed to remove the area of land which part of Hanson's machinery is sited. This reduces the impact on their operations.
8/4k	M1 (figure 4)	Freehold - Marshalls Mono Ltd	Batching plant. Land required temporarily during construction. Building/ Plant DEMOLISHED or relocated off site as part of Scheme.
8/5q	M2 (figure 4)	Freehold - Marshalls Mono Ltd	Aggregate storage hanger. New structure passes over this building. Building DEMOLISHED as part of Scheme. The intention would be an offer back of suitable lesser interest in or rights to the land, to minimise the land.
8/5t	M3 (figure 4)	Freehold - Marshalls Mono Ltd	Unknown use. Land required temporarily during construction. Building DEMOLISHED as part of Scheme.
8/5q, 8/5w, 8/5u & 8/5t	M4 (figure 4)	Freehold - Marshalls Mono Ltd	Prefabricated factory. New structure passes partially over this building. Building DEMOLISHED as part of Scheme.
5/5s, 8/5r & 8/5q	M5 (figure 4)	Freehold - Marshalls Mono Ltd	Office. New structure passes partially over this building. Building DEMOLISHED as part of Scheme. The intention would be an offer back of suitable lesser interest in or rights to the land.

File Note

11 January 2017

draft CPO Plot no	Building Reference number	Owner/ Leaseholder/ Tenant	Effect of Scheme on property
8/5v	M6 (figure 4)	Freehold - Marshalls Mono Ltd Tenant - Newport Container Valet Ltd	Unknown use. Land required temporarily during construction. Business operations on land will not be possible during construction.
8/5v & 8/5ab	M7 (figure 4)	Freehold - Marshalls Mono Ltd Tenant - Newport Container Valet Ltd	Unknown use. Land required temporarily during construction. Business operations on land will not be possible during construction.
8/5ad	M8 (figure 4)	Freehold - Marshalls Mono Ltd Tenant - Newport Container Valet Ltd	Unknown use. Land required temporarily during construction. Business operations on land will not be possible during construction. Building DEMOLISHED as part of Scheme.
8/5ad & 8/5af	M9 (figure 4)	Freehold - Marshalls Mono Ltd Tenant - Newport Container Valet Ltd	Unknown use. Land required temporarily during construction. Business operations on land will not be possible during construction. Building DEMOLISHED as part of Scheme.
8/5v & 8/5ab	M10 (figure 4)	Freehold - Marshalls Mono Ltd Tenant - Newport Container Valet Ltd	Unknown use. Land required temporarily during construction. Business operations on land will not be possible during construction.
8/6u, 8/6v, 8/7r & 8/7j	R0 (figure 5)	Freehold – The Bird Group of Companies Ltd *Freehold- Network Rail Leasehold - Cargo Services (UK Ltd)	Rail terminal to be DEMOLISHED. *Part of the rail terminal is located on Network Rail freehold land. Rail terminal building spans the railway line. Discussions on the relocation of the rail terminal are being held.
8/9h	R1 (figure 5)	Freehold - Liberty House Group	Utilities building - Required temporarily to construct the Scheme. Building DEMOLISHED as part of Scheme. A modification to the CPO has been proposed to remove this building from the CPO, therefore leaving it unaffected.
8/14	R2 (figure 5)	Freehold – Network Rail Leasehold – Western Power Distribution Plc	Sub Station - Building DEMOLISHED as part of Scheme. A modification to the CPO has been proposed to remove this building from the CPO, therefore leaving it unaffected.
8/9h	R3 (figure 5)	Freehold - Liberty House Group	Utilities building - Building DEMOLISHED as part of Scheme. A modification to the CPO has been proposed to remove this building from the CPO, therefore leaving it unaffected.
8/9h	R4 (figure 5)	Freehold - Liberty House Group	Unknown use - Building DEMOLISHED as part of Scheme. A modification to the CPO has been proposed to remove this building from the CPO, therefore leaving it unaffected.
9/2 series	n/a	Freehold - Solutia UK Ltd	No Operational land required for the scheme. PCB cell not acquired- easement for construction and maintenance of bridge required.
9/8 series	n/a	Freehold - Royal Ordnance (Crown Service) Pension Scheme Trustees Limited	Land required for the realigned Nash Road and Nash Mead. Private means of access to be re-provided through the Side Roads Order.

File Note

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draft CPO Plot no	Building Reference number	Owner/ Leaseholder/ Tenant	Effect of Scheme on property
		Leasehold –Carlsberg UK ltd	A modification to the CPO has been proposed for an alternative layout of the junction and access arrangement, to reduce the impact on the operation of the business.
9/10 series	n/a	Freehold – Alan R Jones and Sons Ltd. and Mr Peter David Jones.	Minor impact. Access arrangement amended to suit new Nash Road/Nash Mead side road. A modification to the CPO has been proposed for an alternative layout of the junction and access arrangement.
10/1cx	n/a	Freehold - WG Leasehold - Industrial Automation And Control Holdings Ltd	Yard and loading areas required for the Scheme. Building unaffected. A modification to the CPO has been proposed to reduce the impact on the operation of the business.
12/2 and 11/2 series	n/a	Freehold - Tata Steel	Operational land required for the scheme. Amendments to reed beds and settling ponds.
11/2aq, 11/2bu and 11/2ar	n/a	Freehold – Tata Steel Leasehold - Tarmac Ltd (Cambrian Stone Ltd)	Temporary and permanent land Required for the Scheme. A modification to the CPO has been proposed to reduce the impact on the operation of the business.
15/23 series	n/a	Freehold – Rontec Leasehold – Road chef	Magor Service Station - Required for temporary access road and permanent land take. Operational land.
15/1r	n/a	Freehold – WG (SWTRA Highway Maintenance Depot)	Buildings/yard requires demolition as part of the scheme. Replacement depot to be constructed at the proposed Glan Llyn Junction (CPO Plot 11/2v and 11/2ac)

The figures below are extracts taken from the land reference plans with the buildings identified.

File Note

11 January 2017

Figure 1

ABP - Docks Way Link

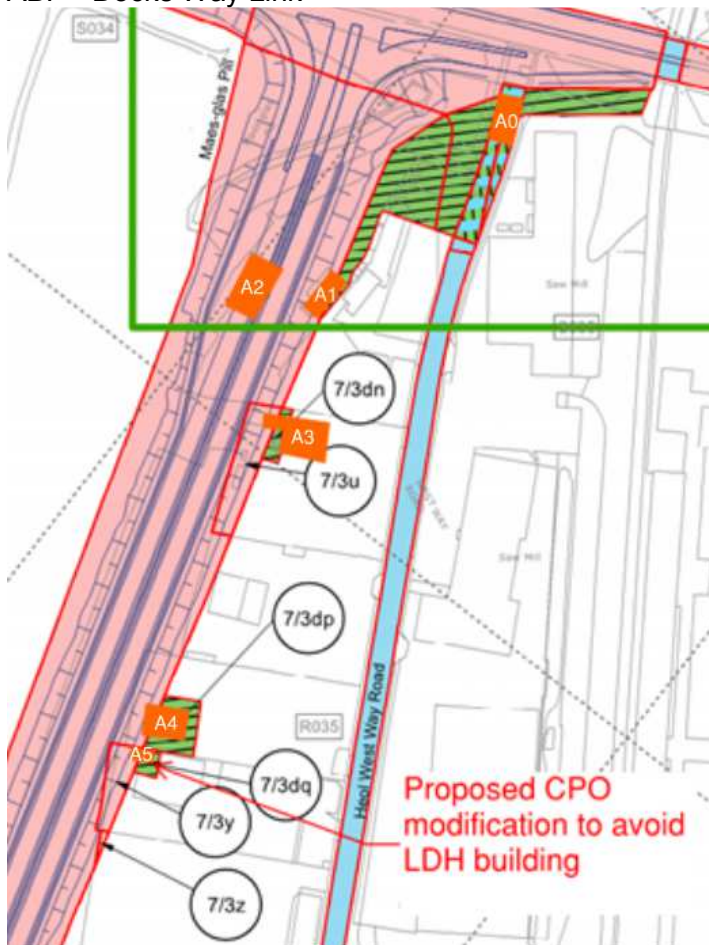
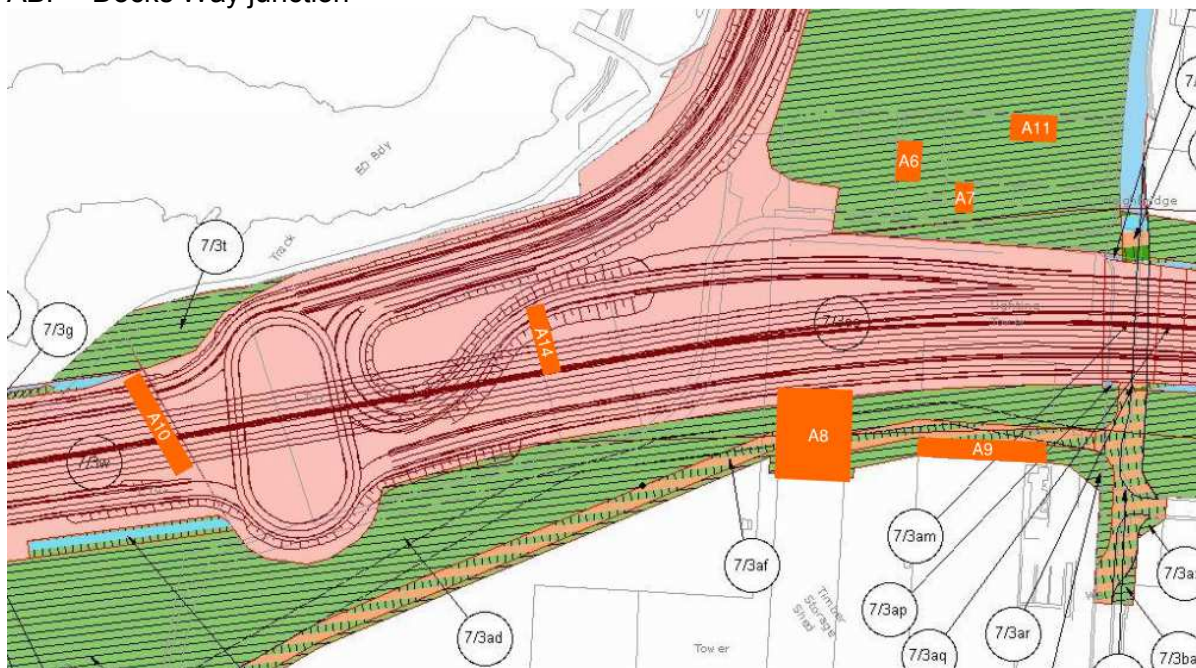


Figure 2

ABP - Docks Way junction



File Note

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Figure 3

ABP – Central Workshop area

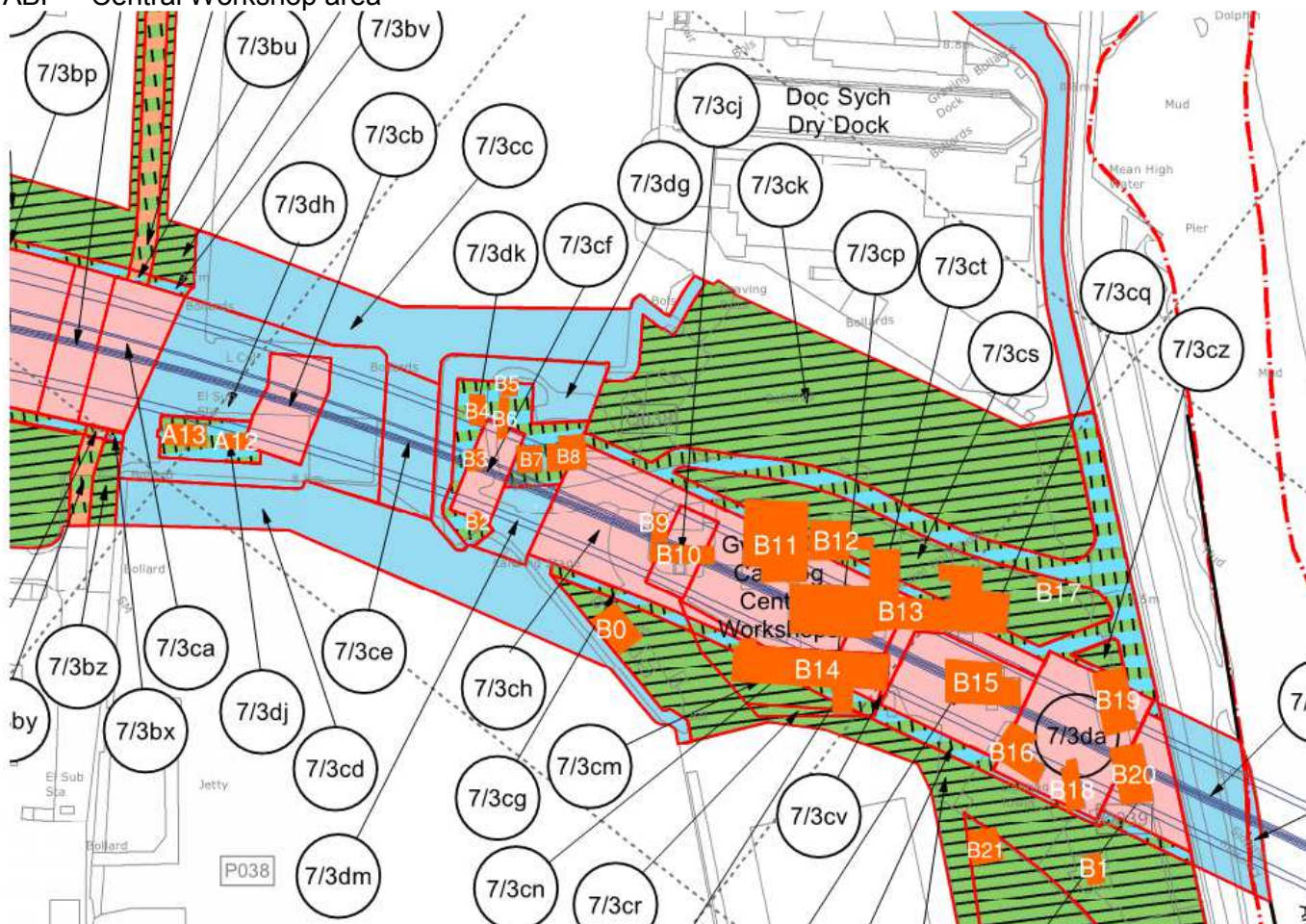


Figure 4

Marshall's Mono Ltd



File Note

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Figure 5

Birdport and Liberty Steel Ltd.



Figure 6 Maintenance Depot



File Note

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Appendix F – Summary of ABP Land Areas in the CPO

File Note M4CaN-DJV-LSI-Z3_GEN-FN-YL-0001 – Total ABP land required for the scheme

Drawing M4CaN-DJV-LSI-ZG_GEN-DR-YL-1639 – ABP Land Area

File Note

Project title M4 Corridor around Newport

File reference

M4CaN-DJV-LSI-Z3_GEN-FN-YL-0001

Date

18 January 2016

Subject ABP Land Requirements

1. Introduction

The alignment of the proposed new M4 Corridor around Newport scheme would pass over the Newport docks (owned and operated by Associated British Ports (ABP)) and would include a junction and link road to the A48. The road would be on elevated viaduct structures over Newport Docks, with a cable stay bridge spanning the River Usk. This structure is known as the River Usk Crossing.

In order to construct the River Usk Crossing, the Docks Way Junction and Docks Way Link, the Welsh Government (WG) needs to purchase land, permanently and temporarily from ABP. The WG would also require permanent easements over some of ABP's land for maintenance of the highway assets. This land was shown in a draft Compulsory Purchase Order, published in March 2016.

This note provides an analysis of the total area of ABP land required for the scheme, as proposed in the draft CPO dated March 2016. Modifications to the CPO have been prepared in draft. Subject to their acceptance, minor amendments to the areas given in this file note would apply.

2. Total ABP Land at Newport Docks

Newport docks is operated by Associated British Ports (ABP) and has many different operations carried out by different tenants on their land. ABP have two registered freehold titles, CYM41665 and CYM93518, which define their total freehold area. ABP confirmed that the data held by the Land Registry was correct by submission of their questionnaire response to the Welsh Government on 8 February 2016.

The two land registry plots were inputted into the project team's land database. Figures 1 and 2 below display the two freehold title areas, registered in the database as plots 4o and 4t. These areas are also displayed on drawing M4CaN-DJV-LSI-ZG_GEN-DR-YL-1639.

File Note

18 January 2016

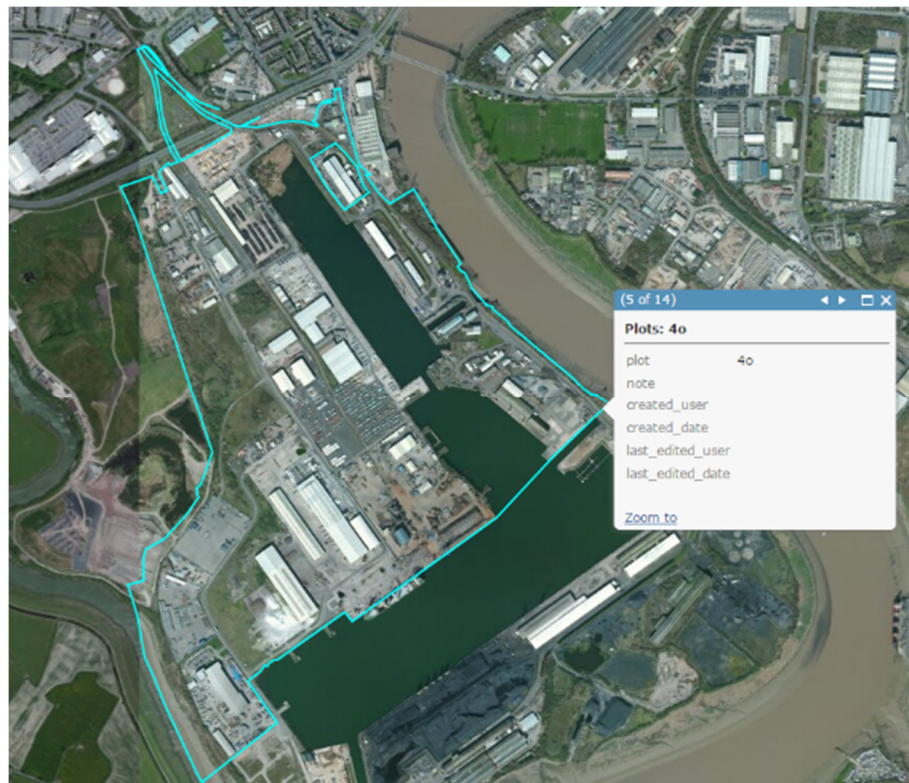


Figure 1: Outline of plot 4o

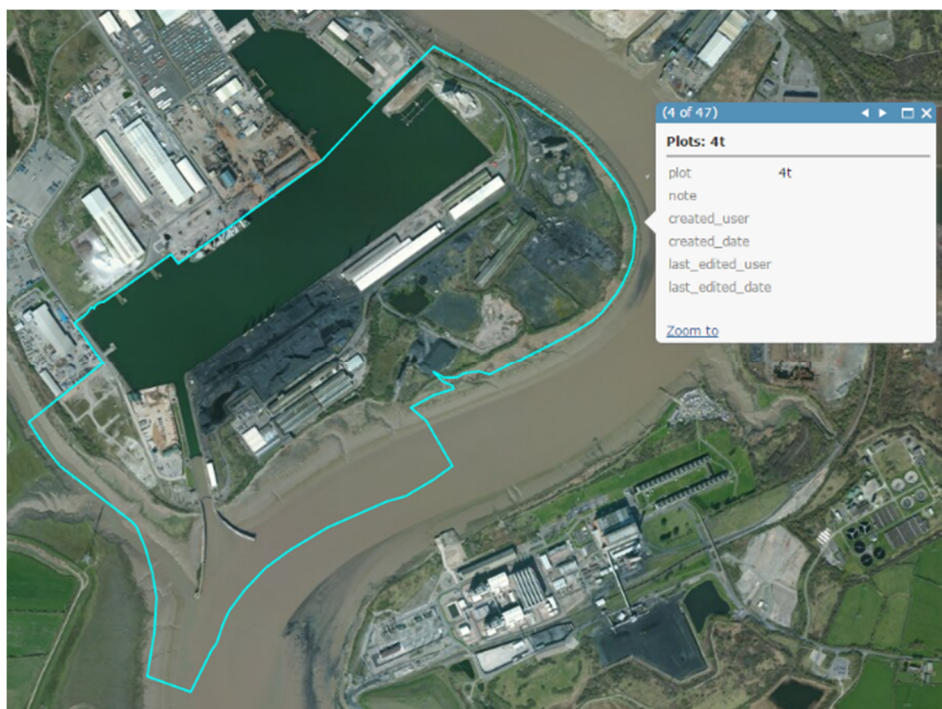


Figure 2: Outline of plot 4t

File Note

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From this information it is possible to get the total ABP freehold area. Table 1 below displays this information.

Table 1: Total ABP Freehold Area

<u>Units</u>	<u>Plot 4o</u>	<u>Plot 4t</u>	<u>Total ABP Area</u>
m ²	1349998	1450083	2800081
Hectares	135	145	280
Acres	334	358	692

A further 2 plots are also included in the database as being in the freehold ownership of ABP, being plots 4a and 4m. These plots are so small however that their areas are considered to be negligible (0.065 and 0.014 acres respectively.) It can therefore be seen from the table above that the **total ABP freehold** in Newport Docks is **692 acres**. This calculation was compared to a listing on Newport Docks' website, which states that ABP's total port acreage is 685 acres.

As part of the ABP Land Questionnaire response, ABP provided their leasehold schedule and leasehold plan. This lists all the leasehold agreements in place at Newport Docks, and the plots of land that they occupy. This information was also input into the project database for reference. From this, we can see that out of ABP's total freehold of 692 acres, **ABP have leasehold agreements on 202 acres** of land. This amounts to **29% of ABP's total freehold area**.

Drawing M4CaN-DJV-LSI-ZG_GEN-DR-YL-1639 displays the outline of the total 692 acres of ABP's freehold area. It can be seen from the drawing that there are areas of the freehold that are currently inaccessible in a practical sense for port operations, and that this should be taken into account when assessing any impact of the M4 scheme on ABP's freehold area.

- Area of ABP's Freehold that extends into the River Ebbw to the west.
- Area of ABP's Freehold that extends into Newport Landfill
- The areas of the North Dock, South Dock, Junction Cut, and Entrance Locks (i.e. the impounded water area)
- Foreshore areas at the south and west extents alongside the River Usk mouth and the River Ebbw;
- The land to the east of the Docks railway on the west bank of the River Usk.

These areas are shown hatched brown in drawing M4CaN-DJV-LSI-ZG_GEN-DR-YL-1639, and have been assumed by the Welsh Government as inaccessible for ABP's current port operational activity in the port as described above. This area has been measured to be 242 acres. By discounting these areas from the total ABP freehold, the Welsh Government have deduced that **ABP's current area** of the port accessible land (at December 2016) is **450 acres (182 hectares)**. By discounting the inaccessible land from the 202 acres of land that ABP have leasehold agreements on (which is 10 acres of land on the west of the freehold that extends into the River Ebbw, currently leased by Newport City Council) **ABP have leasehold agreements on 192 acres of accessible land**. This amounts to **43%** of their total accessible area.

It should be noted that the figure derived for ABP's current area of 450 acres does not take into account future development proposals, such as those shown in ABP's draft Masterplan 2015-2035 for consultation

3. Land take requirements for the scheme over ABP's land.

In order to construct the proposed new motorway, the Welsh Government require land to be acquired from ABP via a Compulsory Purchase Order (CPO). A draft CPO was published on 24 March 2016. Within this draft CPO, the land outlined in Table 2 was identified as essential to the scheme.

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Following receipt of ABP's landowner questionnaire on 8 February 2016, it was deemed that this was too late for the inclusion of all of ABP's leaseholder information in the draft CPO issued on 24 March 2016. It was decided to undertake a modification to include the leaseholder information within the draft CPO schedule – this has been referenced as MOD 2. Following further consultation with ABP and their leaseholders, a number of other changes have been included within MOD2. An example of one such change is the agreement to remove the permanent easement from the level crossing on Jewson's land, and to use Junction Cut road instead.

Table 2: Designation of land in the draft CPO (March 2016)

<u>Land designation</u>	<u>Acres</u>	<u>Hectares</u>	<u>Percentage of Total ABP Freehold (%)</u>	<u>Percentage of ABP's accessible land area (%)</u>
Total land take required during construction	90.9	36.8	13.1	20.2
Title to be purchased permanently by WG for Highway Operation & Maintenance	37.3	15.1	5.4	8.3
Total S250 Rights required by WG for Highway Maintenance.	14.3	5.7	2.0	3.2
Essential Licence land to return to ABP (assuming total land designated in CPO is returned)	39.3	15.9	5.6	8.7
Essential Licence Land to be returned, of which WG would still require S250 Rights for Highway Maintenance	2.7	1.1	0.4	0.6

It can be seen from Table 2 above that the total land take required during the construction of the proposed new motorway is 90.9 acres, which constitutes 20.2% of ABP's accessible land area. The total land take based on ABP's total freehold area is 13.1%. Of this 90.9 acres, 42 acres would be returned to ABP after completion, however WG would still require a permanent S250 Rights over 2.7 acres of this for highway maintenance purposes. (This is assuming that the entire land acquired under Essential Licence is returned to ABP.) The total **permanent land take** required for the scheme from ABP would therefore be **51.57 acres**, which is 11.5% of ABP's useable land area.

Table 3 below outlines the land designations based on the MOD2 land CPO.

File Note

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Table 3: Designation of land in draft MOD2

<u>Land designation</u>	<u>Acres</u>	<u>Hectares</u>	<u>Percentage of Total ABP Freehold (%)</u>	<u>Percentage of ABP's accessible land area (%)</u>
Total land take required during construction	91.2	36.9	13.2	20.3
Title to be purchased permanently by WG for Highway Operation & Maintenance	36.5	14.8	5.3	8.1
Total S250 Rights required by WG for Highway Maintenance.	15.6	6.3	2.3	3.5
Essential Licence land to return to ABP (assuming total land designated in CPO is returned)	39.1	15.8	5.7	8.7
Essential Licence Land to be returned, of which WG would still require S250 Rights for Highway Maintenance	3.5	1.4	0.5	0.8

Based on the MOD2 draft CPO option, whilst slightly more land would be required during construction (an increase of 0.3 acres), the total land required as title for WG would be reduced, with an increase in the amount of land required as easement. Total land take required during construction would be 91.2 acres, which is 20.3% of ABP's accessible land area. 39.1 acres would be returned to ABP post completion, however WG would still require a permanent S250 right over 3.5 acres of this. This gives a total **permanent land take of 52.13 acres**, which is 11.6% of ABP's total accessible land area.

In between the foundation title plots and beneath the projected area of the bridge deck above, the land is provided as title with the intention to offer back suitable lesser interest in or rights to the land should the Welsh Government and the landowner agree a suitable covenant to control the use of the land beneath the bridge. The reason for this approach to the draft CPO is to minimise the land required and disruption from ABP and its tenants and to manage the interests of the Welsh Government and the travelling public in respect of safety, fire and security risks arising from land based operations beneath the bridge, and to ensure that the Welsh Government has access available beneath the bridge for inspection and maintenance. Should this lesser requirement be agreed, the total permanent title acquired from ABP by the WG would reduce.

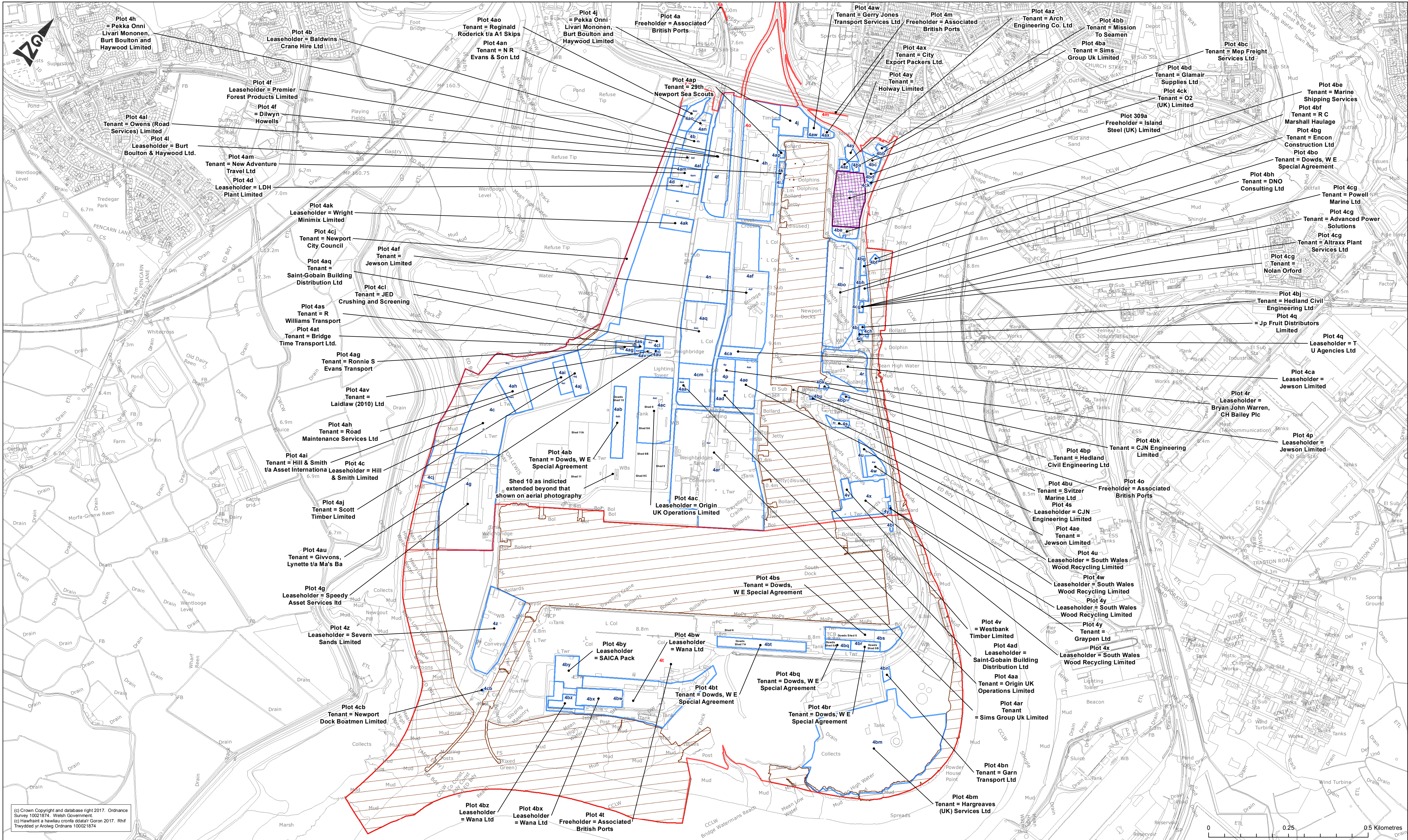
4. Attachments

M4CaN-DJV-LSI-ZG_GEN-DR-YL-1639 – Land Ownership Associated with ABP Plot: Land Area

File Note

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<div><div>LEGEND</div><div><div><div></div></div>Freehold boundary</div><div><div><div></div></div>Leaseholder/Tenancy Boundaries</div><div><div><div></div></div>Approximate area of water and inaccessible areas excluded from ABP freehold assessed by the Welsh Government (November 2016)</div><div><div><div></div></div>Island Steel Freehold excluded from Area calculations</div></div>		<div><div>Notes</div><div>1. Plot numbers shown on this plan are the M4CaN land ownership database plot numbers used to identify land owners prior to preparing the CPO</div></div>		<div><div>SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION</div><div>In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)</div><div>Construction (Enter "None" if applicable)</div><div>Maintenance / Cleaning (Enter "None" if applicable)</div><div>Use (Enter "None" if applicable)</div><div>Decommissioning / Demolition (Enter "None" if applicable)</div><div>Rev. Date Description By Chk'd App'd</div></div>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												</	
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