

Mira / Extra Self Storage
Updated Review of A5 Mitigation



Contents

	Page
1.0 Introduction	1
2.0 The Modelling Approach	1
3.0 Milestone Modelling Concerns	2
4.0 General Arrangement	4

Appendices

Appendix A	Milestone Response
Appendix B	Scheme Drawings
Appendix C	LinSig Model Reports
Appendix D	Topographical Survey Drawing
Appendix E	Vehicle Tracking Drawings



1.0 Introduction

- 1.1 David Tucker Associates (DTA) is advising Extra Room Self Storage Ltd on the access implications of the works to the A5, proposed as part of the outline MIRA planning application (LPA: PAP/2022/0423), on their property on Drayton Lane. These works would prohibit the right turn movements at the A5 Watling Street – Drayton Lane junction. These turning restrictions have not been demonstrated to be necessary to allow the Woodford Lane junction to be signalised.
- 1.2 A concept scheme has previously been provided by DTA to National Highways (NH), the local planning and highway authorities and the applicant which demonstrates that all movements access to and from Drayton Lane is achievable. A response from the highway consultant, Milestone, acting on behalf of the applicant has been received (dated 21st January 2025). It is attached at **Appendix A**. This report addresses their comments.

2.0 The Modelling Approach

- 2.1 The original application for MIRA proposed the signalisation of both Woodford Lane and Drayton Lane. LinSig models were presented by the applicant which treated both junctions as being independent of each other. In later development the applicant used a microsimulation model.
- 2.2 In the review of the scheme, a LinSig model was developed by DTA, replicating the approach taken by the applicant for the Woodford Lane junction, to support their concept schemes retaining all movements.
- 2.3 The key consideration of the Woodford Lane Junction is how the flare will operate. This is in effect a re-purposed left turn filter lane which is approximately 80m in length with a funnel immediately downstream. The maximum use of the flare is circa 13 cars including the left turners but in practice is likely to be less. The maximum rate at which vehicles will enter the funnel will be equivalent to the saturation flow of the two upstream lanes for the duration for which the flare is effective. The funnel is effectively a constriction which either needs to be sufficiently long to allow the platoon to disperse or there will be delay within the funnel which will feedback into the use of the flare. The funnel is significantly



shorter than the flare at around 50-60m (length within which vehicles can be carried two abreast).

- 2.4 The issue for the Drayton Lane junction is that there could be confusion about whether downstream delay is attributable to the junction or funnel. The design solutions here are either to extend two westbound lanes through both junctions and locate the funnel to the west of both junctions OR link the timings of the junctions so they are co-ordinated such that ahead traffic from Woodford Lane junction is not held at the Drayton Lane junction when the flare is operational. The DTA concept scheme adopted the former approach but either approach is workable here. Both options are shown on the drawings at **Appendix B**.

3.0 Milestone Modelling Concerns

- 3.1 Cruise speeds and link lengths can be defined within the model to allow drive times to be calculated. Alternatively drive times can be defined directly as was done within the model; ultimately the outcome will be the same. **Milestone concern 1** is that cruise speeds are not defined. This metric is not used and makes no difference to the outcome.
- 3.2 A flare is proposed on Drayton Lane to minimise the green time required for the minor arm demand. **Milestone concern 2** is where the flare should be developed on the nearside or the offside. In a practical sense the difference between a nearside and offside flare is the layout of the road markings on the road – which can be defined and refined at the detailed design stage. The appropriate assignment of traffic relates to the overall weight of demand in each lane, and the approach taken (assuming an off-side flare), is most appropriate in that respect.
- 3.3 **Milestone concern 3** is in three parts:
- a. 50:50 split for ahead traffic is unlikely due to the presence of a give-way right-turn into Drayton Lane. Drivers will likely be aware of this and the potential for queuing and therefore will likely select to drive in the nearside lane.



- b. Within the LinSig Arm 12/2 (right-turners) are giving way to Arm 12/1 this is wrong and should be giving way to Arm 7 (A5 West).
 - c. Neither lane 1 or 2 have been inputted as nearside lanes, therefore overestimating the saturation flow.
- 3.4 As discussed above, the use of the flares is a matter of judgment. This concern would be equally applied to the scheme that Milestone have agreed with NH where the proposed works at Woodford Lane will be influenced by the merge/funnel upstream. From experience elsewhere on the A5 corridor there can be a tendency to over assign traffic to flares. A conservative approach has been adopted in the updated LinSig model in this regard. The proposed funnel does not extend as far back as Drayton Lane and there is ample opportunity for merging/weaving if necessary.
- 3.5 The give-way relationship should have been to Arm 7 and this has been amended.
- 3.6 The model can be updated to provide nearside lane factors but these are internal links and there should be consistency in saturation flows to avoid spurious queues.
- 3.7 **Milestone concern 4** is that Arm 3 is not required in the context of the capacity outcome. This is partly true but providing for it in the model is good practice and allows consideration of the funnel more directly. As above, drive times have been defined rather than cruise speeds and lengths. The inclusion of Arm 3 makes no difference to assumed queuing length because the queue is represented on the signal-controlled link.
- 3.8 **Milestone concern 5** is the same point as Milestone concern 4. Arm 9 is not required in the context of the capacity outcome but providing for it in the model is good practice.
- 3.9 **Milestone concern 6** was that the radius on 6/2 reduces the saturation flow on this arm by 2.5% which, given the relatively short green periods assigned to the associated phase, will make no practical difference.



-
- 3.10 An updated Model for both options is provided at **Appendix C**.
- 3.11 In response to their comment in relation to queuing and degree of saturation for different scenarios (item 1 under "Additional Points") the modelling has been updated as above. However, the reason for the difference in simple terms is that the proportion of turning traffic is different between the two scenarios and this therefore results in different levels of queuing and degrees of saturation.

4.0 General Arrangement

- 4.1 To address GA comments the general arrangement drawing has been updated as shown at **Appendix B**. It is now based on a topographical survey commissioned by the client (provided separately at **Appendix D**).
- 4.2 Vehicle tracking has been undertaken based on a maximum legal articulated lorry (i.e. DMRB design vehicle) and these are provided at **Appendix E**. The layout has been adjusted to accommodate this vehicle.
- 4.3 The highway boundary extents are shown. In practice our client is willing to contribute land in the northwest quadrant of the Drayton Lane junction to support an appropriate layout and hence land is not considered to be a constraint.
- 4.4 Signal intervisibility envelopes are shown. Intervisibility is achievable at the Drayton Lane junction. Forward visibility to a primary signal head is achievable on all approaches. A nearside primary signal head can be provided on the Drayton Lane minor arm.

Appendix A

Mr G Warriner
Stantec
7 Soho Square
London
W1D 3QB

By e-mail

MTP Ref: 17-059

21 January 2025

Dear Graeme,

Re: Technical Note to Review A5 Mitigation prepared by DTA on behalf of ERSS dated 15.01.24

Milestone Transport Planning ("MTP") have reviewed the Technical Note to Review A5 Mitigation prepared by DTA on behalf of ERSS and dated 15 January 2025.

The main point is that the linked traffic signals they propose (i.e. the signalisation of Drayton Lane as well as the signalisation of Woodford Lane, based on MTP drawings) was rejected by the Highway Authorities, in particular National Highways, as part of their review of the Transport Assessment (August 2022) submitted with the planning application.

Notwithstanding the fact that the layout is unacceptable to the Highway Authorities, MTP have identified a number of issues with the LinSig modelling that DTA have undertaken to assess the linked signals in their Technical Note. These concerns are detailed below.

1. No cruise speeds between arms identified.
2. Arm 8 - Drayton Lane:
 - a. In line with the proposed drawing prepared by DTA the short-lane should be provided for left-turning traffic not right.
3. Arm 12 - A5 East:
 - a. 50:50 split for ahead traffic is unlikely due to the presence of a give-way right-turn into Drayton Lane. Drivers will likely be aware of this and the potential for queuing and therefore will likely select to drive in the nearside lane.
 - b. Within the LinSig Arm 12/2 (right-turners) are giving way to Arm 12/1 this is wrong and should be giving way to Arm 7 (A5 West).
 - c. Neither lane 1 or 2 have been inputted as nearside lanes, therefore overestimating the saturation flow.

e: mail@milestonetp.co.uk
w: www.milestonetp.co.uk

Milestone Gateshead Office:
Gateshead IBC
Mulgrave Terrace, Gateshead
Tyne and Wear, NE8 1AN

Milestone Fleet Office:
7 Ancells Court
Rye Close, Fleet
Hampshire, GU51 2UY

t: 0191 338 7220

t: 01483 397888

4. Arm 3:
 - a. This is unnecessary within the linked model.
 - b. DTA have inputted a physical lane length of 28.0 PCUs. It is unclear why this has been added. Arm 12 has a length of 26.1 PCUs, which is accounting for the spaces between the two junctions. Therefore, the inclusion of Arm 3 is overestimating the amount of queuing space between the two junctions.
 - c. Neither lane 1 or 2 have been inputted as nearside lanes, therefore overestimating the saturation flow.
5. Arm 9:
 - a. This is unnecessary within the linked model.
 - b. DTA have inputted a physical lane length of 60.0 PCUs. It is unclear why this has been added. Arm 1 has a length of 26.1 PCUs, which is accounting for the spaces between the two junctions. Therefore, the inclusion of Arm 9 is overestimating the amount of queuing space between the two junctions.
6. Arm 2 - Woodford Lane:
 - a. Infinite radius inputted for left-turners, therefore overestimating the saturation flow.

Additional points regarding the Technical Note and the LinSig modelling contained therein include:

1. It is unclear why the degree of saturation and queuing on the A5 eastbound is highest in the AM1 scenario, despite the traffic flows increasing in the subsequent scenarios.
2. No swept-path analysis shown for HGVs accessing / egressing Drayton Lane.
3. No signal intervisibility shown.
4. No highway boundary shown.

All of the above casts doubt on the conclusions reached within the DTA Technical Note to Review A5 Mitigation dated 15 January 2025. Coupled with the clear response from the Highway Authorities that the linked signals at both the Drayton Lane and Woodford Lane junctions with the A5 Watling Street is not an acceptable mitigation solution, the findings within the DTA Technical Note dated 15 January 2025 should be rejected.

Yours sincerely



Matthew Stevens

for Milestone Transport Planning Limited

e: mail@milestonetp.co.uk
w: www.milestonetp.co.uk

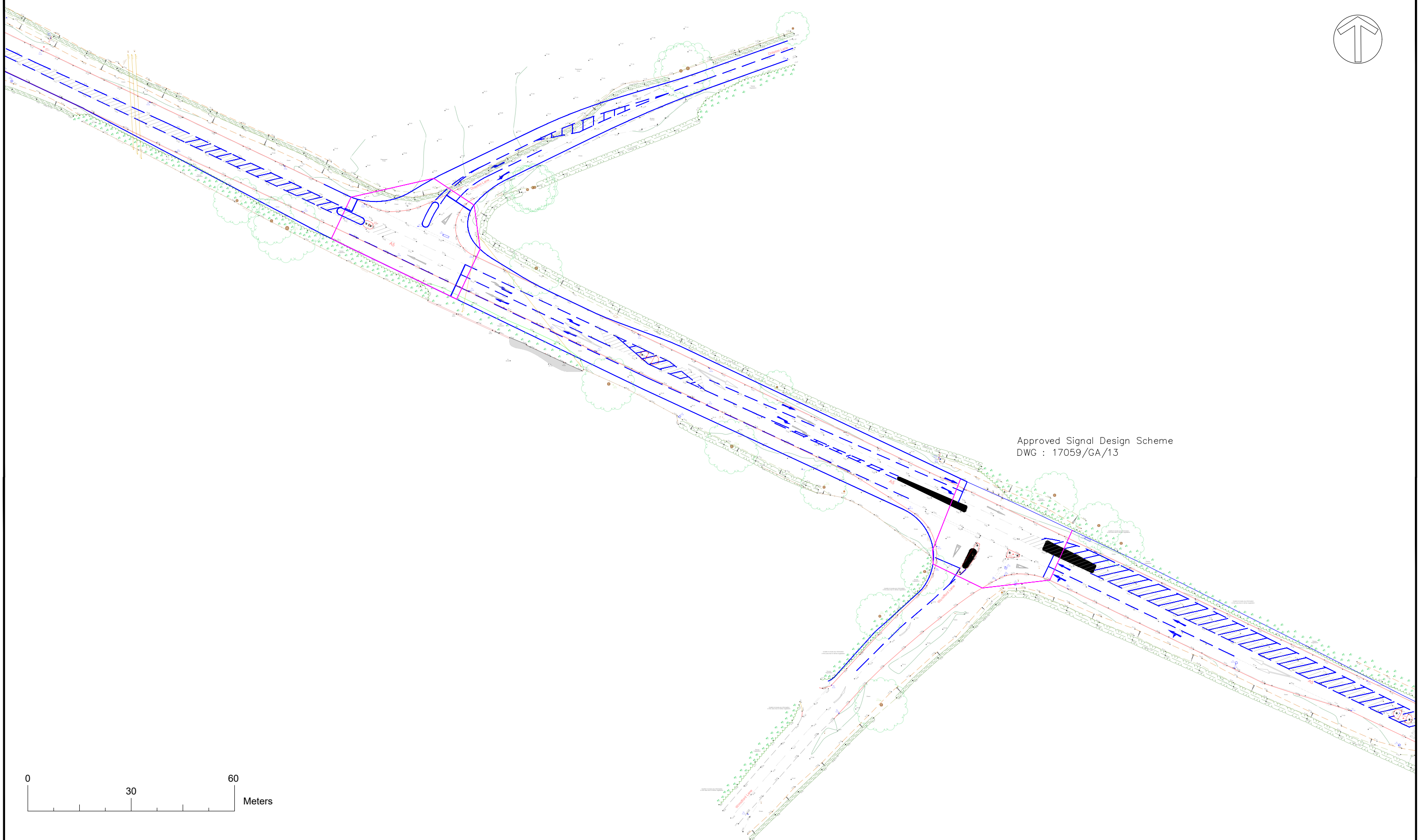
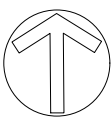
Milestone Gateshead Office:
Gateshead IBC
Mulgrave Terrace, Gateshead
Tyne and Wear, NE8 1AN

Milestone Fleet Office:
7 Ancells Court
Rye Close, Fleet
Hampshire, GU51 2UY

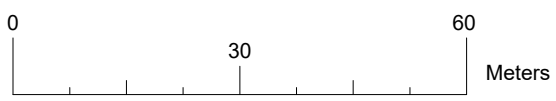
t: 0191 338 7220

t: 01483 397888

Appendix B



Approved Signal Design Scheme
DWG : 17059/GA/13

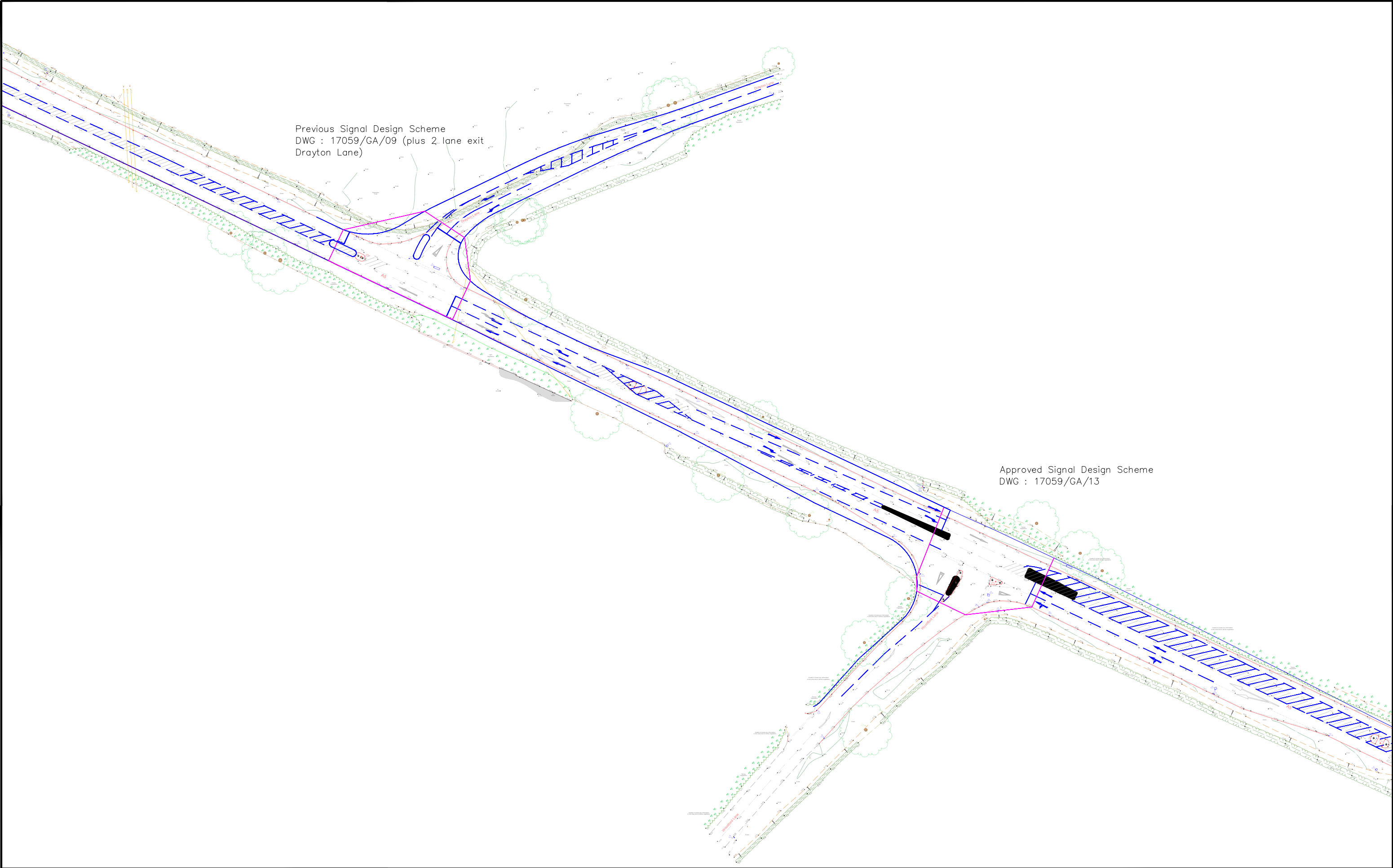


Based upon the ORDNANCE SURVEY MAPS with the permission of
THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE
© Crown Copyright AL 100030412
© David Tucker Associates

REV	DESCRIPTION	DRAWN	INITIALS	DATE

Forester House, Doctors Lane,
Henley in Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

JOB TITLE		CLIENT	
Mira / Extra Room Self Storage		Mark Simpson	
DRAWING TITLE			
A5 – Drayton Lane – Woodford Lane Junctions Concept Mitigation Package 1			
SCALE	DRAWN BY	DATE	DRAWING No
1:1000@A3	BP	07/05/25	24316-04-GA
			REVISION



Previous Signal Design Scheme
DWG : 17059/GA/09 (plus 2 lane exit
Drayton Lane)

Approved Signal Design Scheme
DWG : 17059/GA/13

Based upon the ORDNANCE SURVEY MAPS with the permission of
THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE
© Crown Copyright AL 100030412

© David Tucker Associates

REV	DESCRIPTION	DRAWN	INITIALS	DATE



DTA
Transport Planning Consultants

Forester House, Doctors Lane,
Henley in Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

JOB TITLE		CLIENT		
Mira / Extra Room Self Storage		Mark Simpson		
DRAWING TITLE				
A5 – Drayton Lane – Woodford Lane Junctions Concept Mitigation Package 2				
SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1:1000@A3	BP	07/05/25	24316–03–GA	

Appendix C

Basic Results Summary

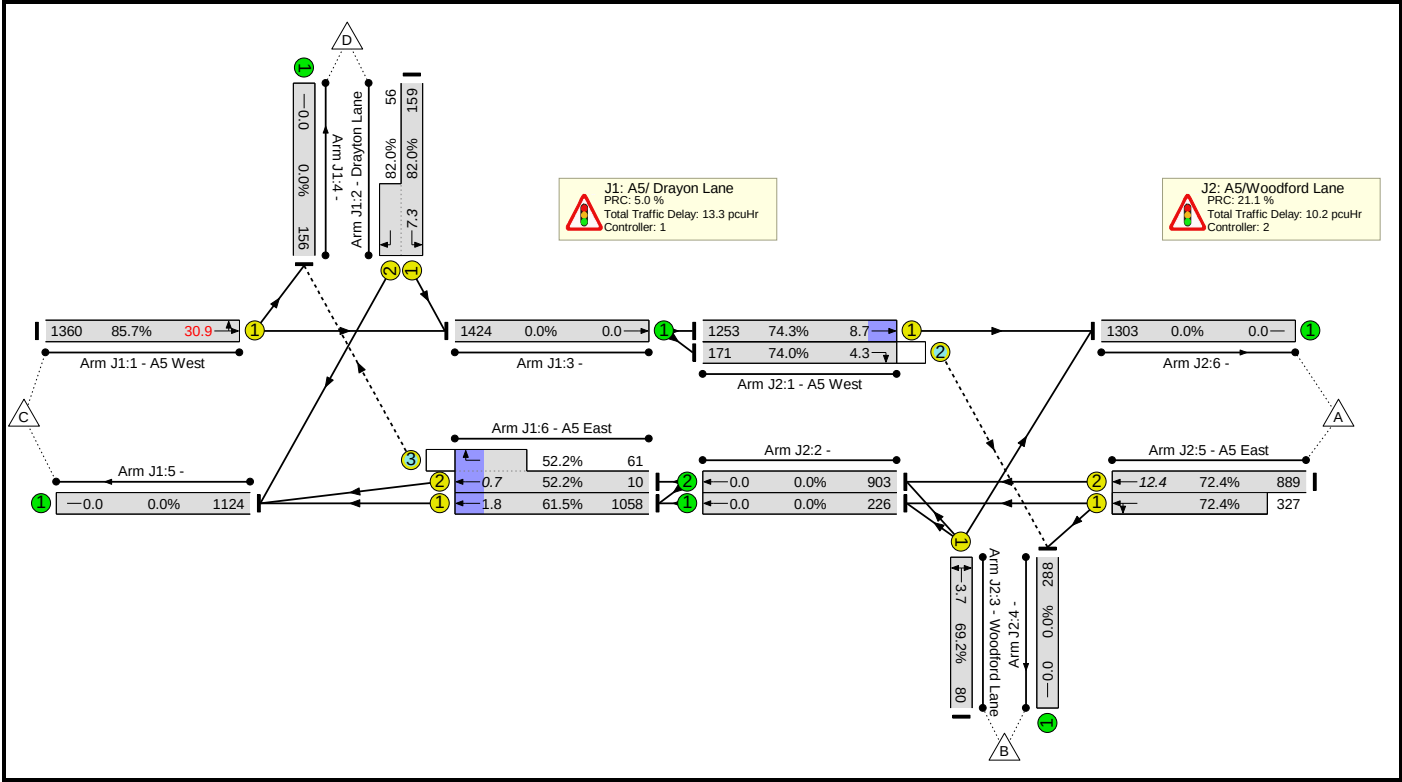
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	A5 – Drayton Lane – Woodford Lane
Additional detail:	
File name:	Linked Junction LinSig Model_REV1e.lsg3x
Author:	RM
Company:	David Tucker Associates
Address:	Henley-in-Arden

Scenario 1: 'AM1' (FG1: 'AM1 Reference + DEV', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

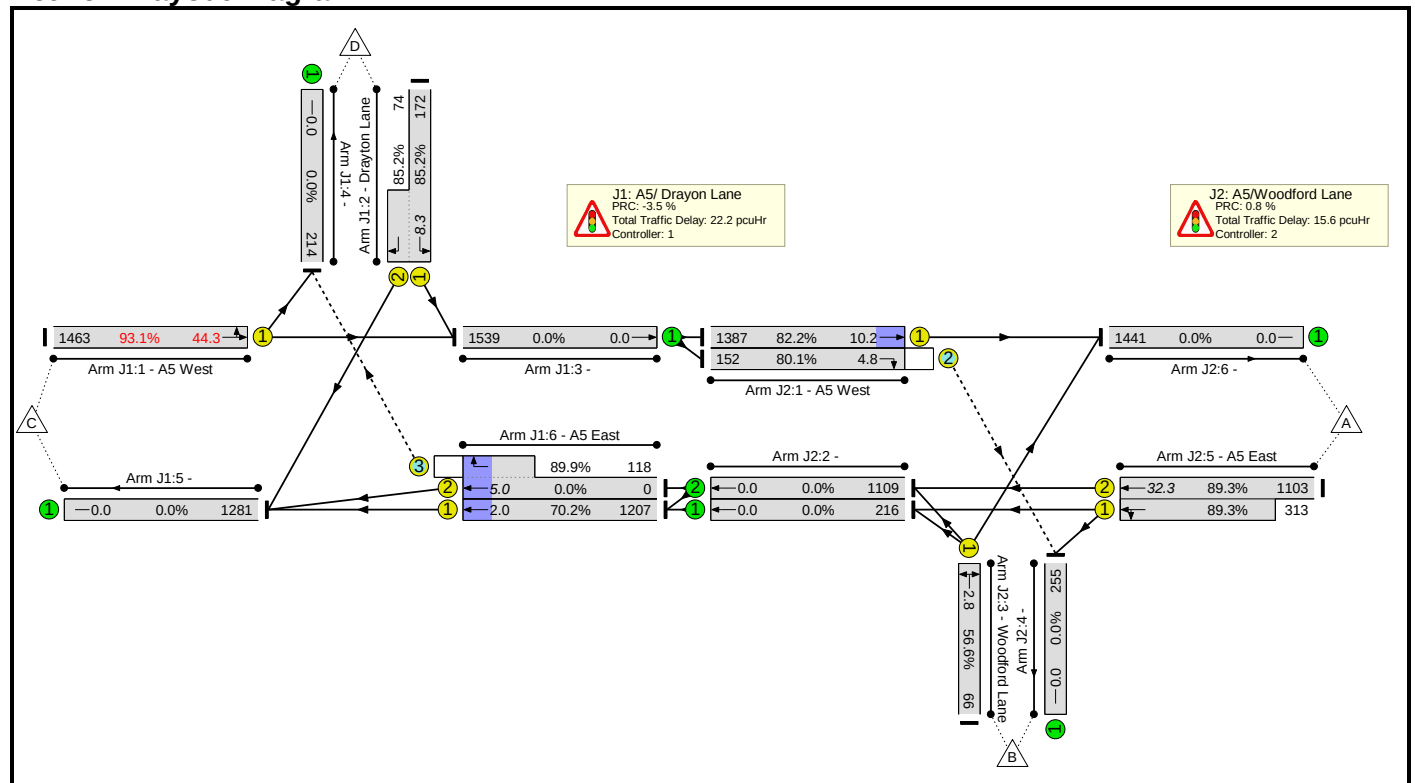


Network Results

Basic Results Summary

Scenario 2: 'AM2' (FG2: 'AM2 Reference + DEV', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

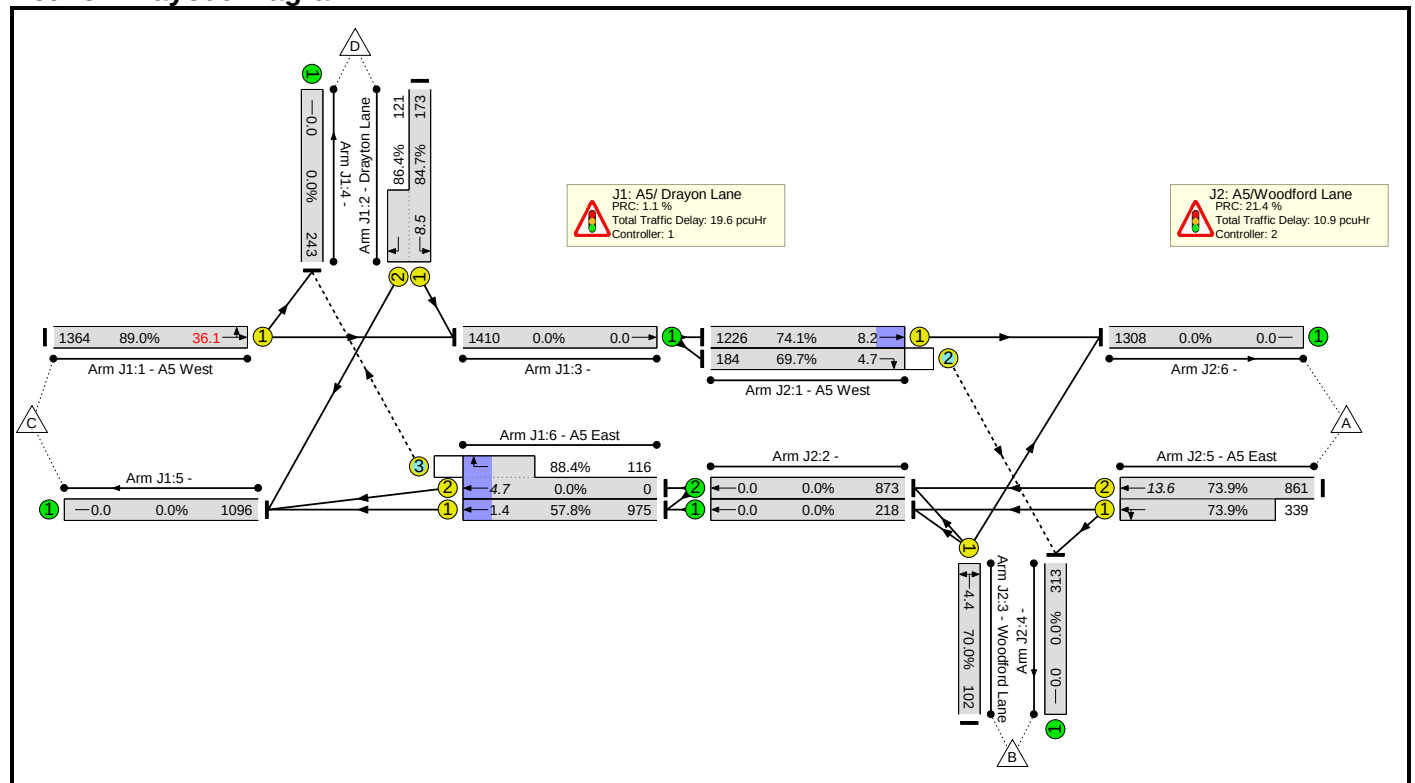


Network Results

Basic Results Summary

Scenario 3: 'AM3' (FG3: 'AM3 Reference + DEV', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

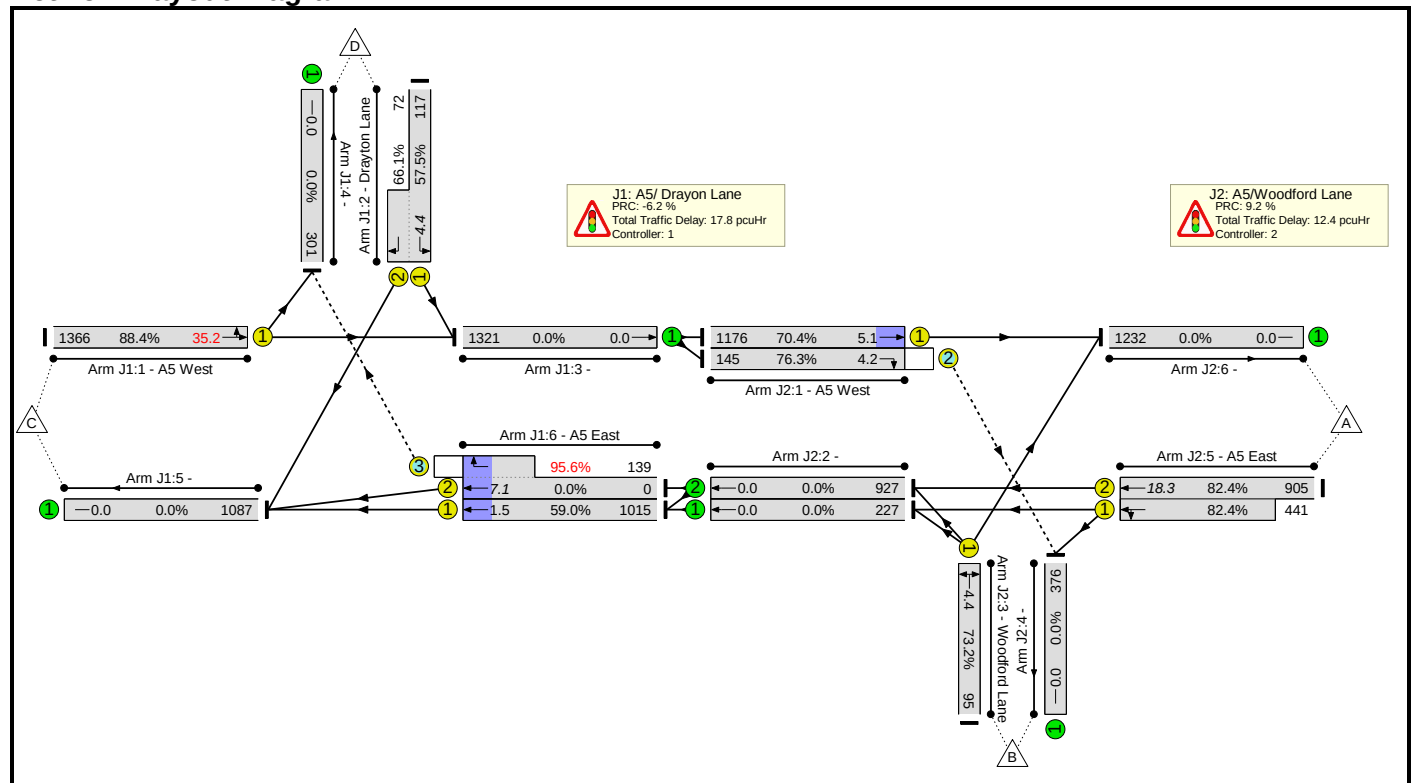


Network Results

Basic Results Summary

Scenario 4: 'PM1' (FG4: 'PM1 Reference + DEV', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

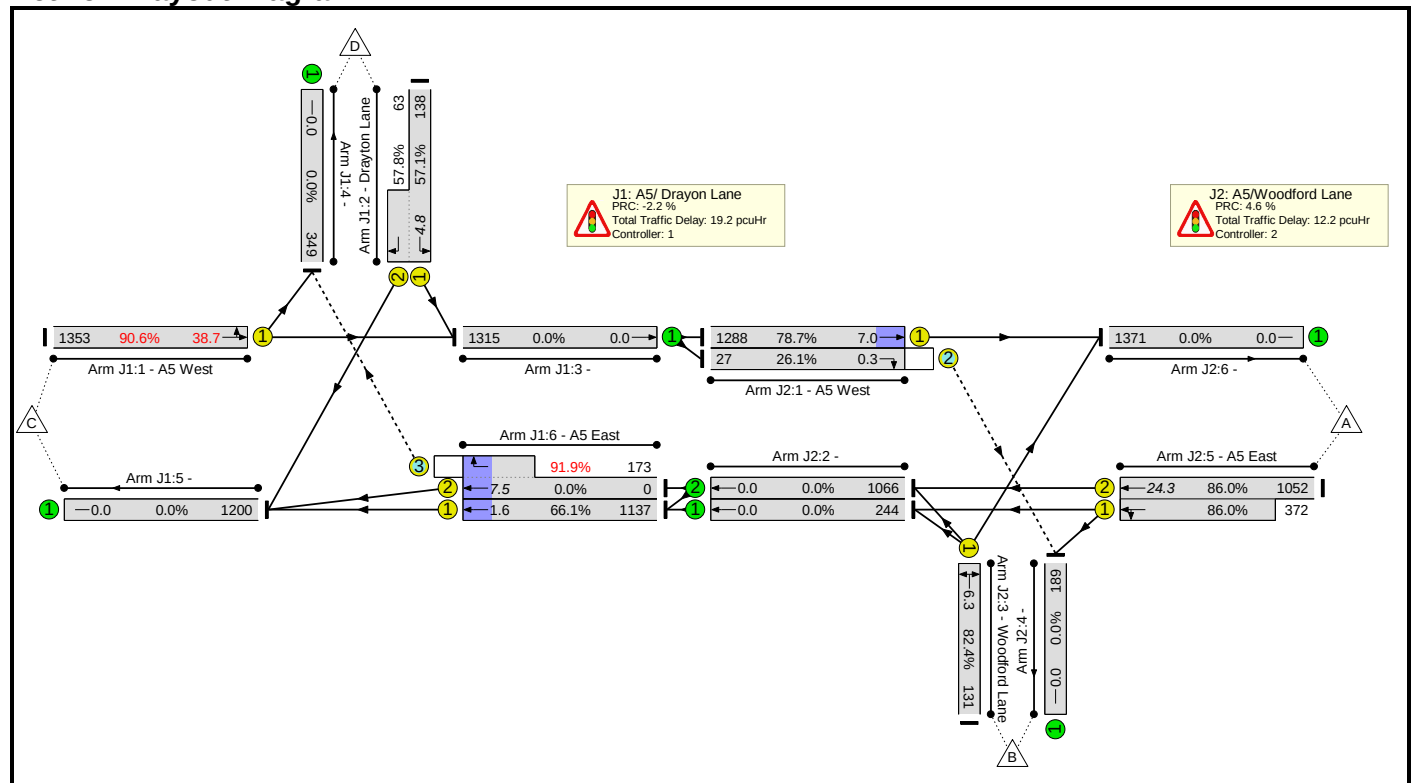


Network Results

Basic Results Summary

Scenario 5: 'PM2' (FG5: 'PM2 Reference + DEV', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

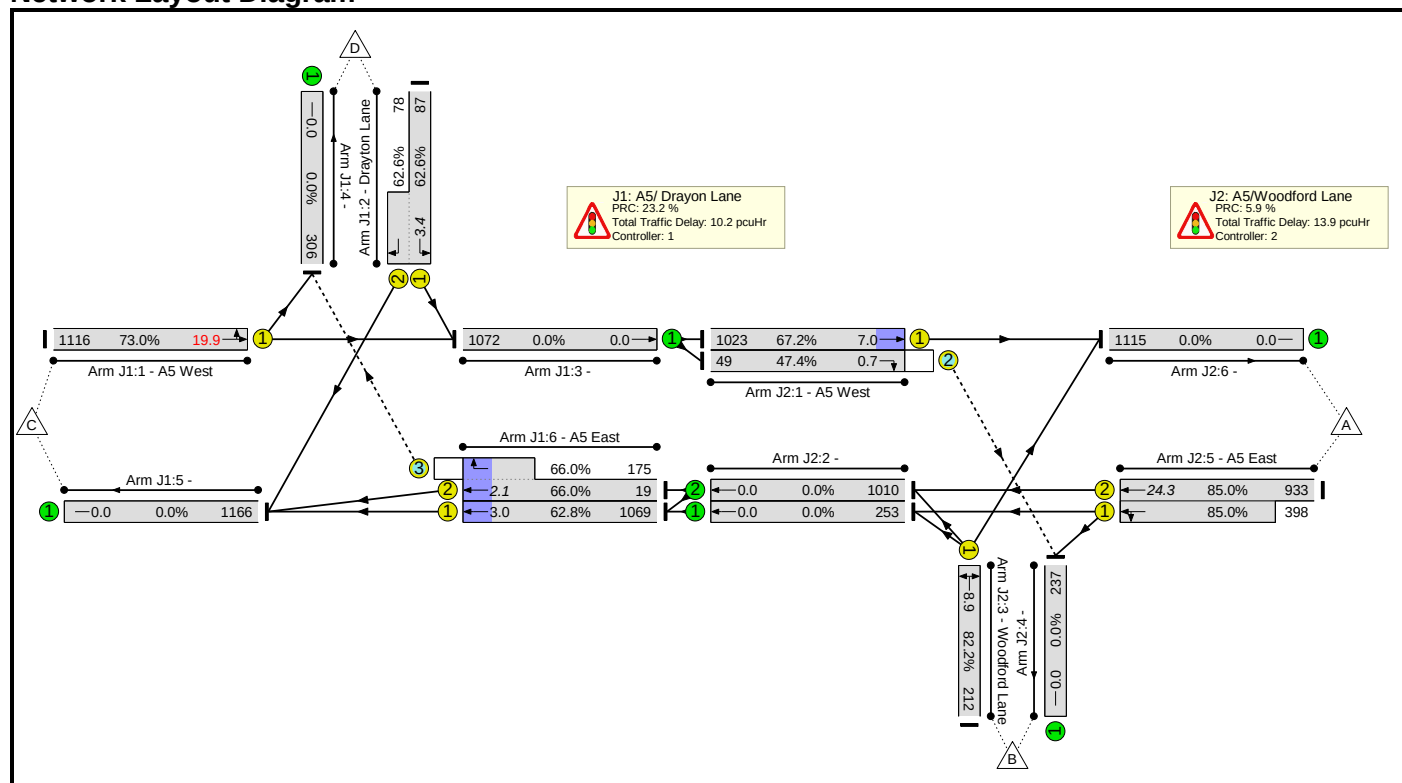


Network Results

Basic Results Summary

Scenario 6: 'PM3' (FG6: 'PM3 Reference + DEV', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Network Results

Basic Results Summary

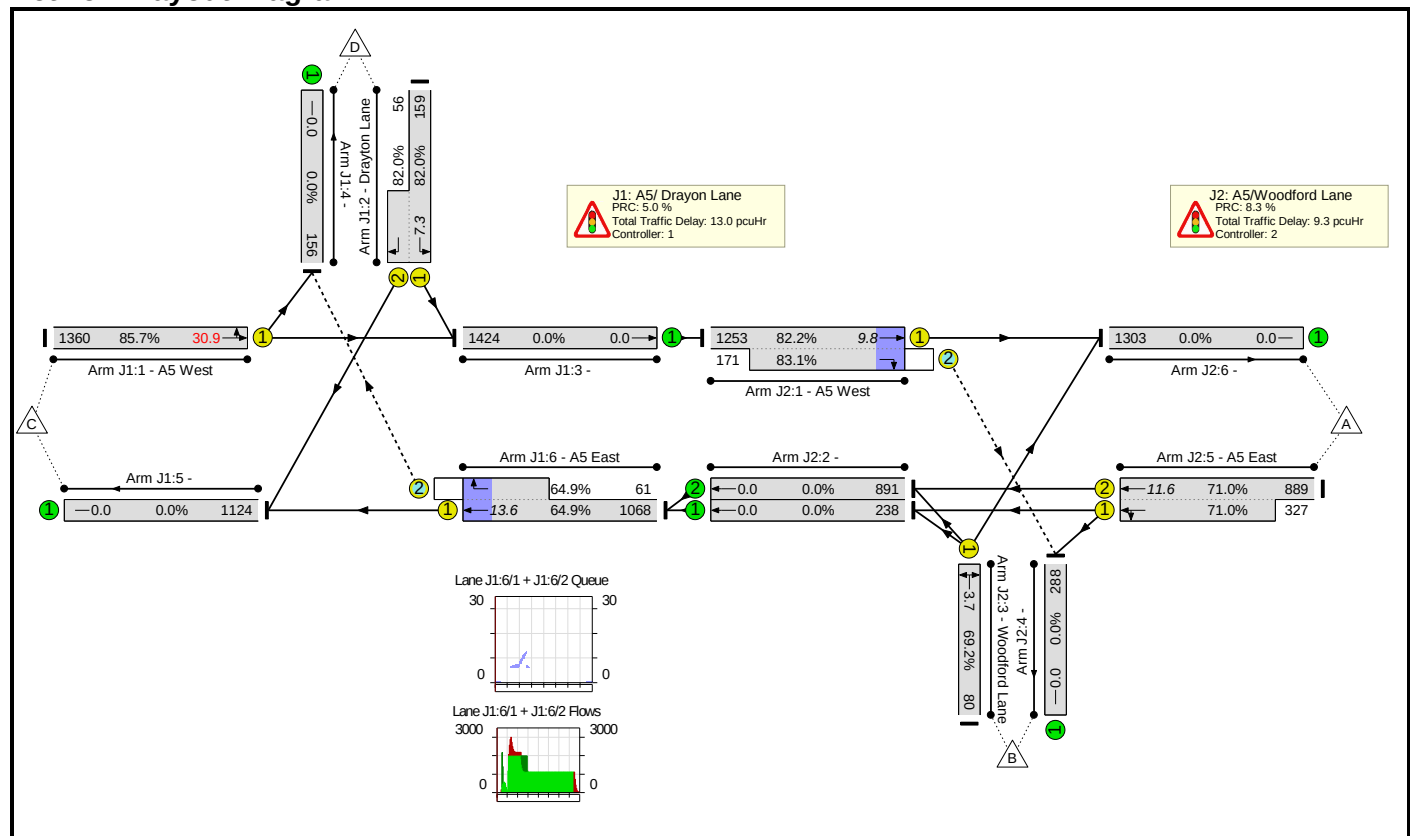
Basic Results Summary

User and Project Details

Project:	
Title:	A5 – Drayton Lane – Woodford Lane
Location:	
Additional detail:	
File name:	Linked Junction LinSig Model_REV2.lsg3x
Author:	RM
Company:	David Tucker Associates
Address:	Henley-in-Arden

Scenario 1: 'AM1' (FG1: 'AM1 Reference + DEV', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



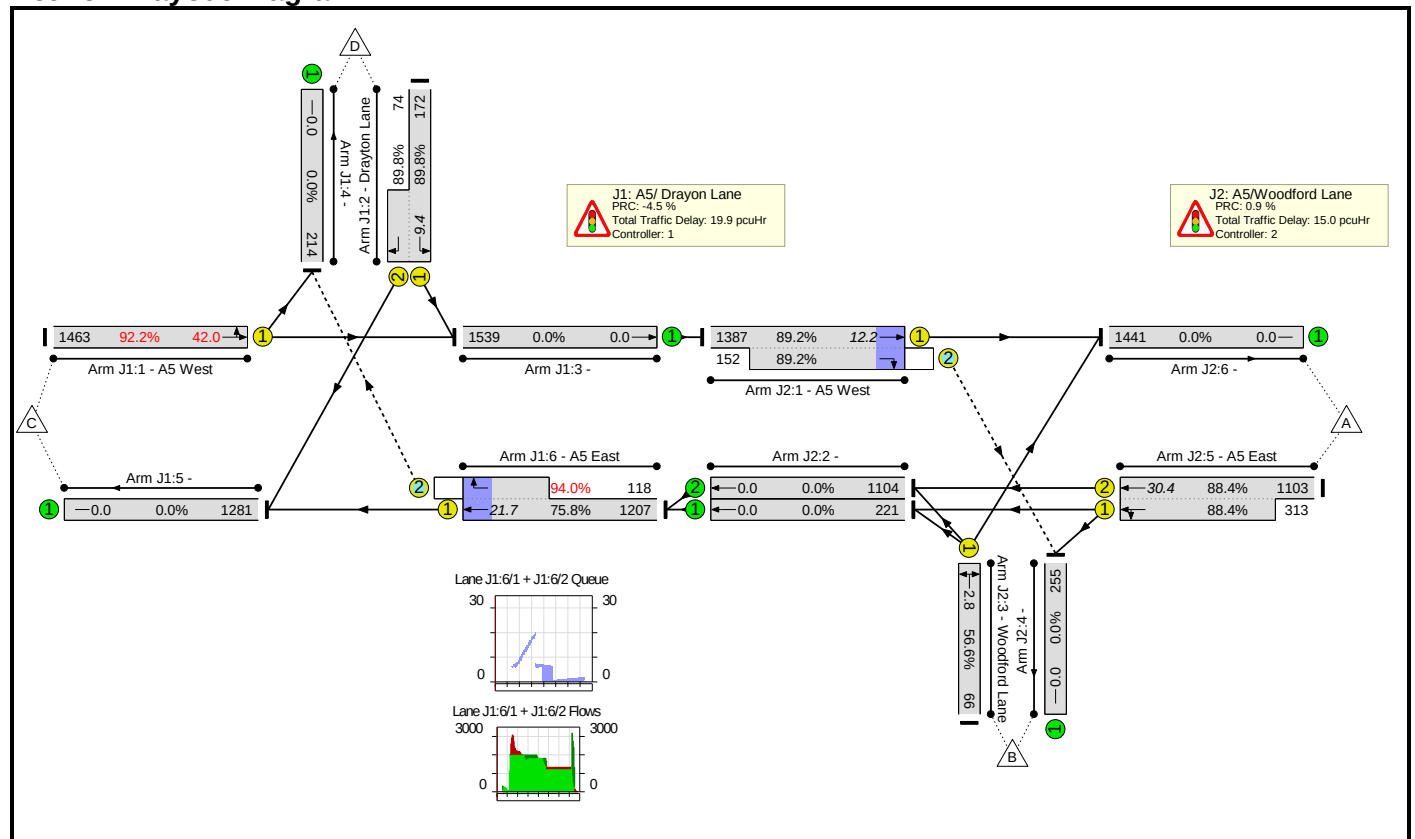
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	85.7%	74	132	26	22.3	-	-
J1: A5/ Drayon Lane	-	-	-		-	-	-	-	-	-	85.7%	0	60	1	13.0	-	-
1/1	A5 West Ahead Left	U	C1:B		1	96	-	1360	1963	1587	85.7%	-	-	-	5.6	14.9	30.9
2/1+2/2	Drayton Lane Left Right	U	C1:C	C1:E	1	13:6	7	215	1747:1868	194+68	82.0 : 82.0%	-	-	-	5.2	87.5	7.3
6/1+6/2	A5 East Right Ahead	U+O	C1:A	C1:D	1	104	5	1129	1980:1965	1647+94	64.9 : 64.9%	0	60	1	2.1	6.8	13.6
J2: A5/Woodford Lane	-	-	-		-	-	-	-	-	-	83.1%	74	72	25	9.3	-	-
1/1+1/2	A5 West Right Ahead	U+O	C2:A	C2:D	1	102	4	1424	1965:1731	1525+206	82.2 : 83.1%	74	72	25	4.6	11.7	9.8
3/1	Woodford Lane Left Right	U	C2:C		1	7	-	80	1734	116	69.2%	-	-	-	2.3	102.5	3.7
5/2+5/1	A5 East Ahead Left	U	C2:B		1	96	-	1216	1965:1865	1251+460	71.0 : 71.0%	-	-	-	2.5	7.3	11.6
		C1			PRC for Signalled Lanes (%):		5.0			Total Delay for Signalled Lanes (pcuHr):		12.98	Cycle Time (s):		120		
		C2			PRC for Signalled Lanes (%):		8.3			Total Delay for Signalled Lanes (pcuHr):		9.35	Cycle Time (s):		120		
					PRC Over All Lanes (%):		5.0			Total Delay Over All Lanes(pcuHr):		22.33					

Basic Results Summary

Scenario 2: 'AM2' (FG2: 'AM2 Reference + DEV', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



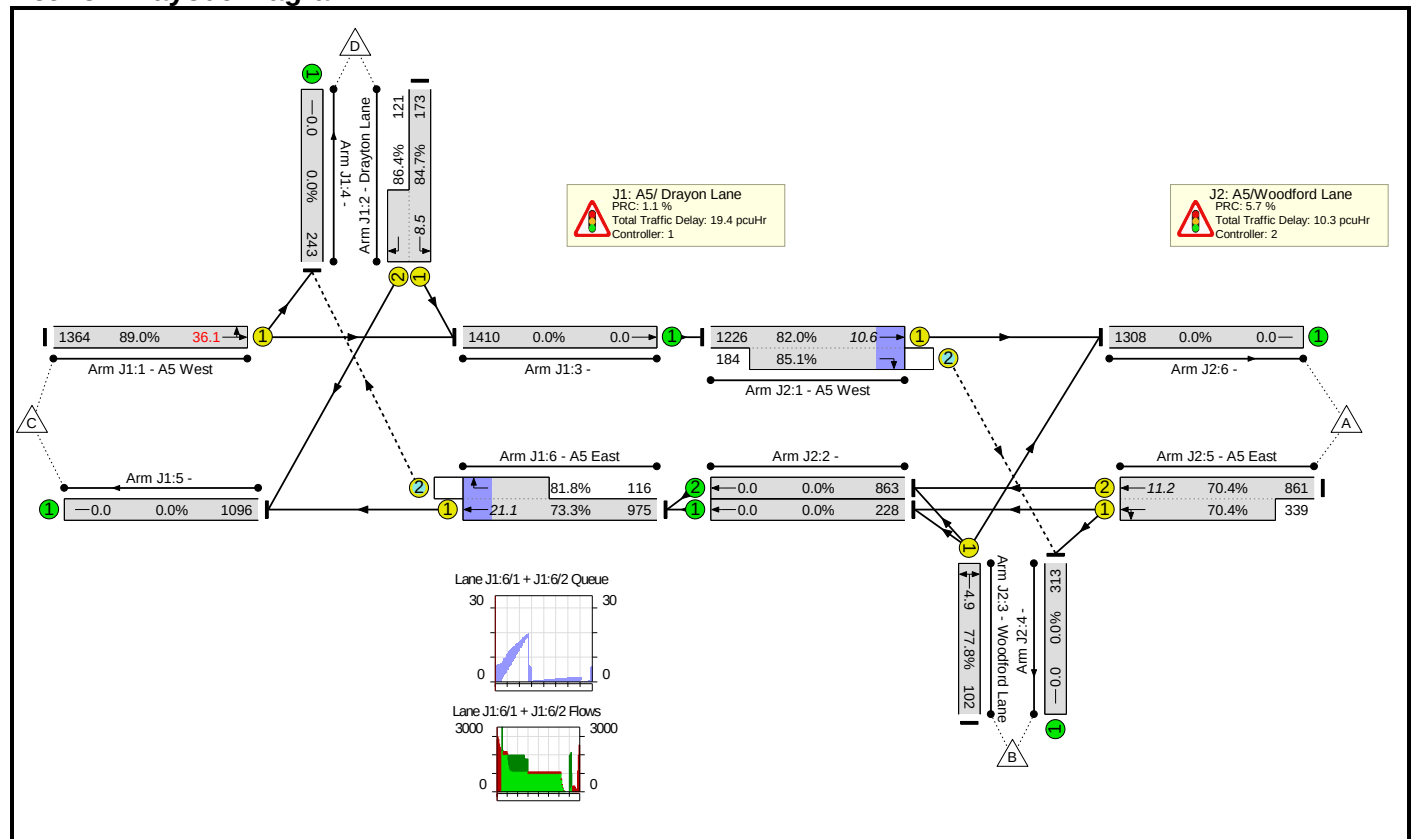
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	94.0%	0	216	54	34.9	-	-	
J1: A5/ Drayon Lane	-	-	-		-	-	-	-	-	-	94.0%	0	72	46	19.9	-	-	
1/1	A5 West Ahead Left	U	C1:B		1	96	-	1463	1964	1588	92.2%	-	-	-	8.9	21.9	42.0	
2/1+2/2	Drayton Lane Left Right	U	C1:C	C1:E	1	13:6	7	246	1747:1868	192+82	89.8 : 89.8%	-	-	-	7.1	104.5	9.4	
6/1+6/2	A5 East Right Ahead	U+O	C1:A	C1:D	1	104	5	1325	1980:1965	1592+125	75.8 : 94.0%	0	72	46	3.8	10.5	21.7	
J2: A5/Woodford Lane	-	-	-		-	-	-	-	-	-	89.2%	0	144	8	15.0	-	-	
1/1+1/2	A5 West Right Ahead	U+O	C2:A	C2:D	1	102	9	1539	1965:1731	1555+170	89.2 : 89.2%	0	144	8	6.8	15.8	12.2	
3/1	Woodford Lane Left Right	U	C2:C		1	7	-	66	1749	117	56.6%	-	-	-	1.6	89.0	2.8	
5/2+5/1	A5 East Ahead Left	U	C2:B		1	91	-	1416	1965:1873	1248+354	88.4 : 88.4%	-	-	-	6.6	16.7	30.4	
		C1	PRC for Signalled Lanes (%):				-4.5	Total Delay for Signalled Lanes (pcuHr):				19.90	Cycle Time (s):		120			
		C2	PRC for Signalled Lanes (%):				0.9	Total Delay for Signalled Lanes (pcuHr):				14.99	Cycle Time (s):		120			
			PRC Over All Lanes (%):				-4.5	Total Delay Over All Lanes(pcuHr):				34.89						

Basic Results Summary

Scenario 3: 'AM3' (FG3: 'AM3 Reference + DEV', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



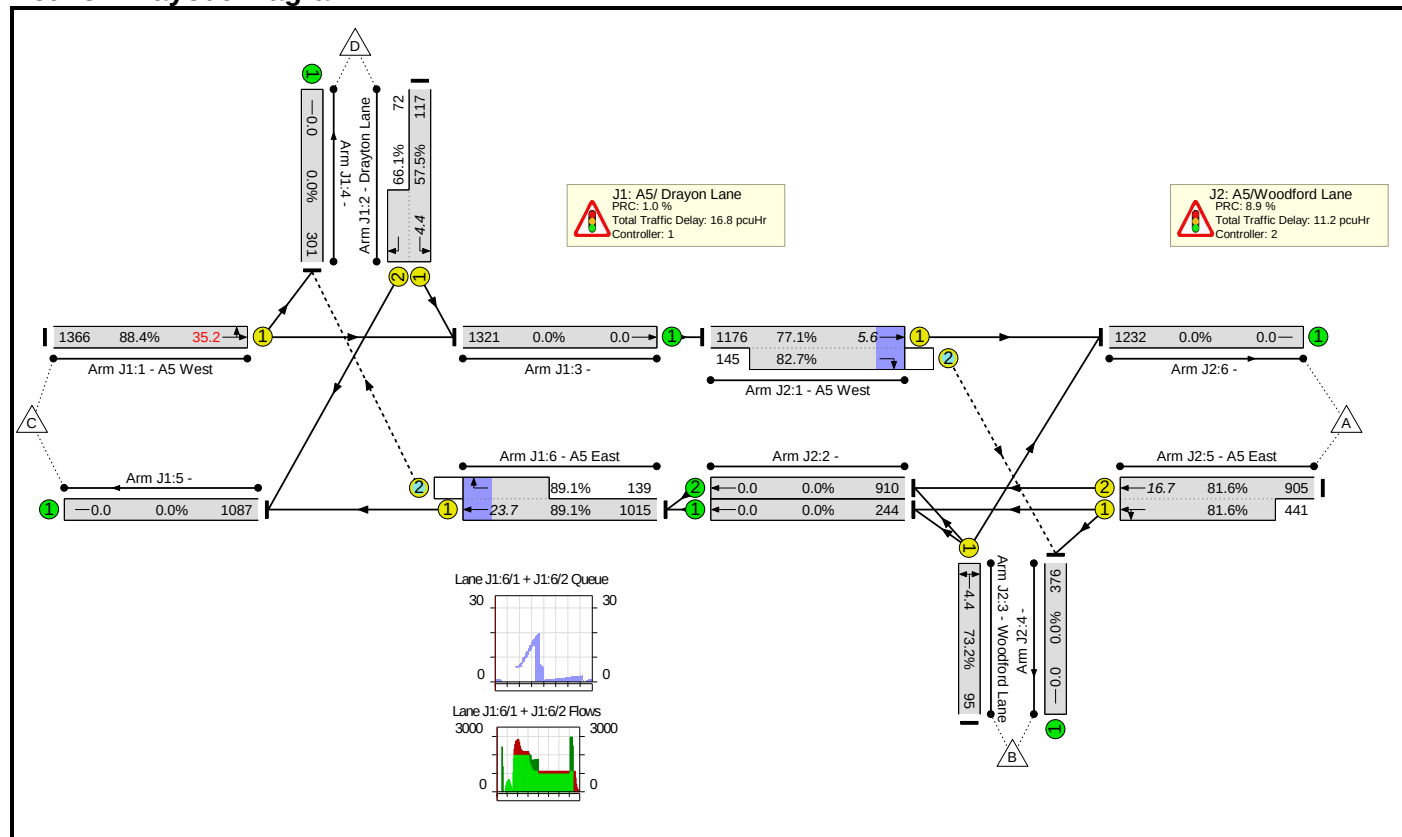
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	89.0%	84	156	60	29.7	-	-
J1: A5/ Drayon Lane	-	-	-		-	-	-	-	-	-	89.0%	0	84	32	19.4	-	-
1/1	A5 West Ahead Left	U	C1:B		1	93	-	1364	1957	1533	89.0%	-	-	-	7.4	19.5	36.1
2/1+2/2	Drayton Lane Left Right	U	C1:C	C1:E	1	16:8	8	294	1747:1868	204+140	84.7 : 86.4%	-	-	-	6.8	83.8	8.5
6/1+6/2	A5 East Right Ahead	U+O	C1:A	C1:D	1	102	6	1091	1980:1965	1330+142	73.3 : 81.8%	0	84	32	5.1	16.9	21.1
J2: A5/Woodford Lane	-	-	-		-	-	-	-	-	-	85.1%	84	72	28	10.3	-	-
1/1+1/2	A5 West Right Ahead	U+O	C2:A	C2:D	1	101	4	1410	1965:1731	1496+216	82.0 : 85.1%	84	72	28	4.7	12.0	10.6
3/1	Woodford Lane Left Right	U	C2:C		1	8	-	102	1748	131	77.8%	-	-	-	3.1	110.3	4.9
5/2+5/1	A5 East Ahead Left	U	C2:B		1	95	-	1200	1965:1859	1223+481	70.4 : 70.4%	-	-	-	2.5	7.5	11.2
		C1			PRC for Signalled Lanes (%):		1.1			Total Delay for Signalled Lanes (pcuHr):		19.36	Cycle Time (s):		120		
		C2			PRC for Signalled Lanes (%):		5.7			Total Delay for Signalled Lanes (pcuHr):		10.33	Cycle Time (s):		120		
					PRC Over All Lanes (%):		1.1			Total Delay Over All Lanes(pcuHr):		29.69					

Basic Results Summary

Scenario 4: 'PM1' (FG4: 'PM1 Reference + DEV', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



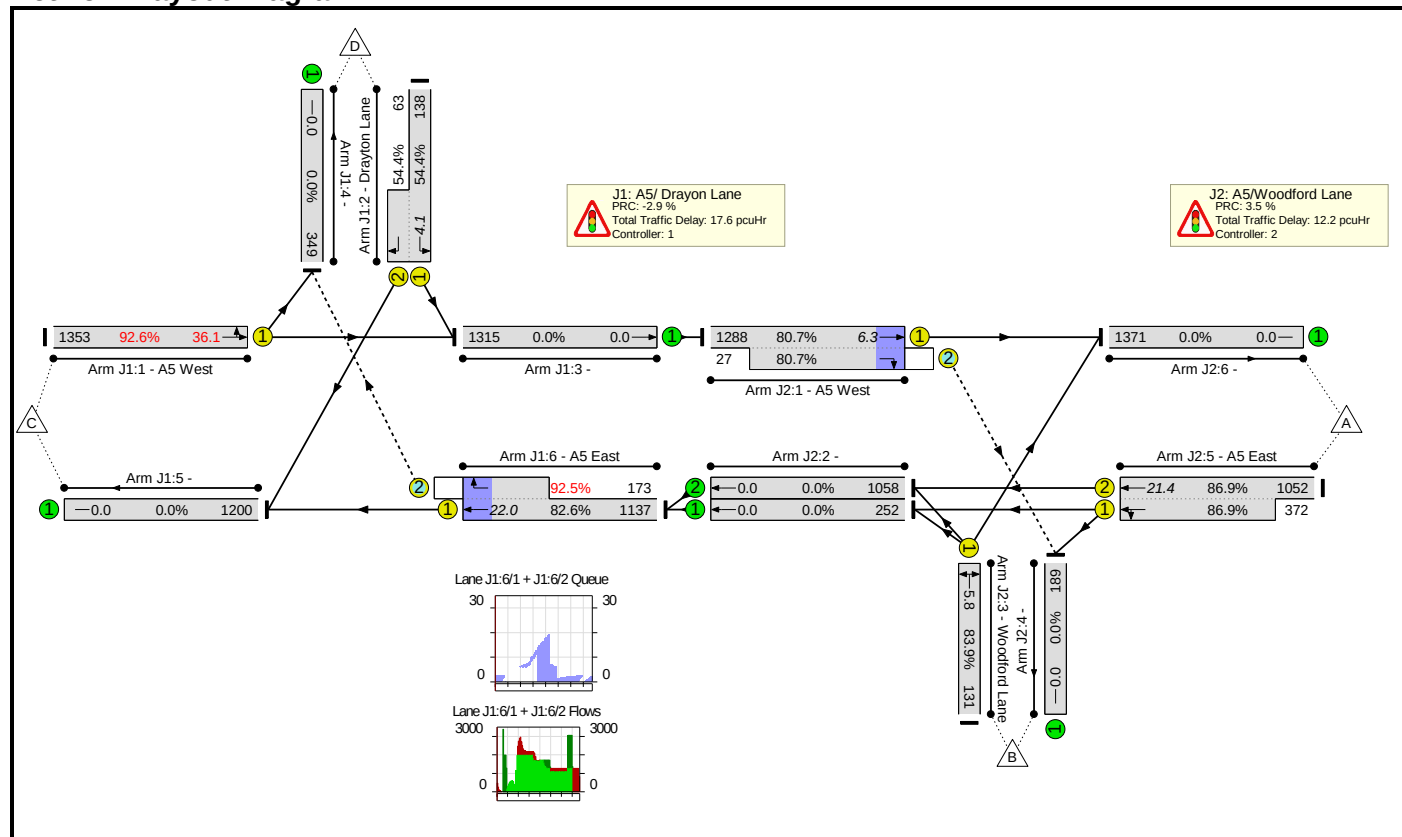
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	89.1%	0	239	45	27.9	-	-	
J1: A5/ Drayon Lane	-	-	-		-	-	-	-	-	-	89.1%	0	96	43	16.8	-	-	
1/1	A5 West Ahead Left	U	C1:B		1	94	-	1366	1951	1545	88.4%	-	-	-	7.0	18.4	35.2	
2/1+2/2	Drayton Lane Left Right	U	C1:C	C1:E	1	15:6	9	189	1747:1868	204+109	57.5 : 66.1%	-	-	-	3.4	65.4	4.4	
6/1+6/2	A5 East Right Ahead	U+O	C1:A	C1:D	1	104	7	1154	1980:1965	1139+156	89.1 : 89.1%	0	96	43	6.4	19.8	23.7	
J2: A5/Woodford Lane	-	-	-		-	-	-	-	-	-	82.7%	0	143	2	11.2	-	-	
1/1+1/2	A5 West Right Ahead	U+O	C2:A	C2:D	1	101	9	1321	1965:1731	1525+175	77.1 : 82.7%	0	143	2	4.1	11.2	5.6	
3/1	Woodford Lane Left Right	U	C2:C		1	8	-	95	1731	130	73.2%	-	-	-	2.7	102.5	4.4	
5/2+5/1	A5 East Ahead Left	U	C2:B		1	90	-	1346	1965:1822	1109+540	81.6 : 81.6%	-	-	-	4.4	11.7	16.7	
		C1	PRC for Signalled Lanes (%):				1.0	Total Delay for Signalled Lanes (pcuHr):				16.75	Cycle Time (s):		120			
		C2	PRC for Signalled Lanes (%):				8.9	Total Delay for Signalled Lanes (pcuHr):				11.19	Cycle Time (s):		120			
			PRC Over All Lanes (%):				1.0	Total Delay Over All Lanes(pcuHr):				27.94						

Basic Results Summary

Scenario 5: 'PM2' (FG5: 'PM2 Reference + DEV', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



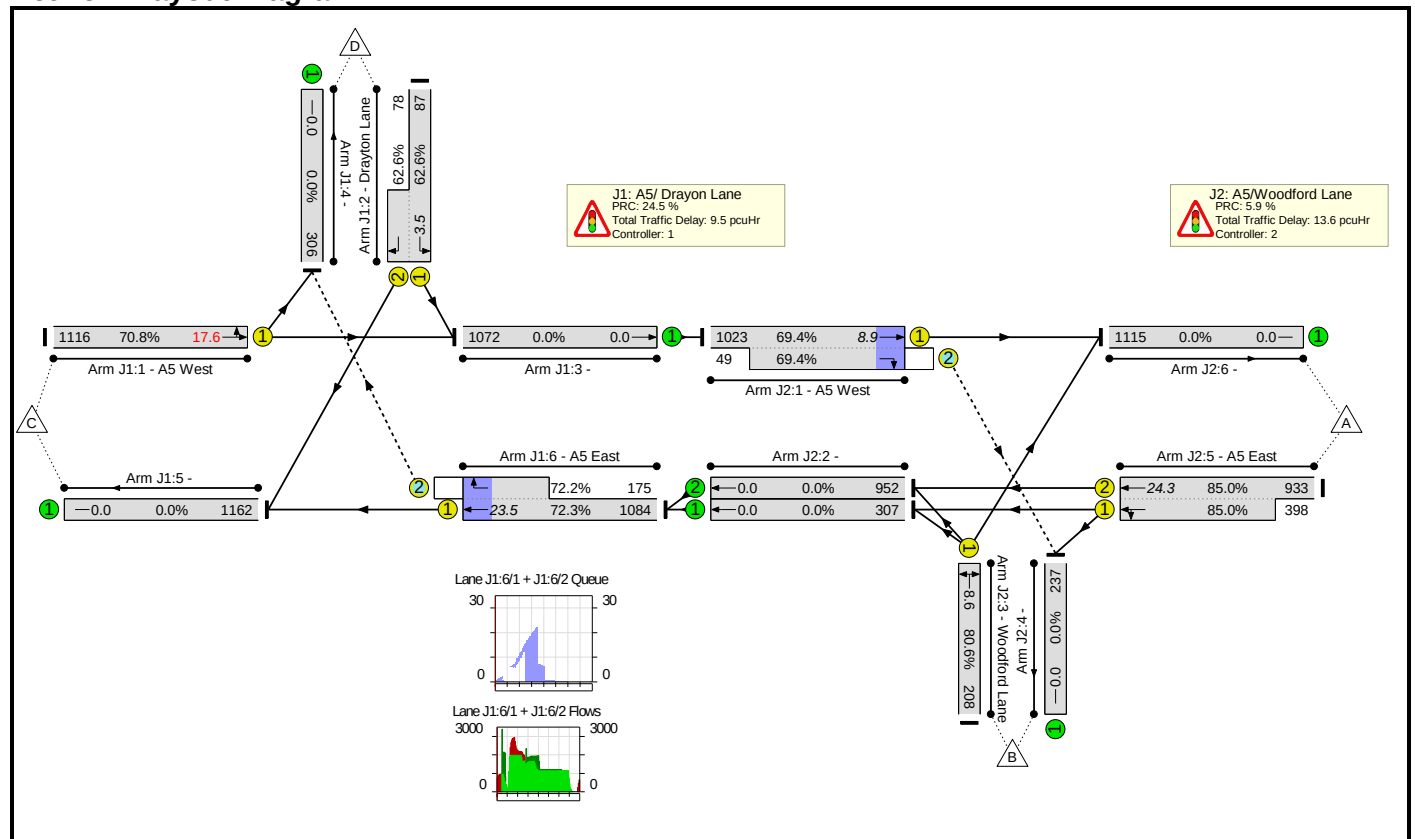
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	92.6%	0	142	58	29.8	-	-
J1: A5/ Drayon Lane	-	-	-		-	-	-	-	-	-	92.6%	0	115	58	17.6	-	-
1/1	A5 West Ahead Left	U	C1:B		1	74	-	1353	1948	1461	92.6%	-	-	-	9.5	25.3	36.1
2/1+2/2	Drayton Lane Left Right	U	C1:C	C1:E	1	15:6	9	201	1747:1868	253+116	54.4 : 54.4%	-	-	-	2.8	51.0	4.1
6/1+6/2	A5 East Right Ahead	U+O	C1:A	C1:D	1	84	7	1310	1980:1965	1376+187	82.6 : 92.5%	0	115	58	5.3	14.5	22.0
J2: A5/Woodford Lane	-	-	-		-	-	-	-	-	-	86.9%	0	27	0	12.2	-	-
1/1+1/2	A5 West Right Ahead	U+O	C2:A	C2:D	1	81	4	1315	1965:1731	1596+33	80.7 : 80.7%	0	27	0	2.9	7.8	6.3
3/1	Woodford Lane Left Right	U	C2:C		1	8	-	131	1735	156	83.9%	-	-	-	3.8	105.7	5.8
5/2+5/1	A5 East Ahead Left	U	C2:B		1	75	-	1424	1965:1845	1210+428	86.9 : 86.9%	-	-	-	5.5	13.8	21.4
		C1			PRC for Signalised Lanes (%):		-2.9			Total Delay for Signalised Lanes (pcuHr):		17.65	Cycle Time (s):		100		
		C2			PRC for Signalised Lanes (%):		3.5			Total Delay for Signalised Lanes (pcuHr):		12.18	Cycle Time (s):		100		
					PRC Over All Lanes (%):		-2.9			Total Delay Over All Lanes(pcuHr):		29.82					

Basic Results Summary

Scenario 6: 'PM3' (FG6: 'PM3 Reference + DEV', Plan 1: 'Network Control Plan 1')

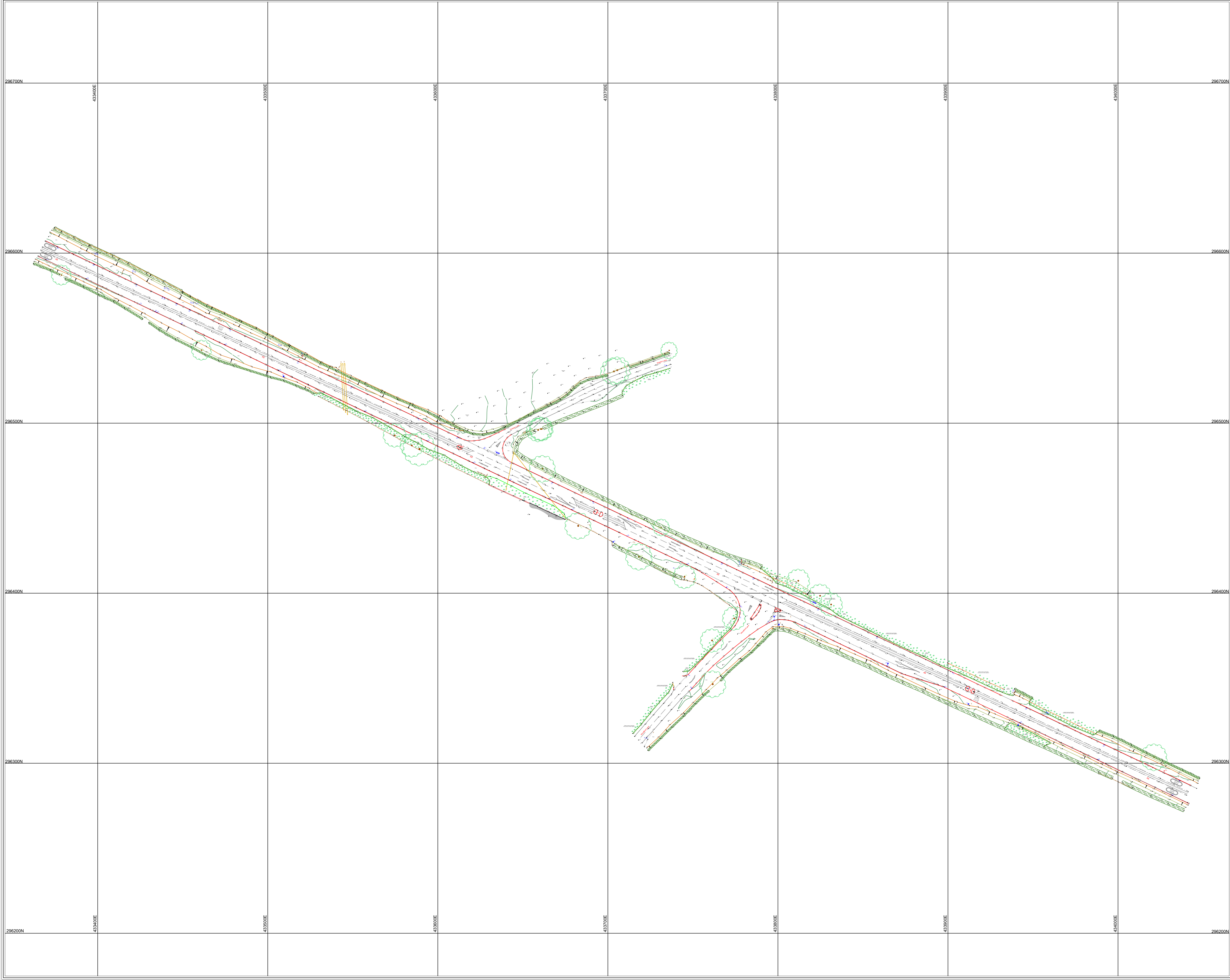
Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	85.0%	122	101	1	23.0	-	-
J1: A5/ Drayon Lane	-	-	-		-	-	-	-	-	-	72.3%	122	53	0	9.5	-	-
1/1	A5 West Ahead Left	U	C1:B		1	96	-	1116	1951	1577	70.8%	-	-	-	2.8	9.0	17.6
2/1+2/2	Drayton Lane Left Right	U	C1:C	C1:E	1	13:7	6	165	1747:1868	139+125	62.6 : 62.6%	-	-	-	3.2	69.8	3.5
6/1+6/2	A5 East Right Ahead	U+O	C1:A	C1:D	1	103	4	1259	1980:1965	1500+242	72.3 : 72.2%	122	53	0	3.5	9.9	23.5
J2: A5/Woodford Lane	-	-	-		-	-	-	-	-	-	85.0%	0	48	1	13.6	-	-
1/1+1/2	A5 West Right Ahead	U+O	C2:A	C2:D	1	92	4	1072	1965:1731	1475+71	69.4 : 69.4%	0	48	1	3.0	10.1	8.9
3/1	Woodford Lane Left Right	U	C2:C		1	17	-	208	1720	258	80.6%	-	-	-	4.8	82.7	8.6
5/2+5/1	A5 East Ahead Left	U	C2:B		1	86	-	1331	1965:1835	1098+468	85.0 : 85.0%	-	-	-	5.8	15.6	24.3
		C1			PRC for Signalled Lanes (%):		24.5			Total Delay for Signalled Lanes (pcuHr):		9.46	Cycle Time (s):		120		
		C2			PRC for Signalled Lanes (%):		5.9			Total Delay for Signalled Lanes (pcuHr):		13.56	Cycle Time (s):		120		
					PRC Over All Lanes (%):		5.9			Total Delay Over All Lanes(pcuHr):		23.02					

Appendix D



OS Note:
This survey has been orientated to the Ordnance Survey (O.S.) National Grid OSG36(15) via Global Navigation Satellite Systems (GNSS) and the O.S. Active Network (OS Net).
A true OSG36 coordinate has been established near to the site centre via a transformation using the OSTN15GB & OSGM15GB transformation models.
The survey has been correlated to this point and a further one or more OSG36 (15) points established to create a true O.S. bearing for angle orientation.
No scale factor has been applied to the survey therefore the coordinates shown are arbitrary & not true O.S. Coordinates which have a scale factor applied.
Please refer to Survey Station Table to enable establishment of the on-site grid and datum.

<i>Date</i>	<i>Date</i>	<i>Description</i>	<i>Debit</i>	<i>Credit</i>

Rev	Date	Description	Drawn	Q. Ref.
-----	------	-------------	-------	---------



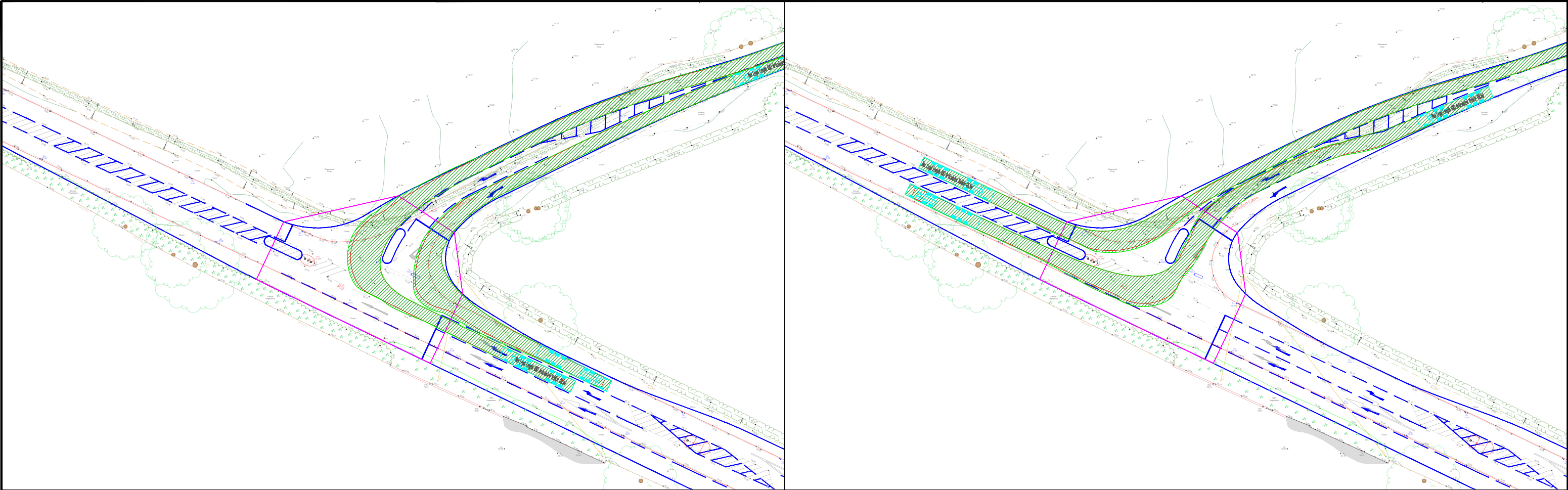
PROJECT
A5/Drayton Lane/Woodford Lane,
Fenny Drayton, Nuneaton,
CV10 0SB

SCALE A1@ 1:1000	DATE SURVEYED 16.04.25
DRAWN WA	QUALITY REF GH24591

Drawing No.	Rev.
54179_T	0

© Copyright Greenbatch Group. 05/07/13

Appendix E



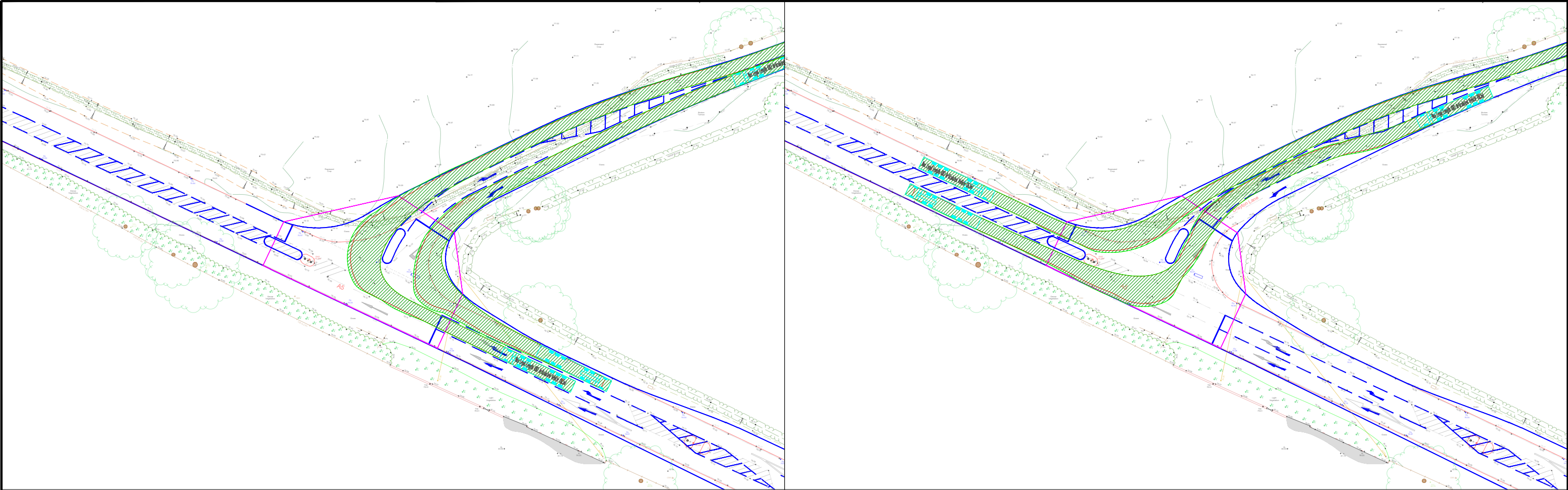
Based upon the ORDNANCE SURVEY MAPS with the permission of
THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE
© Crown Copyright AL 100030412
© David Tucker Associates

REV	DESCRIPTION	DRAWN	INITIALS	DATE



Forester House, Doctors Lane,
Henley in Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

JOB TITLE Mira / Extra Room Self Storage			CLIENT Mark Simpson	
DRAWING TITLE A5 – Drayton Lane – Woodford Lane Junctions Concept Mitigation Package 1 Vehicle Tracking				
SCALE 1:1000@A3	DRAWN BY BP	DATE 07/05/25	DRAWING No 24316-04-TK	REVISION



Based upon the ORDNANCE SURVEY MAPS with the permission of
THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE
© Crown Copyright AL 100030412
© David Tucker Associates

REV	DESCRIPTION	DRAWN	INITIALS	DATE



Forester House, Doctors Lane,
Henley in Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

JOB TITLE Mira / Extra Room Self Storage		CLIENT Mark Simpson	
DRAWING TITLE A5 – Drayton Lane – Woodford Lane Junctions Concept Mitigation Package 2 Vehicle Tracking			
SCALE 1:1000@A3	DRAWN BY BP	DATE 07/05/25	DRAWING No 24316-03-TK
			REVISION



Forester House
Doctor's Lane
Henley-in-Arden
Warwickshire
B95 5AW

Tel: +44(0)1564 793598
inmail@dtatransportation.co.uk
www.dtatransportation.co.uk