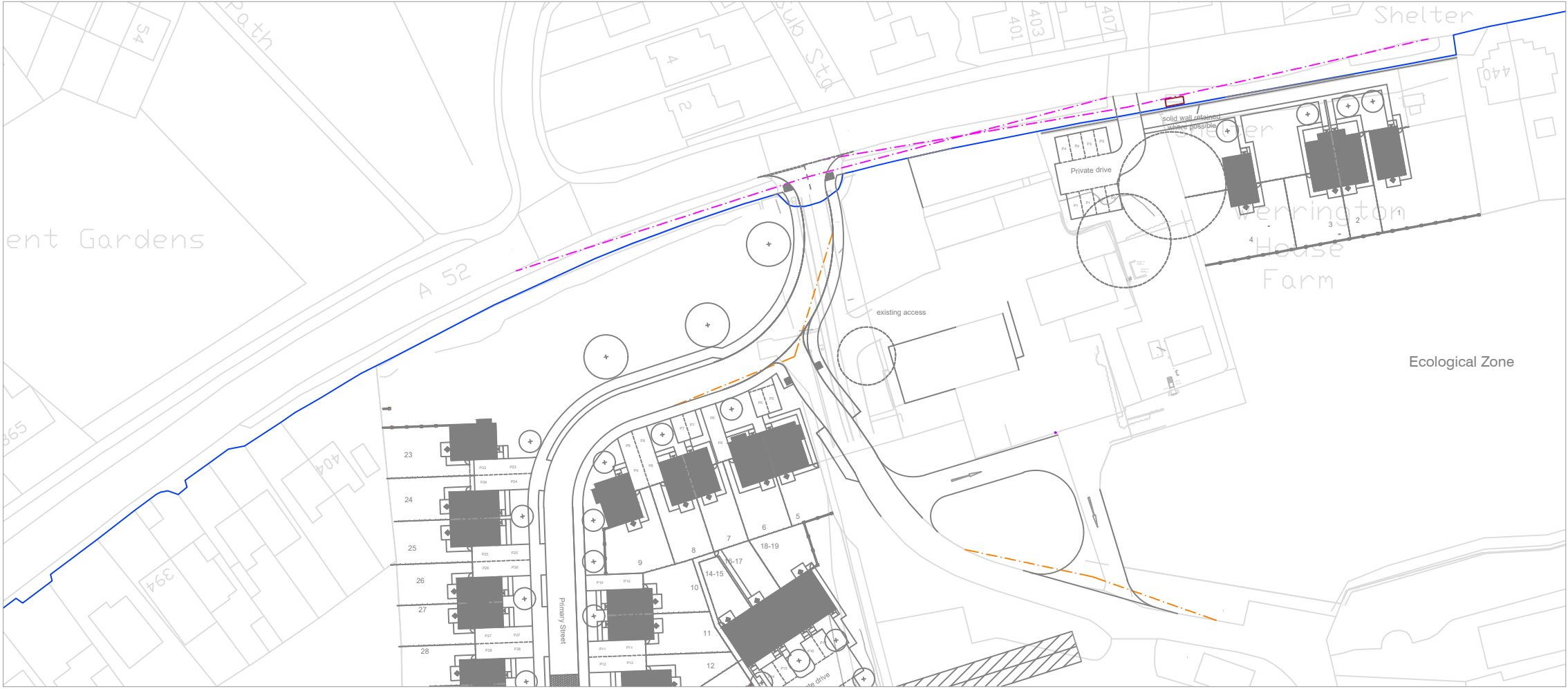
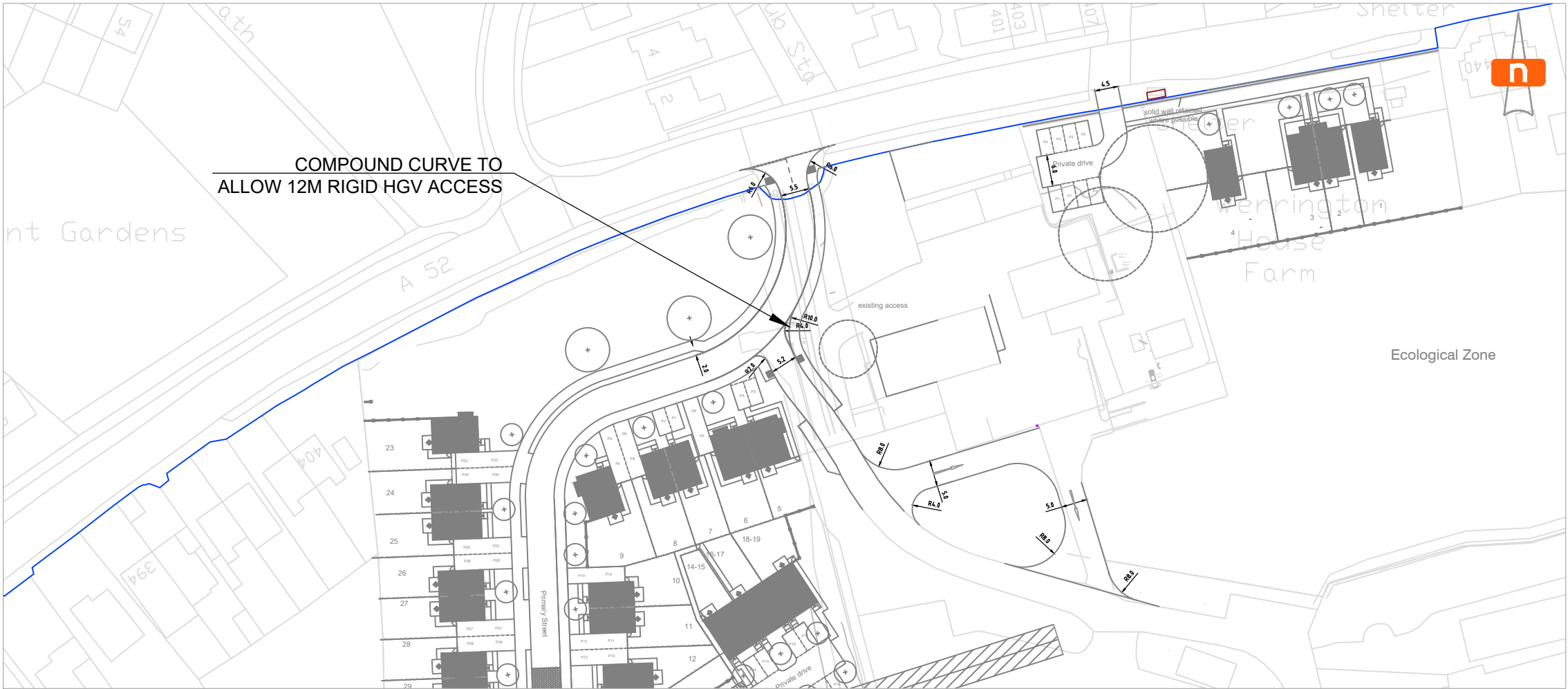


APPENDIX E

Highway Drawings



- NOTE;
1. THIS DRAWING IS BASED UPON DRAWING NUMBER SKMI89-PL-01LDWG BY COUNTRYSIDE PROPERTIES.
 2. THIS DRAWING IS BASED UPON THE ORDNANCE SURVEY'S (1:250) MAP WITH PERMISSION OF THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE, CROWN COPYRIGHT RESERVED.
 3. THIS DRAWING IS INDICATIVE AND SUBJECT TO DISCUSSIONS WITH LOCAL & NATIONAL HIGHWAY AUTHORITIES. THIS DESIGN IS ALSO SUBJECT TO CONFIRMATION OF LAND OWNERSHIP, TOPOGRAPHY, LOCATION OF STATUTORY SERVICES, DETAILED DESIGN AND TRAFFIC MODELLING.
 4. ROAD MARKINGS & TRAFFIC SIGNS ARE TO BE IN ACCORDANCE WITH 'THE TRAFFIC SIGNS REGULATIONS AND GENERAL DIRECTIONS 2016'
 5. DO NOT SCALE FROM THIS DRAWING WORK FROM FIGURED DIMENSIONS ONLY.
 6. HIGHWAY BOUNDARY INFORMATION HAS BEEN PROVIDED BY SCC (2021) AND HAS BEEN TRANSCRIBED BY MODE ONTO AN ORDNANCE SURVEY. MODE ACCEPTS NO LIABILITY FOR THE ACCURACY OF THE DATA PROVIDED AND THE HIGHWAY BOUNDARY INFORMATION SHOWN IS SUBJECT TO CHECKS BY A LICENSED CONVEYANCER.
 7. ALL DIMENSIONS ARE SHOWN IN METRES UNLESS NOTED OTHERWISE.

- KEY:
- HIGHWAY BOUNDARY
(TRANSCRIBED HIGHWAY BOUNDARY BASED ON SCC DATA)
 - - - VISIBILITY SPLAY 2.4m x 59m (37mph)
(VISIBILITY SPLAYS ARE BASED UPON M15 STANDARDS)
 - - - VISIBILITY SPLAY 2.4m x 25m (20mph)
(VISIBILITY SPLAYS ARE BASED UPON M15 STANDARDS)

B	06.10.2021	REVISED LAYOUT
A	28.07.2021	REVISED LAYOUT
-	12.03.2021	INITIAL ISSUE
REV	DATE	REMARKS
CLIENT		

COUNTRYSIDE PROPERTIES

JOB TITLE
ASH BANK ROAD, WERRINGTON

DRAWING TITLE
ACCESS
JUNCTION GEOMETRIES AND VISIBILITY

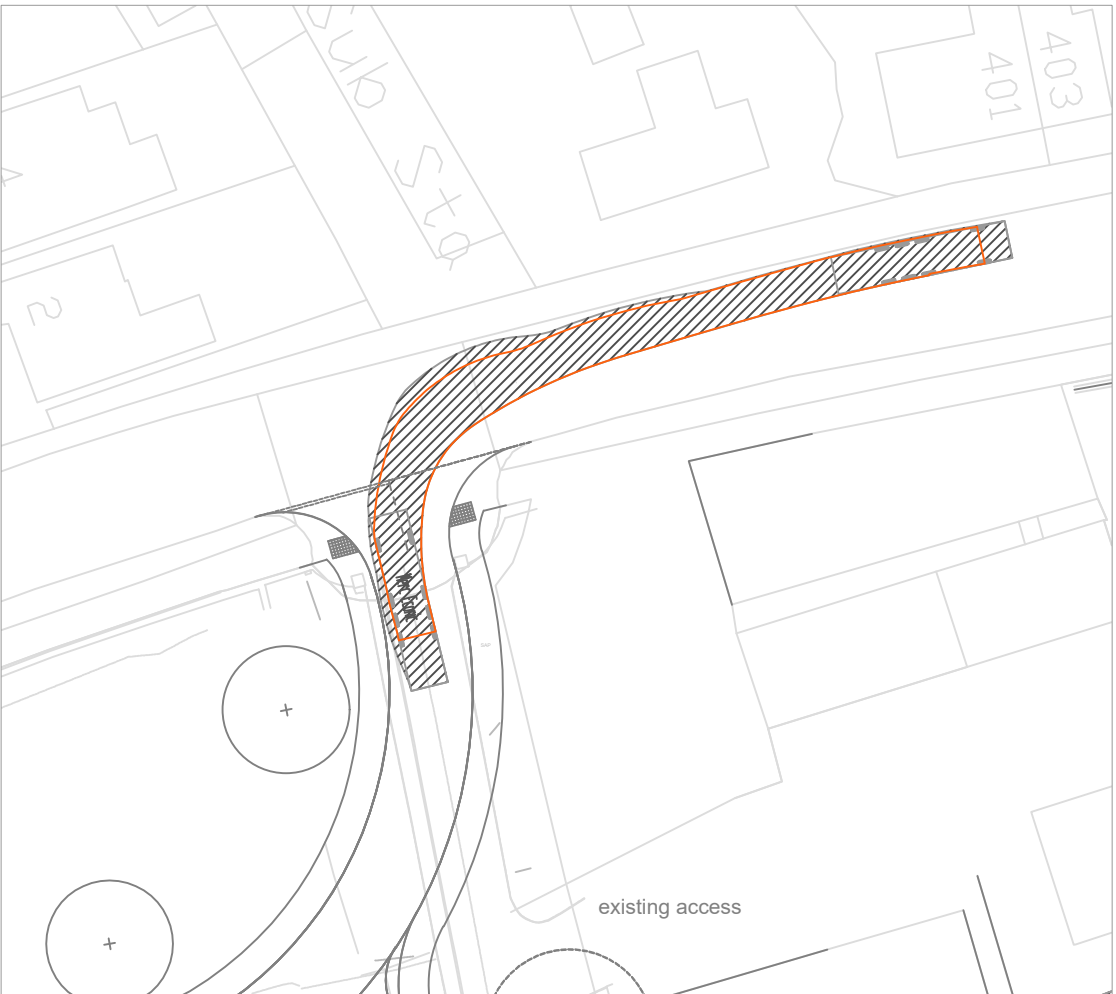
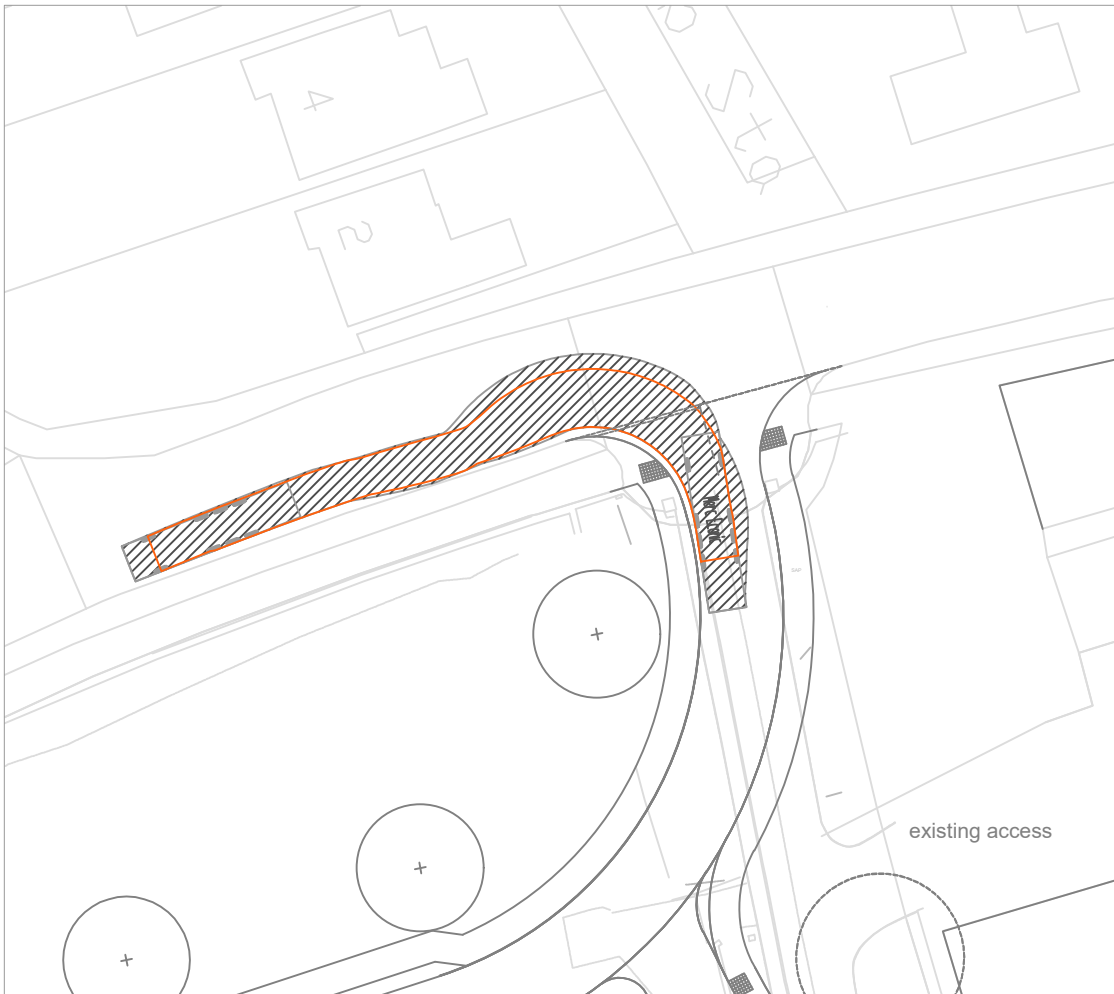
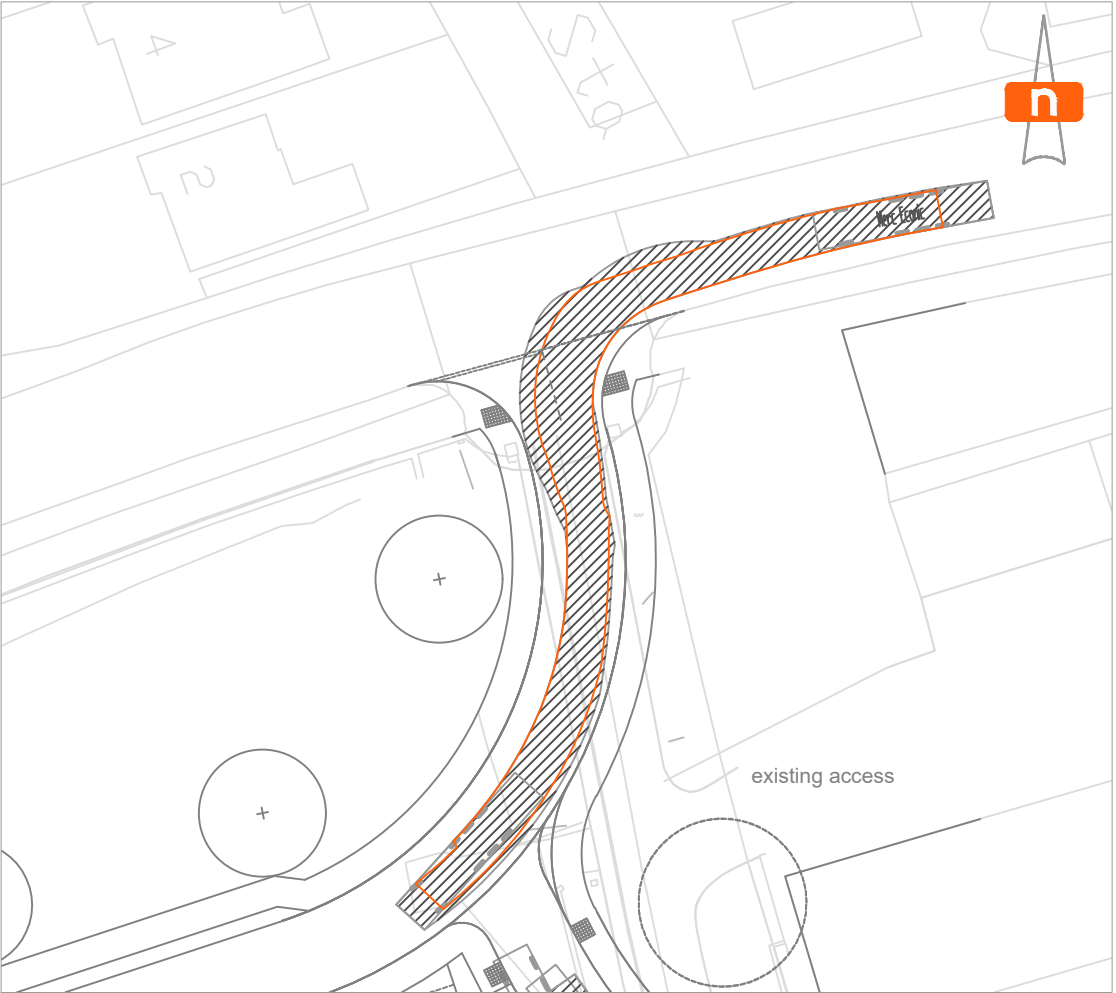
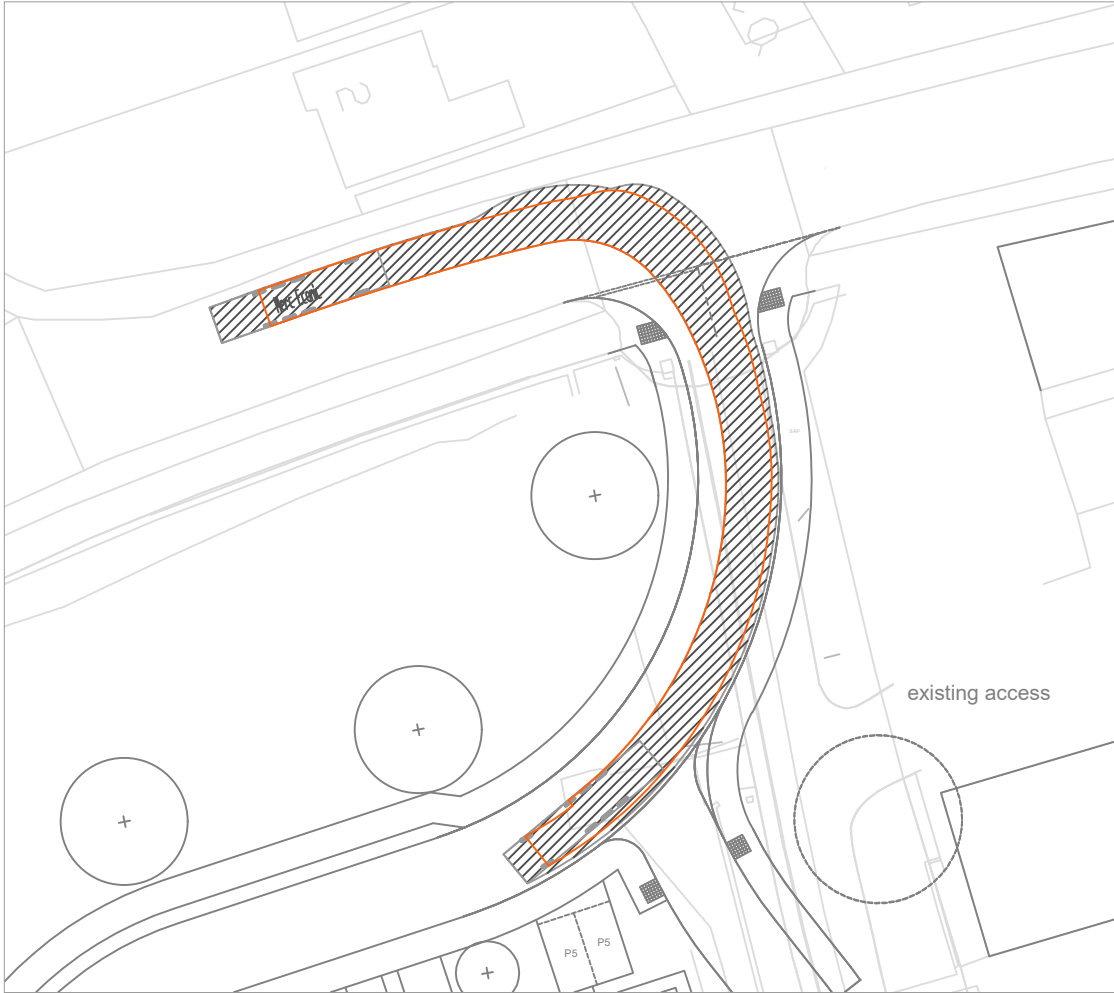
DRAWING NO.
J32-5522-PS-001

DRAWN	JFN / ESP	CHECKED	BDF
CREATED	MAR '21	SCALE	1:1000 @A3

mode transport planning
LOMBARD HOUSE
145 GREAT CHARLES STREET
BIRMINGHAM
B3 3LP

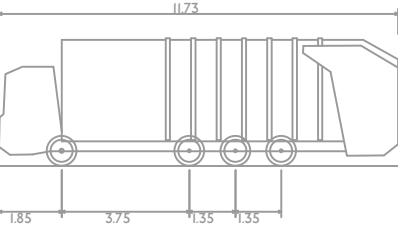
T 0121 794 8390
E INFO@MODETRANSPORT.CO.UK
W WWW.MODETRANSPORT.CO.UK





- NOTE;
1. THIS DRAWING IS BASED UPON DRAWING NUMBER SKMI89-PL-01LDWG BY COUNTRYSIDE PROPERTIES.
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VEHICLE PROFILE



Merc Econic	
Overall Length	11.730m
Overall Width	2.490m
Overall Body Height	3.749m
Min Body Ground Clearance	0.302m
Track Width	2.490m
Lock to lock time	4.00s
Max Steering Angle (Virtual)	33.00°

A	06.10.2021	REVISED LAYOUT
-	28.07.2021	INITIAL ISSUE
REV	DATE	REMARKS
CLIENT		

COUNTRYSIDE PROPERTIES

JOB TITLE
ASH BANK ROAD, WERRINGTON

DRAWING TITLE
SWEPT-PATH ANALYSIS
REFUSE VEHICLE - WESTERN PARCEL

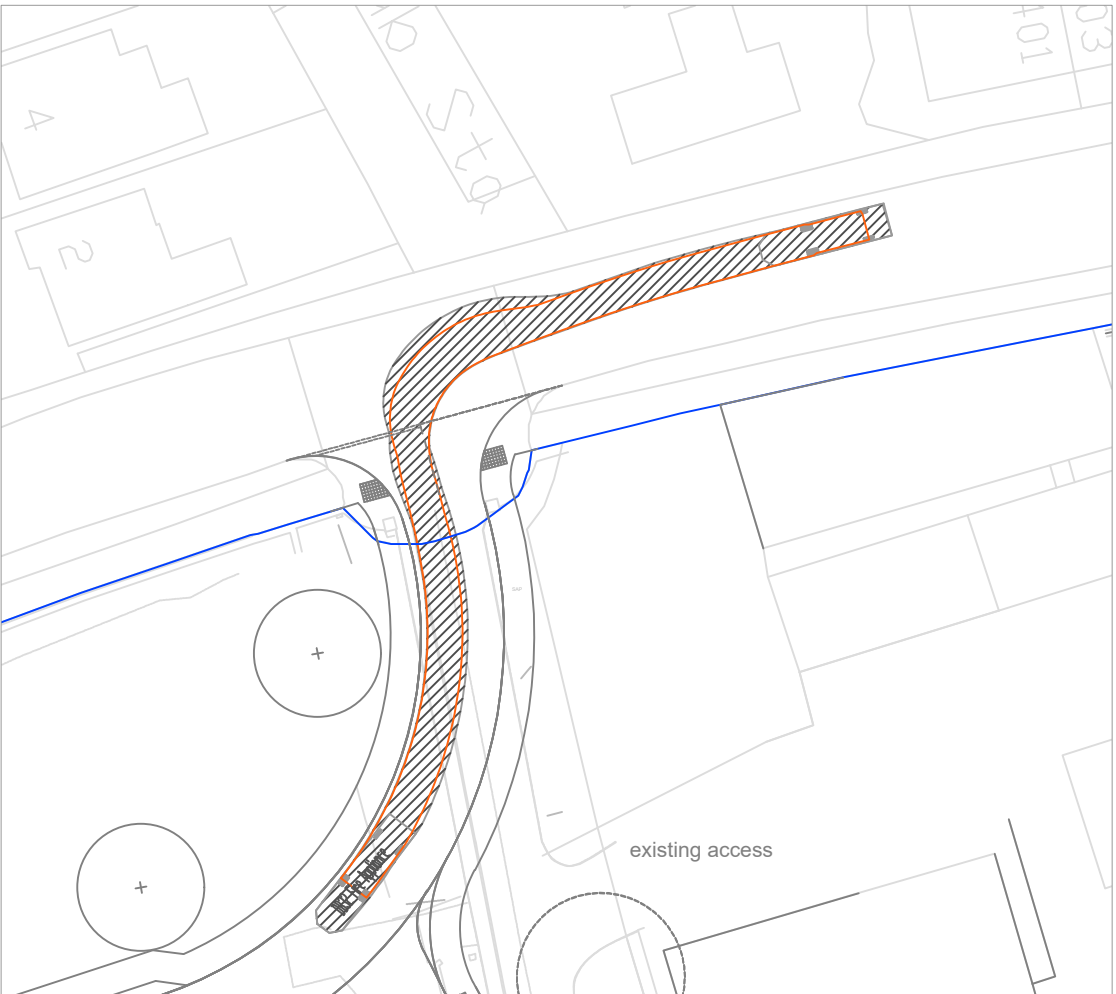
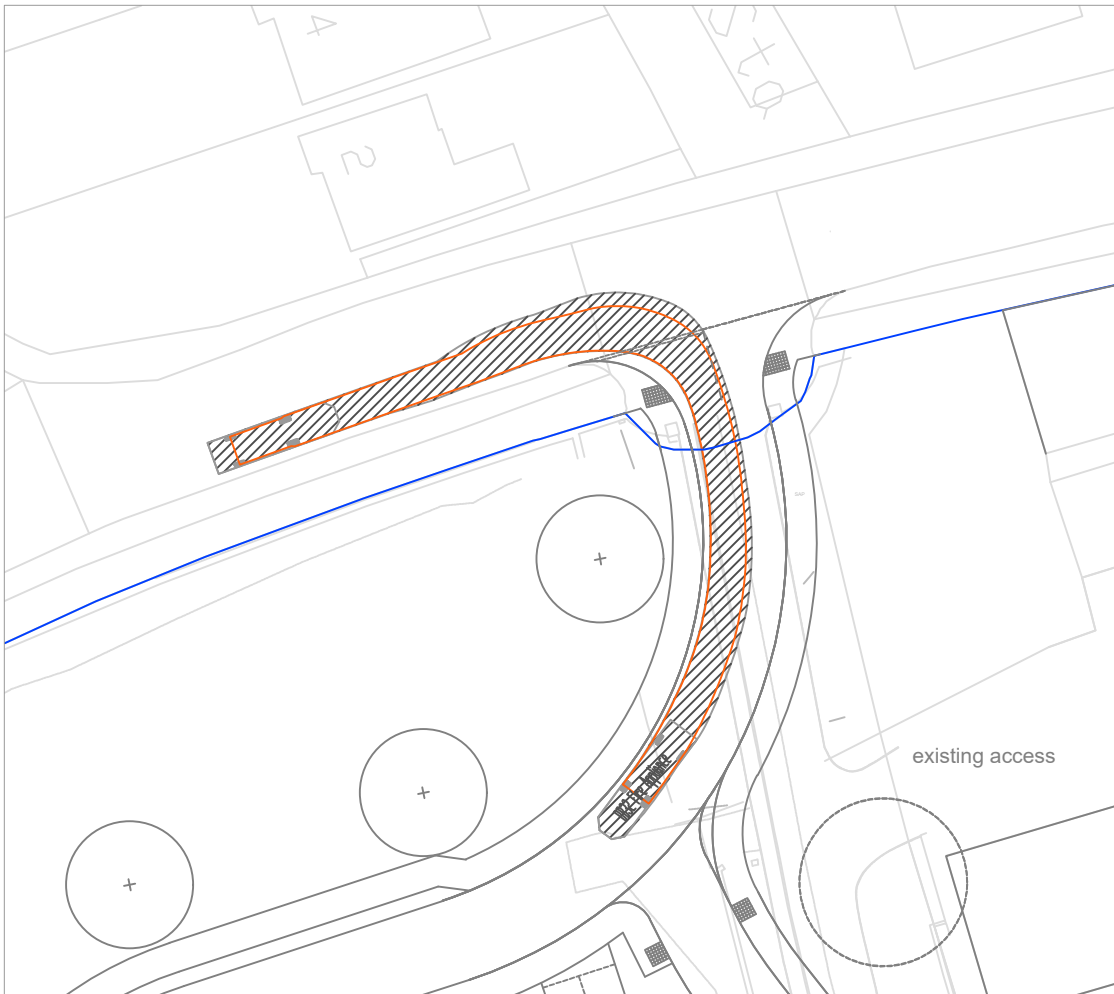
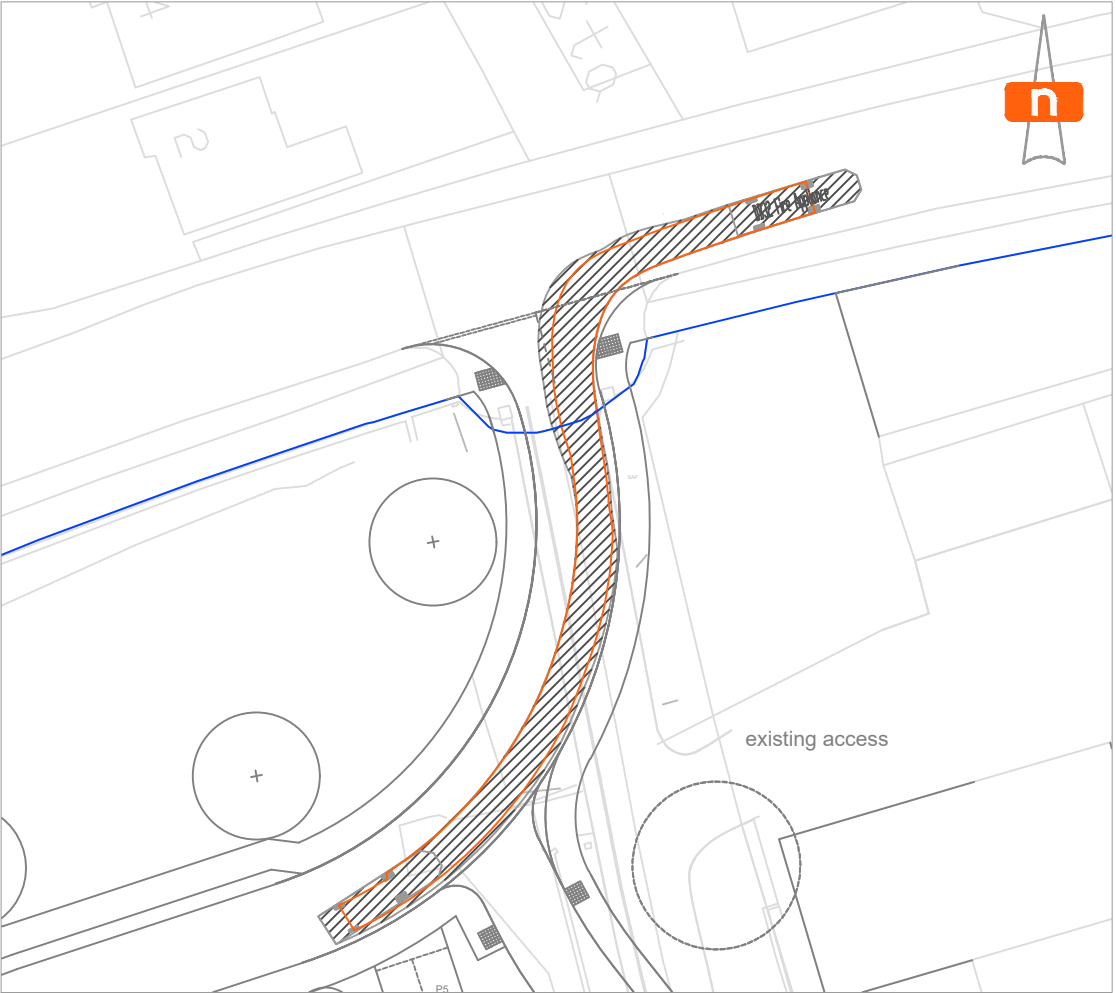
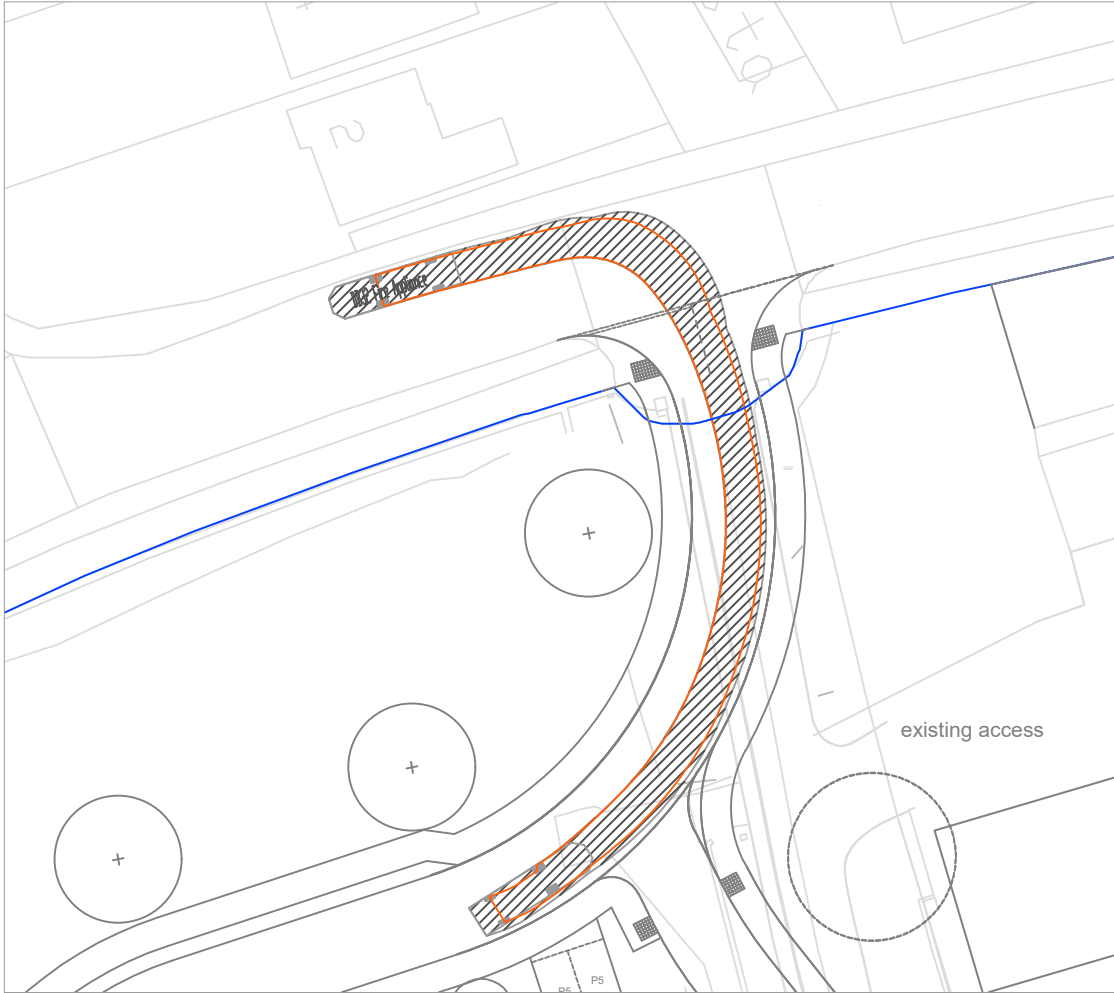
DRAWING NO.
J32-5522-PS-007

DRAWN	ESP/JFN	CHECKED	BDF
CREATED	JUL '21	SCALE	1:500 @A3

mode transport planning
LOMBARD HOUSE
145 GREAT CHARLES STREET
BIRMINGHAM
B3 3LP

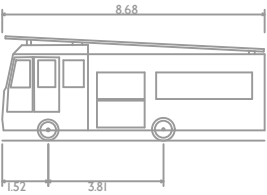
T 0121 794 8390
E INFO@MODETRANSPORT.CO.UK
W WWW.MODETRANSPORT.CO.UK





- NOTE;
1. THIS DRAWING IS BASED UPON DRAWING NUMBER SKMI89-PL-0ILDWG BY COUNTRYSIDE PROPERTIES.
 2. THIS DRAWING IS BASED UPON THE ORDNANCE SURVEY'S (1:250) MAP WITH PERMISSION OF THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE, CROWN COPYRIGHT RESERVED.
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VEHICLE PROFILE



DB32 Fire Appliance	
Overall Length	8.680m
Overall Width	2.180m
Overall Body Height	3.452m
Min Body Ground Clearance	0.337m
Max Track Width	2.121m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	7.910m

A	06.10.2021	REVISED LAYOUT
-	28.07.2021	INITIAL ISSUE
REV	DATE	REMARKS
CLIENT		

COUNTRYSIDE PROPERTIES

JOB TITLE
ASH BANK ROAD, WERRINGTON

DRAWING TITLE
SWEPT-PATH ANALYSIS
FIRE TENDER - WESTERN PARCEL

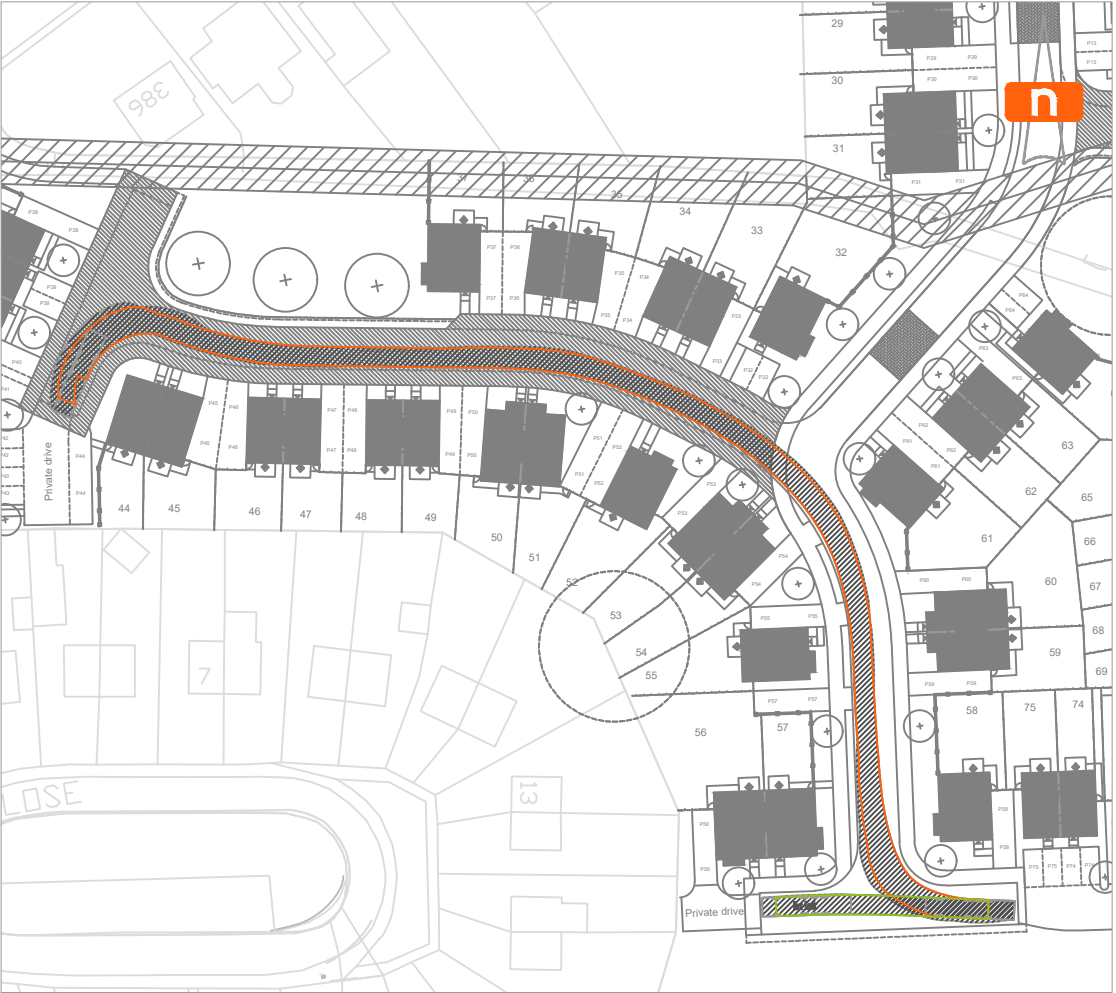
DRAWING NO.
J32-5522-PS-008

DRAWN	ESP	CHECKED	JFN
CREATED	JUL '21	SCALE	1:500 @A3

mode transport planning
LOMBARD HOUSE
145 GREAT CHARLES STREET
BIRMINGHAM
B3 3LP

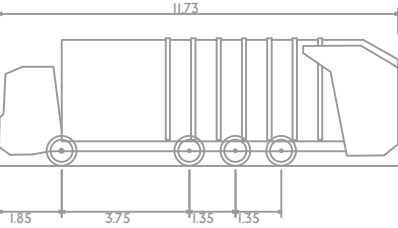
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W WWW.MODETRANSPORT.CO.UK





- NOTE;
1. THIS DRAWING IS BASED UPON DRAWING NUMBER SKMI89-PL-01LDWG BY COUNTRYSIDE PROPERTIES.
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VEHICLE PROFILE



Merc Eonic
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to lock time
Max Steering Angle (Virtual)

11.730m
2.490m
3.749m
0.302m
2.490m
4.00s
33.00°

-	06.10.2021	INITIAL ISSUE
REV	DATE	REMARKS
CLIENT		

COUNTRYSIDE PROPERTIES

JOB TITLE
ASH BANK ROAD, WERRINGTON

DRAWING TITLE
SWEPT-PATH ANALYSIS
REFUSE VEHICLE - INTERNAL SITE LAYOUT

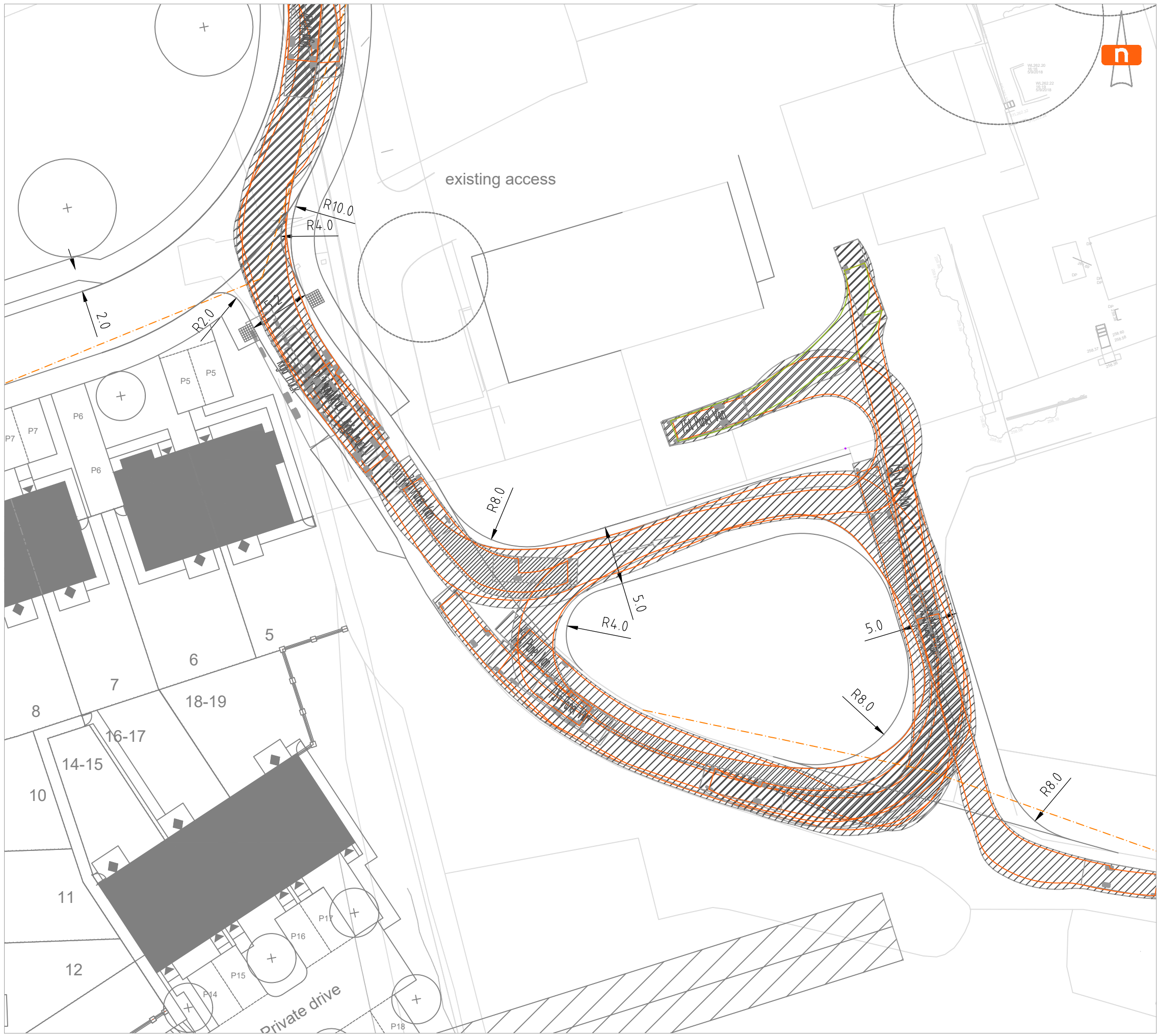
DRAWING NO.
J32-5522-PS-011

DRAWN	ESP/JFN	CHECKED	BDF
CREATED	OCT '21	SCALE	1:1000 @A3

mode transport planning
LOMBARD HOUSE
145 GREAT CHARLES STREET
BIRMINGHAM
B3 3LP

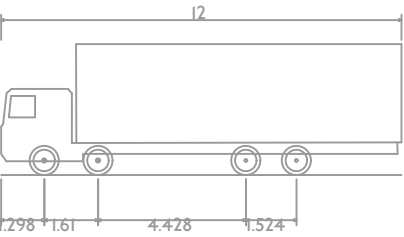
T 0121 794 8390
E INFO@MODETRANSPORT.CO.UK
W WWW.MODETRANSPORT.CO.UK





- NOTE;
1. THIS DRAWING IS BASED UPON DRAWING NUMBER SKMI89-PL-01LDWG BY COUNTRYSIDE PROPERTIES.
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VEHICLE PROFILE



Rigid Truck	
Overall Length	12.000m
Overall Width	2.500m
Overall Body Height	3.928m
Min Body Ground Clearance	0.412m
Track Width	2.471m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	11.900m

-	-	-
-	08.10.2021	INITIAL ISSUE
REV	DATE	REMARKS
CLIENT		

COUNTRYSIDE PROPERTIES

JOB TITLE
ASH BANK ROAD, WERRINGTON

DRAWING TITLE
SWEPT PATH ANALYSIS
YOI ACCESS / STORAGE SHEDS

DRAWING NO.
J32-5522-PS-012

DRAWN	JFN/ESP	CHECKED	BDF
CREATED	OCT '21	SCALE	1:1000 @A3

mode transport planning
LOMBARD HOUSE
145 GREAT CHARLES STREET
BIRMINGHAM
B3 3LP

T 0121 794 8390
E INFO@MODETRANSPORT.CO.UK
W WWW.MODETRANSPORT.CO.UK



APPENDIX F

Traffic Flow Diagrams

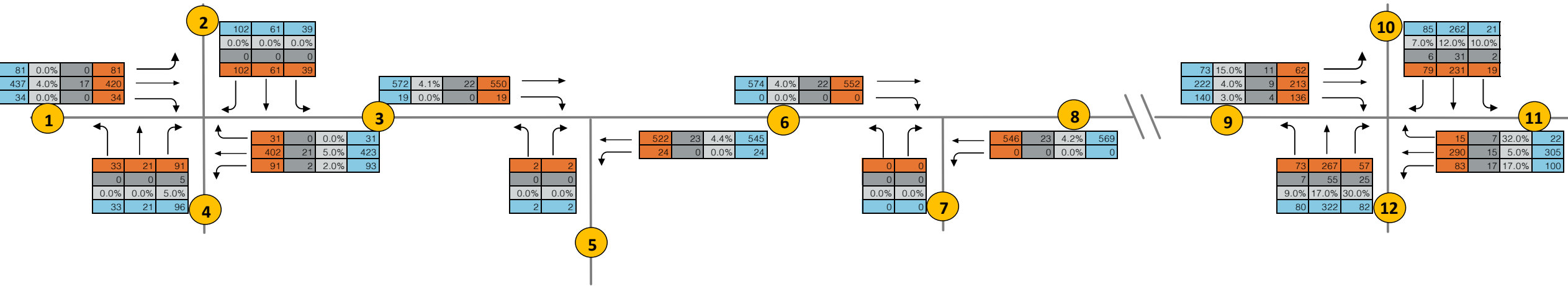
Appendix F

Title - 2019 Baseline (Surveyed)

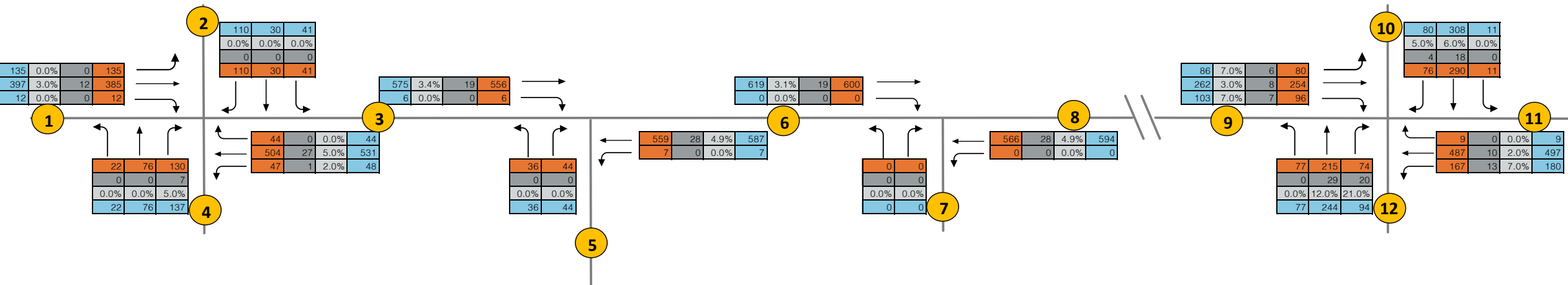
Notes - Data extracted from October 2020 TA for conversion (2019 Baseline) - Data taken from Appendix B

	Total
	HGV
	HGV %
	PCU

AM Peak Hour



PM Peak Hour



Link	Link Name	Speed (MPH)	Traffic (AM)			Traffic (PM)			Traffic 18hr AAWT			Traffic 24hr AADT		
			Total	HGV	%HGV	Total	HGV	%HGV	Total	HGV	%HGV	Total	HGV	%HGV
1	A52	40	1071	39	4%	1169	38	3%	14225	490	3%	13693	471	3%
2	Washerwall Lane	30	335	0	0%	436	0	0%	4896	0	0%	4713	0	0%
3	A52	40	1074	45	4%	1152	46	4%	14133	581	4%	13605	560	4%
4	Salters Lane	30	331	7	2%	317	8	2%	4119	92	2%	3965	88	2%
5	Moj Access/Larger Parcel Access	20	47	0	0%	93	0	0%	889	0	0%	856	0	0%
6	A52	40	1098	45	4%	1167	46	4%	14381	581	4%	13843	560	4%
7	Smaller Parcel Access	20	0	0	#####	0	0	#####	0	0	#####	0	0	#####
8	A52	40	1098	45	4%	1167	46	4%	14381	581	4%	13843	560	4%
9	A52	30/40	853	52	6%	1070	35	3%	12209	555	5%	11753	535	5%
10	A520 Leek Road	30	673	112	17%	680	58	8%	8592	1080	13%	8271	1039	13%
11	A52	30/60	677	75	11%	1003	50	5%	10669	794	7%	10270	764	7%
12	A520 Leek Road	30	847	139	16%	919	87	10%	11212	1438	13%	10793	1385	13%

Conversion Factors (AAWT/AADT)
Factors Calculated using DfT Statistics Table TRA0307 (2020)

AM + PM to 18 hr (0600-2400) AAWT	6.351
AM + PM to 24 hr AADT	6.113

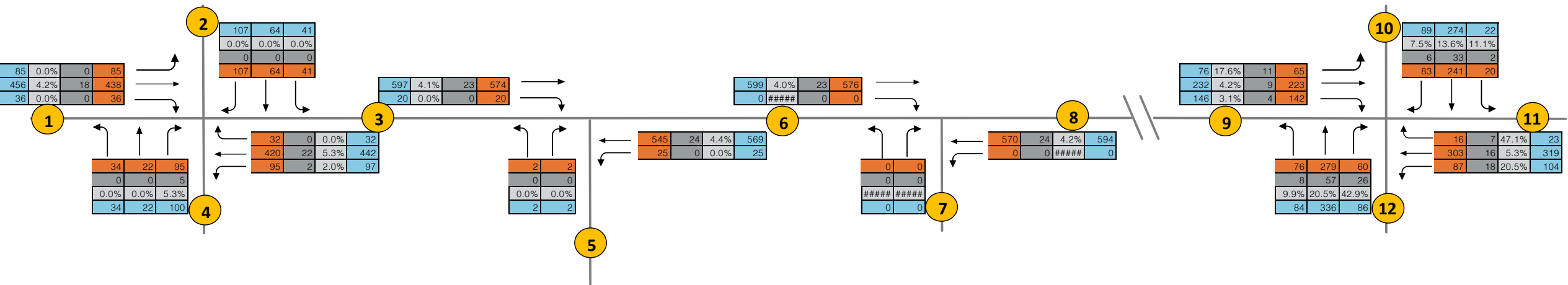
Appendix F

Title - 2026 Baseline

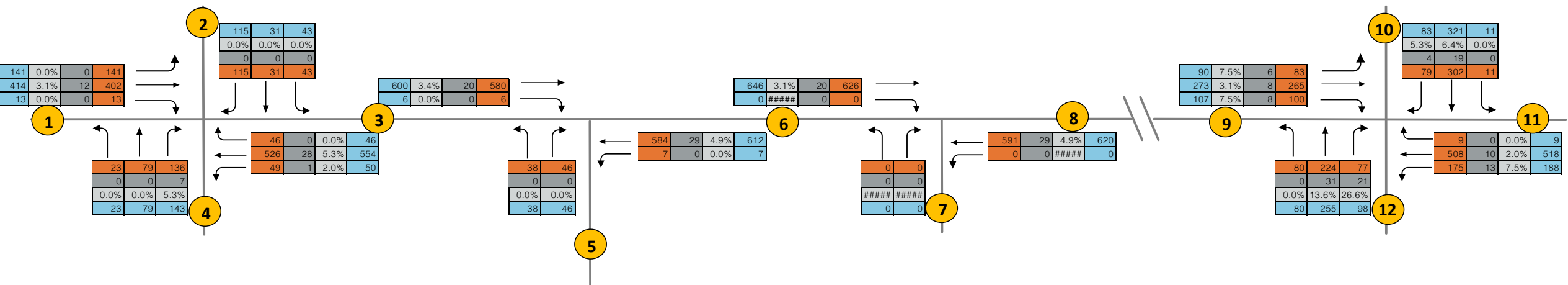
Notes - Traffic growth calculated using TEMPRO

	Total
	HGV
	HGV %
	PCU

AM Peak Hour



PM Peak Hour



Link	Link Name	Speed (MPH)	Traffic (AM)			Traffic (PM)			Traffic 18hr AAWT			Traffic 24hr AADT		
			Total	HGV	%HGV	Total	HGV	%HGV	Total	HGV	%HGV	Total	HGV	%HGV
1	A52	40	1119	40	4%	1219	40	3%	14846	511	3%	14291	492	3%
2	Washerwall Lane	30	350	0	0%	455	0	0%	5110	0	0%	4919	0	0%
3	A52	40	1121	47	4%	1201	48	4%	14750	607	4%	14199	584	4%
4	Salters Lane	30	346	7	2%	331	8	2%	4299	96	2%	4138	92	2%
5	Mol Access/Larger Parcel Access	20	49	0	0%	97	0	0%	928	0	0%	893	0	0%
6	A52	40	1146	47	4%	1217	48	4%	15009	607	4%	14448	584	4%
7	Smaller Parcel Access	20	0	0	0%	0	0	0%	0	0	0%	0	0	0%
8	A52	40	1146	47	4%	1217	48	4%	15009	607	4%	14448	584	4%
9	A52	30/40	890	55	6%	1116	37	3%	12742	580	5%	12266	558	5%
10	A520 Leek Road	30	703	117	17%	710	60	8%	8968	1127	13%	8633	1085	13%
11	A52	30/60	707	78	11%	1046	52	5%	11134	829	7%	10718	798	7%
12	A520 Leek Road	30	884	145	16%	958	91	10%	11702	1501	13%	11264	1445	13%

Conversion Factors (AAWT/AADT)
Factors Calculated using DfT Statistics Table TRA0307 (2020)

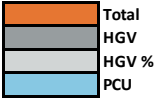
AM + PM to 18 hr (0600-2400) AAWT	6.351
AM + PM to 24 hr AADT	6.113

TEMPRO	
2019 - 2026 (AM)	1.044
2019 - 2026 (PM)	1.043

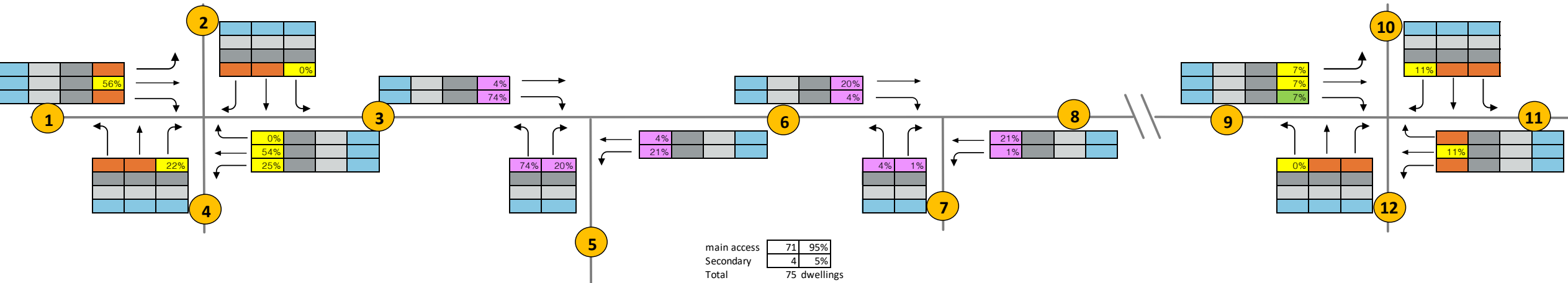
Appendix F

Title - Calculated Development Distribution

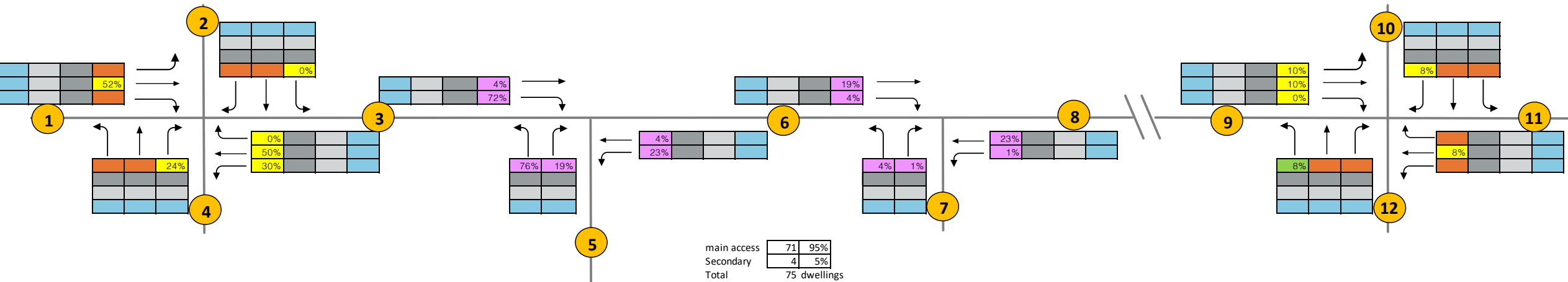
Notes - Cells highlighted bright green to address rounding in reported values at study area extremities. Cells highlighted in purple have been amended to reflect split of development across two parcels
Cells highlighted in yellow reflect Novemebr 2020 TA approved distribution



AM Peak Hour



PM Peak Hour



Link	Link Name	Speed (MPH)	Traffic (AM)			Traffic (PM)			Traffic 18hr AAWT			Traffic 24hr AADT		
			Total	HGV	%HGV	Total	HGV	%HGV	Total	HGV	%HGV	Total	HGV	%HGV
1	A52	40	1	0	0%	1	0	0%	0	0	0%	0	0	0%
2	Washerwall Lane	30	0	0	0%	0	0	0%	0	0	0%	0	0	0%
3	A52	40	2	0	0%	2	0	0%	0	0	0%	0	0	0%
4	Salters Lane	30	0	0	0%	1	0	0%	0	0	0%	0	0	0%
5	Mol Access/Larger Parcel Access	20	2	0	0%	2	0	0%	0	0	0%	0	0	0%
6	A52	40	0	0	0%	0	0	0%	0	0	0%	0	0	0%
7	Smaller Parcel Access	20	0	0	0%	0	0	0%	0	0	0%	0	0	0%
8	A52	40	0	0	0%	0	0	0%	0	0	0%	0	0	0%
9	A52	30/40	0	0	0%	0	0	0%	0	0	0%	0	0	0%
10	A520 Leek Road	30	0	0	0%	0	0	0%	0	0	0%	0	0	0%
11	A52	30/60	0	0	0%	0	0	0%	0	0	0%	0	0	0%
12	A520 Leek Road	30	0	0	0%	0	0	0%	0	0	0%	0	0	0%

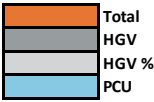
Conversion Factors (AAWT/AADT)
Factors Calculated using DfT Statistics Table TRA0307 (2020)

AM + PM to 18 hr (0600-2400) AAWT
AM + PM to 24 hr AADT

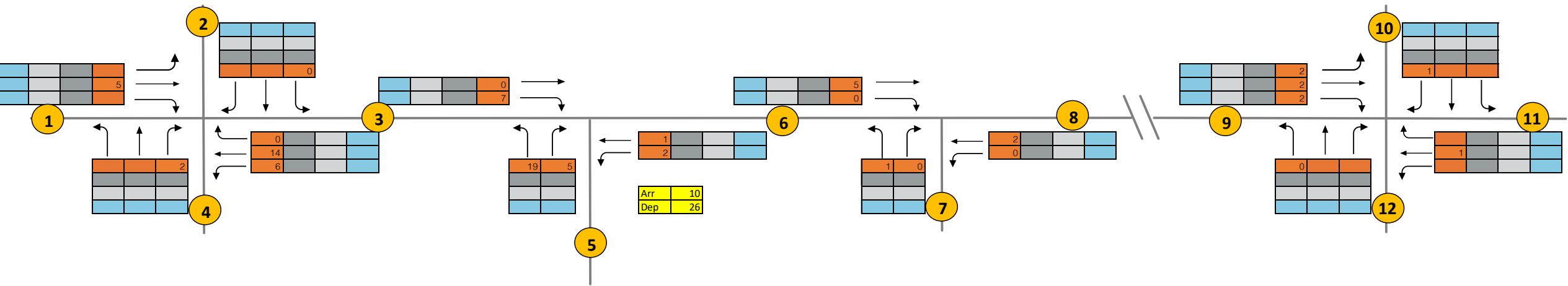
Appendix F

Title - Development Traffic Reported

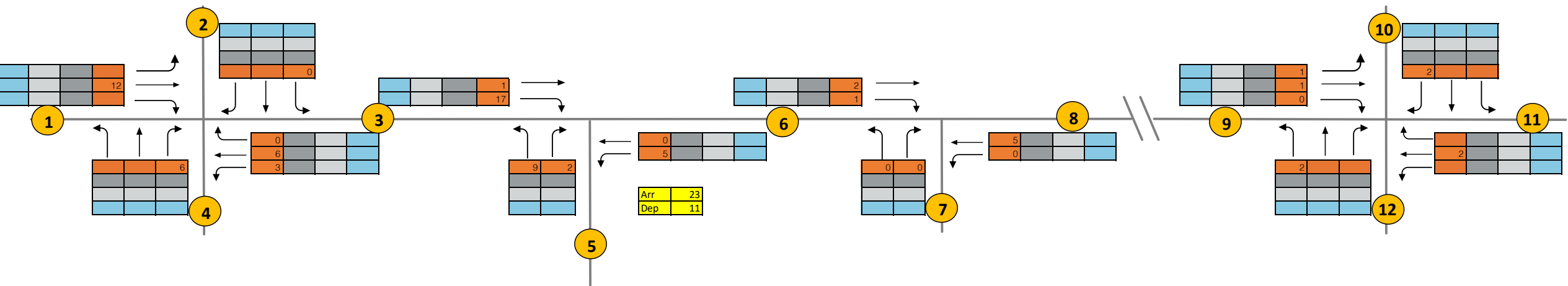
Notes - Data extracted from October 2020 TA for conversion Data taken from Appendix B



AM Peak Hour



PM Peak Hour



Link	Link Name	Speed (MPH)	Traffic (AM)			Traffic (PM)			Traffic 18hr AAWT			Traffic 24hr AADT		
			Total	HGV	%HGV	Total	HGV	%HGV	Total	HGV	%HGV	Total	HGV	%HGV
1	A52	40	19	0	0%	18	0	0%	184	0	0%	178	0	0%
2	Washerwall Lane	30	0	0	####	0	0	####	0	0	####	0	0	####
3	A52	40	28	0	0%	27	0	0%	272	0	0%	262	0	0%
4	Salters Lane	30	9	0	0%	9	0	0%	88	0	0%	84	0	0%
5	Moj Access/Larger Parcel Access	20	34	0	0%	33	0	0%	331	0	0%	319	0	0%
6	A52	40	9	0	0%	9	0	0%	88	0	0%	85	0	0%
7	Smaller Parcel Access	20	2	0	0%	2	0	0%	19	0	0%	18	0	0%
8	A52	40	8	0	0%	8	0	0%	77	0	0%	75	0	0%
9	A52	30/40	8	0	0%	8	0	0%	77	0	0%	74	0	0%
10	A520 Leek Road	30	3	0	0%	3	0	0%	30	0	0%	28	0	0%
11	A52	30/60	3	0	0%	3	0	0%	30	0	0%	28	0	0%
12	A520 Leek Road	30	2	0	0%	2	0	0%	18	0	0%	18	0	0%

Conversion Factors (AAWT/AADT)
Factors Calculated using DfT Statistics Table TRA0307 (2020)

14 hr to 18 hr (0600-2400) AAWT	1.089
14 hr to 24 hr AADT	1.049

Conversion Factors (TRICS Data)
AM + PM to 14 hr (0700-2100)

4.563

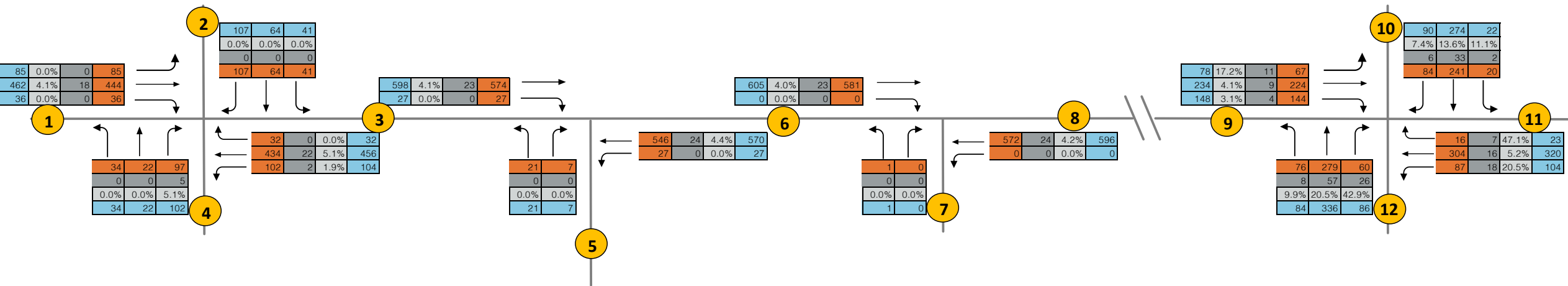
Appendix F

Title - 2026 Baseline + Development

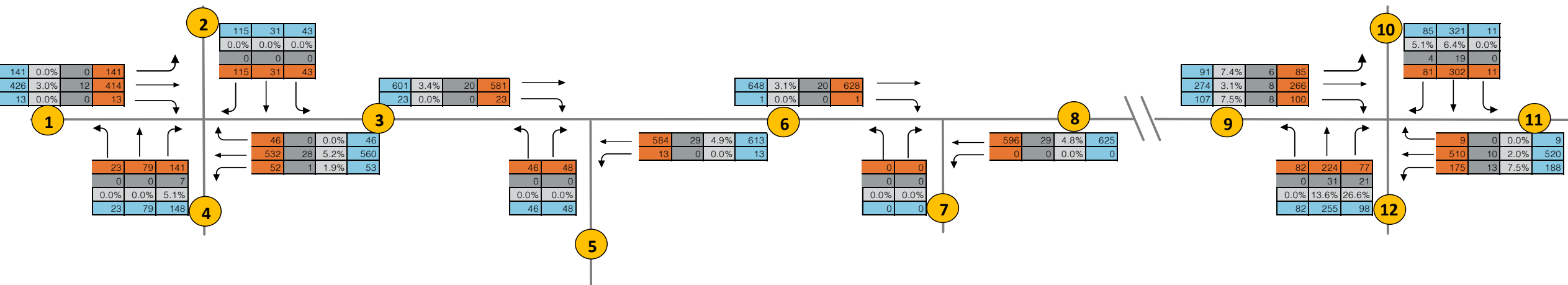
Notes -

	Total
	HGV
	HGV %
	PCU

AM Peak Hour



PM Peak Hour



Link	Link Name	Speed (MPH)	Traffic (AM)			Traffic (PM)			Traffic 18hr AAWT			Traffic 24hr AADT		
			Total	HGV	%HGV	Total	HGV	%HGV	Total	HGV	%HGV	Total	HGV	%HGV
1	A52	40	1138	40	4%	1237	40	3%	15030	511	3%	14469	492	3%
2	Washerwall Lane	30	350	0	0%	455	0	0%	5110	0	0%	4919	0	0%
3	A52	40	1149	47	4%	1228	48	4%	15022	607	4%	14461	584	4%
4	Salters Lane	30	355	7	2%	340	8	2%	4386	96	2%	4222	92	2%
5	Mol Access/Larger Parcel Access	20	83	0	0%	130	0	0%	1259	0	0%	1212	0	0%
6	A52	40	1155	47	4%	1226	48	4%	15097	607	4%	14532	584	4%
7	Smaller Parcel Access	20	2	0	0%	2	0	0%	19	0	0%	18	0	0%
8	A52	40	1154	47	4%	1225	48	4%	15086	607	4%	14522	584	4%
9	A52	30/40	898	55	6%	1124	37	3%	12819	580	5%	12340	558	5%
10	A520 Leek Road	30	706	117	17%	713	60	8%	8997	1127	13%	8661	1085	13%
11	A52	30/60	710	78	11%	1049	52	5%	11163	829	7%	10746	798	7%
12	A520 Leek Road	30	886	145	16%	960	91	9%	11720	1501	13%	11282	1445	13%

APPENDIX G

Junction Capacity Assessment Outputs

Junctions 9							
PICADY 9 - Priority Intersection Module							
Version: 9.5.0.6896							
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+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk							
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution							

Filename: 210908_Ash Bank Road - Site Access.j9

Path: C:\Users\JamesMonk\Dropbox (mode)\Project\Birmingham\2. Projects\J325522_Ash Bank Road, Werrington\4.

Data\Junction Assessments\3 - Ash Bank Road - Site Access - Priority

Report generation date: 08/09/2021 15:29:20

«2026 Base + Dev, AM

»Junction Network

»Arms

»Traffic Demand

»Origin-Destination Data

»Vehicle Mix

»Results

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2026 Base + Dev								
Stream B-C	0.0	7.38	0.05	A	0.1	7.52	0.10	A
Stream B-A	0.0	12.08	0.03	B	0.2	16.09	0.19	C
Stream C-AB	0.2	4.69	0.10	A	0.2	4.63	0.08	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	08/09/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\JamesMonk
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15

2026 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ash Bank Road / Site Access	T-Junction	Two-way		0.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Ash Bank Road (E)		Major
B	Site Access		Minor
C	Ash Bank Road (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Ash Bank Road (W)	7.70			74.1	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane plus flare	8.90	2.90	2.75	2.75	2.75		1.00	49	32

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	555	0.094	0.237	0.149	0.338
1	B-C	659	0.094	0.236	-	-
1	C-B	617	0.221	0.221	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ash Bank Road (E)		✓	573	100.000
B - Site Access		✓	28	100.000
C - Ash Bank Road (W)		✓	601	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Ash Bank Road (E)	B - Site Access	C - Ash Bank Road (W)
From	A - Ash Bank Road (E)	0	27	546
	B - Site Access	7	0	21
	C - Ash Bank Road (W)	574	27	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ash Bank Road (E)	B - Site Access	C - Ash Bank Road (W)
From	A - Ash Bank Road (E)	0	0	4
	B - Site Access	0	0	0
	C - Ash Bank Road (W)	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.05	7.38	0.0	A
B-A	0.03	12.08	0.0	B
C-AB	0.10	4.69	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16	558	0.028	16	0.0	6.636	A
B-A	5	385	0.014	5	0.0	9.483	A
C-AB	42	828	0.051	42	0.1	4.674	A
C-A	410			410			
A-B	20			20			
A-C	411			411			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	538	0.035	19	0.0	6.931	A
B-A	6	352	0.018	6	0.0	10.423	B
C-AB	59	875	0.068	59	0.1	4.516	A
C-A	481			481			
A-B	24			24			
A-C	491			491			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	511	0.045	23	0.0	7.381	A
B-A	8	306	0.025	8	0.0	12.071	B
C-AB	91	942	0.096	90	0.2	4.338	A
C-A	571			571			
A-B	30			30			
A-C	601			601			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	511	0.045	23	0.0	7.381	A
B-A	8	306	0.025	8	0.0	12.076	B
C-AB	91	942	0.097	91	0.2	4.350	A
C-A	571			571			
A-B	30			30			
A-C	601			601			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	538	0.035	19	0.0	6.935	A
B-A	6	352	0.018	6	0.0	10.428	B
C-AB	60	875	0.068	60	0.1	4.534	A
C-A	481			481			
A-B	24			24			
A-C	491			491			

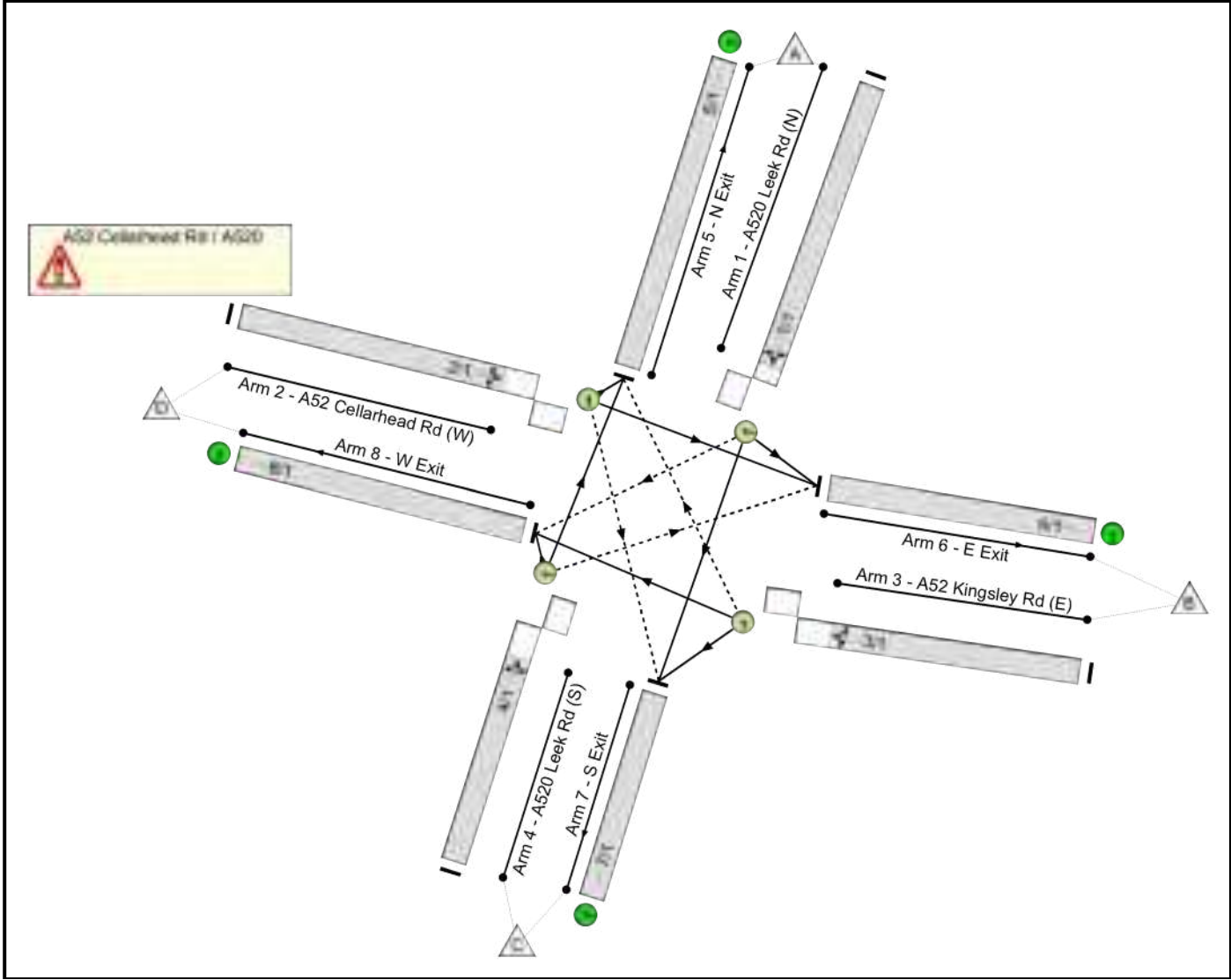
09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16	558	0.028	16	0.0	6.640	A
B-A	5	385	0.014	5	0.0	9.490	A
C-AB	43	829	0.052	43	0.1	4.690	A
C-A	410			410			
A-B	20			20			
A-C	411			411			

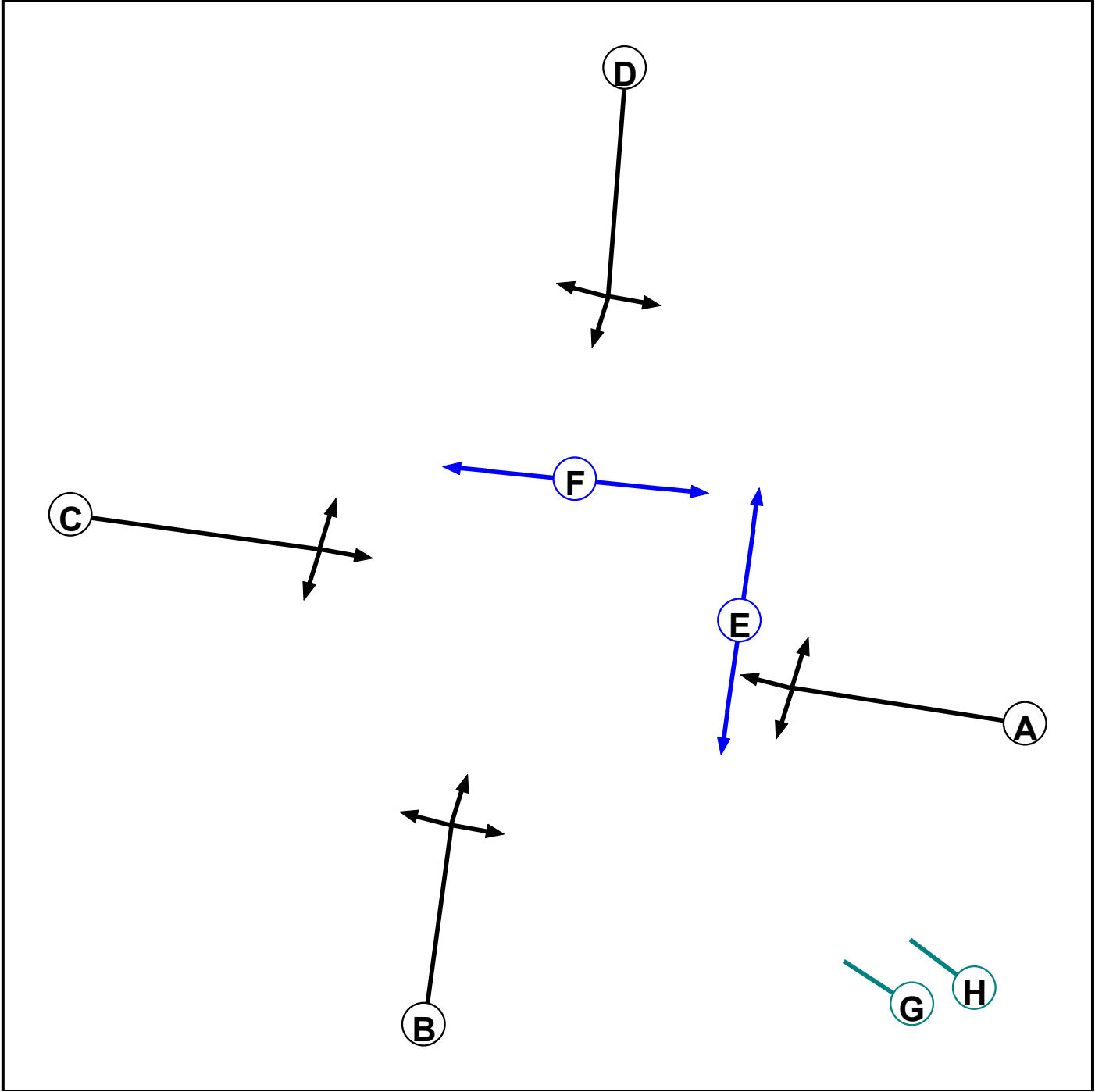
User and Project Details

Project:	
Title:	A52 Cellarhead Rd / A520
Location:	
Additional detail:	
File name:	A52_A520.lsg3x
Author:	al
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		7	7
F	Pedestrian		7	7
G	Dummy		7	7
H	Dummy		7	7

Full Input Data And Results

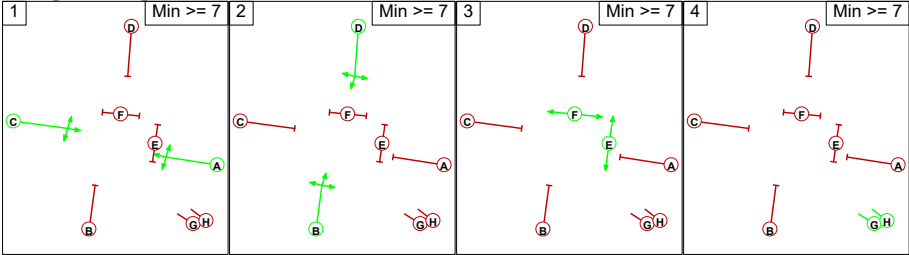
Phase Intergreens Matrix

		Starting Phase							
Terminating Phase		A	B	C	D	E	F	G	H
	A		9	-	9	10	10	3	3
	B	9		9	-	10	10	3	3
	C	-	9		9	10	10	3	3
	D	9	-	9		10	10	3	3
	E	7	7	7	7		-	3	3
	F	7	7	7	7	-		3	3
	G	2	2	2	2	2	2		-
	H	2	2	2	2	2	2	-	

Phases in Stage

Stage No.	Phases in Stage
1	A C
2	B D
3	E F
4	G H

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

		To Stage			
From Stage		1	2	3	4
	1		9	10	3
	2	9		10	3
	3	7	7		3
	4	2	2	2	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A52 Cellarhead Rd / A520											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (A520 Leek Rd (N))	8/1 (Right)	1439	0	4/1	1.09	To 5/1 (Ahead) To 8/1 (Left)	3.00	2.00	0.50	3	2.00
2/1 (A52 Cellarhead Rd (W))	7/1 (Right)	1439	0	3/1	1.09	To 7/1 (Left) To 8/1 (Ahead)	4.00	2.00	0.50	4	3.00
3/1 (A52 Kingsley Rd (E))	5/1 (Right)	1439	0	2/1	1.09	To 5/1 (Left) To 6/1 (Ahead)	4.00	2.00	0.50	4	2.00
4/1 (A520 Leek Rd (S))	6/1 (Right)	1439	0	1/1	1.09	To 6/1 (Left) To 7/1 (Ahead)	4.00	2.00	0.50	4	2.00

Full Input Data And Results

Lane Input Data

Junction: A52 Cellarhead Rd / A520												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A520 Leek Rd (N))	O	D	2	3	60.0	Geom	-	3.82	0.00	Y	Arm 6 Left	9.76
											Arm 7 Ahead	Inf
											Arm 8 Right	9.94
											Arm 5 Left	8.40
2/1 (A52 Cellarhead Rd (W))	O	C	2	3	60.0	Geom	-	3.58	0.00	Y	Arm 6 Ahead	Inf
											Arm 7 Right	11.70
											Arm 5 Right	13.13
3/1 (A52 Kingsley Rd (E))	O	A	2	3	60.0	Geom	-	3.32	0.00	Y	Arm 7 Left	8.53
											Arm 8 Ahead	Inf
											Arm 5 Ahead	Inf
4/1 (A520 Leek Rd (S))	O	B	2	3	60.0	Geom	-	3.86	0.00	Y	Arm 6 Right	9.99
											Arm 8 Left	7.40
5/1 (N Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (E Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (S Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (W Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2026 AM Base'	08:00	09:00	01:00	
2: '2026 PM Base'	17:00	18:00	01:00	
3: '2026 AM Base + Dev'	08:00	09:00	01:00	
4: '2026 PM Base + Dev'	17:00	18:00	01:00	

Scenario 1: '1' (FG1: '2026 AM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	22	274	89	385
	B	23	0	104	319	446
	C	336	86	0	84	506
	D	76	232	146	0	454
	Tot.	435	340	524	492	1791

Traffic Lane Flows

Lane	Scenario 1: 1
Junction: A52 Cellarhead Rd / A520	
1/1	385
2/1	454
3/1	446
4/1	506
5/1	435
6/1	340
7/1	524
8/1	492

Lane Saturation Flows

Junction: A52 Cellarhead Rd / A520								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A520 Leek Rd (N))	3.82	0.00	Y	Arm 6 Left	9.76	5.7 %	1913	1913
				Arm 7 Ahead	Inf	71.2 %		
				Arm 8 Right	9.94	23.1 %		
2/1 (A52 Cellarhead Rd (W))	3.58	0.00	Y	Arm 5 Left	8.40	16.7 %	1842	1842
				Arm 6 Ahead	Inf	51.1 %		
				Arm 7 Right	11.70	32.2 %		
3/1 (A52 Kingsley Rd (E))	3.32	0.00	Y	Arm 5 Right	13.13	5.2 %	1860	1860
				Arm 7 Left	8.53	23.3 %		
				Arm 8 Ahead	Inf	71.5 %		
4/1 (A520 Leek Rd (S))	3.86	0.00	Y	Arm 5 Ahead	Inf	66.4 %	1889	1889
				Arm 6 Right	9.99	17.0 %		
				Arm 8 Left	7.40	16.6 %		
5/1 (N Exit Lane 1)			Infinite Saturation Flow				Inf	Inf
6/1 (E Exit Lane 1)			Infinite Saturation Flow				Inf	Inf
7/1 (S Exit Lane 1)			Infinite Saturation Flow				Inf	Inf
8/1 (W Exit Lane 1)			Infinite Saturation Flow				Inf	Inf

Scenario 2: '2' (FG2: '2026 PM Base', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	11	321	83	415
	B	9	0	188	518	715
	C	255	98	0	80	433
	D	90	273	107	0	470
	Tot.	354	382	616	681	2033

Traffic Lane Flows

Lane	Scenario 2: 2
Junction: A52 Cellarhead Rd / A520	
1/1	415
2/1	470
3/1	715
4/1	433
5/1	354
6/1	382
7/1	616
8/1	681

Lane Saturation Flows

Junction: A52 Cellarhead Rd / A520								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A520 Leek Rd (N))	3.82	0.00	Y	Arm 6 Left Arm 7 Ahead Arm 8 Right	9.76 Inf 9.94	2.7 % 77.3 % 20.0 %	1931	1931
2/1 (A52 Cellarhead Rd (W))	3.58	0.00	Y	Arm 5 Left	8.40	19.1 %	1855	1855
3/1 (A52 Kingsley Rd (E))	3.32	0.00	Y	Arm 6 Ahead Arm 7 Right Arm 5 Right	Inf 11.70 13.13	58.1 % 22.8 % 1.3 %	1858	1858
4/1 (A520 Leek Rd (S))	3.86	0.00	Y	Arm 7 Left Arm 8 Ahead Arm 5 Ahead	8.53 Inf Inf	26.3 % 72.4 % 58.9 %	1868	1868
5/1 (N Exit Lane 1)				Arm 6 Right Arm 8 Left	9.99 7.40	22.6 % 18.5 %	Inf	Inf
6/1 (E Exit Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (S Exit Lane 1)				Infinite Saturation Flow			Inf	Inf
8/1 (W Exit Lane 1)				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

Scenario 3: '3' (FG3: '2026 AM Base + Dev', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin	A	A	B	C	D	Tot.
	A	0	22	274	90	386
	B	23	0	104	320	447
	C	336	86	0	84	506
	D	78	234	148	0	460
	Tot.	437	342	526	494	1799

Traffic Lane Flows

Lane	Scenario 3: 3
Junction: A52 Cellarhead Rd / A520	
1/1	386
2/1	460
3/1	447
4/1	506
5/1	437
6/1	342
7/1	526
8/1	494

Lane Saturation Flows

Junction: A52 Cellarhead Rd / A520								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A520 Leek Rd (N))	3.82	0.00	Y	Arm 6 Left	9.76	5.7 %	1913	1913
				Arm 7 Ahead	Inf	71.0 %		
				Arm 8 Right	9.94	23.3 %		
2/1 (A52 Cellarhead Rd (W))	3.58	0.00	Y	Arm 5 Left	8.40	17.0 %	1841	1841
				Arm 6 Ahead	Inf	50.9 %		
				Arm 7 Right	11.70	32.2 %		
3/1 (A52 Kingsley Rd (E))	3.32	0.00	Y	Arm 5 Right	13.13	5.1 %	1860	1860
				Arm 7 Left	8.53	23.3 %		
				Arm 8 Ahead	Inf	71.6 %		
4/1 (A520 Leek Rd (S))	3.86	0.00	Y	Arm 5 Ahead	Inf	66.4 %	1889	1889
				Arm 6 Right	9.99	17.0 %		
				Arm 8 Left	7.40	16.6 %		
5/1 (N Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (E Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (S Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (W Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '4' (FG4: '2026 PM Base + Dev', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	11	321	85	417
	B	9	0	188	520	717
	C	255	98	0	82	435
	D	91	274	107	0	472
	Tot.	355	383	616	687	2041

Full Input Data And Results

Traffic Lane Flows

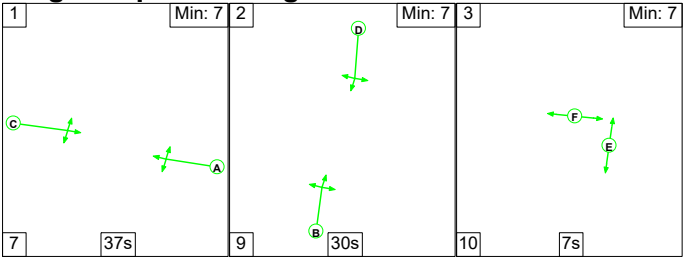
Lane	Scenario 4: 4
Junction: A52 Cellarhead Rd / A520	
1/1	417
2/1	472
3/1	717
4/1	435
5/1	355
6/1	383
7/1	616
8/1	687

Lane Saturation Flows

Junction: A52 Cellarhead Rd / A520								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A520 Leek Rd (N))	3.82	0.00	Y	Arm 6 Left Arm 7 Ahead Arm 8 Right	9.76 Inf 9.94	2.6 % 77.0 % 20.4 %	1930	1930
2/1 (A52 Cellarhead Rd (W))	3.58	0.00	Y	Arm 5 Left	8.40	19.3 %	1855	1855
3/1 (A52 Kingsley Rd (E))	3.32	0.00	Y	Arm 6 Ahead Arm 7 Right Arm 5 Right	Inf 11.70 13.13	58.1 % 22.7 % 1.3 %	1859	1859
4/1 (A520 Leek Rd (S))	3.86	0.00	Y	Arm 7 Left Arm 8 Ahead Arm 5 Ahead	8.53 Inf Inf	26.2 % 72.5 % 58.6 %	1867	1867
5/1 (N Exit Lane 1)				Arm 6 Right Arm 8 Left	9.99 7.40	22.5 % 18.9 %	Inf	Inf
6/1 (E Exit Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (S Exit Lane 1)				Infinite Saturation Flow			Inf	Inf
8/1 (W Exit Lane 1)				Infinite Saturation Flow			Inf	Inf

Scenario 1: '1' (FG1: '2026 AM Base', Plan 1: 'Network Control Plan 1')

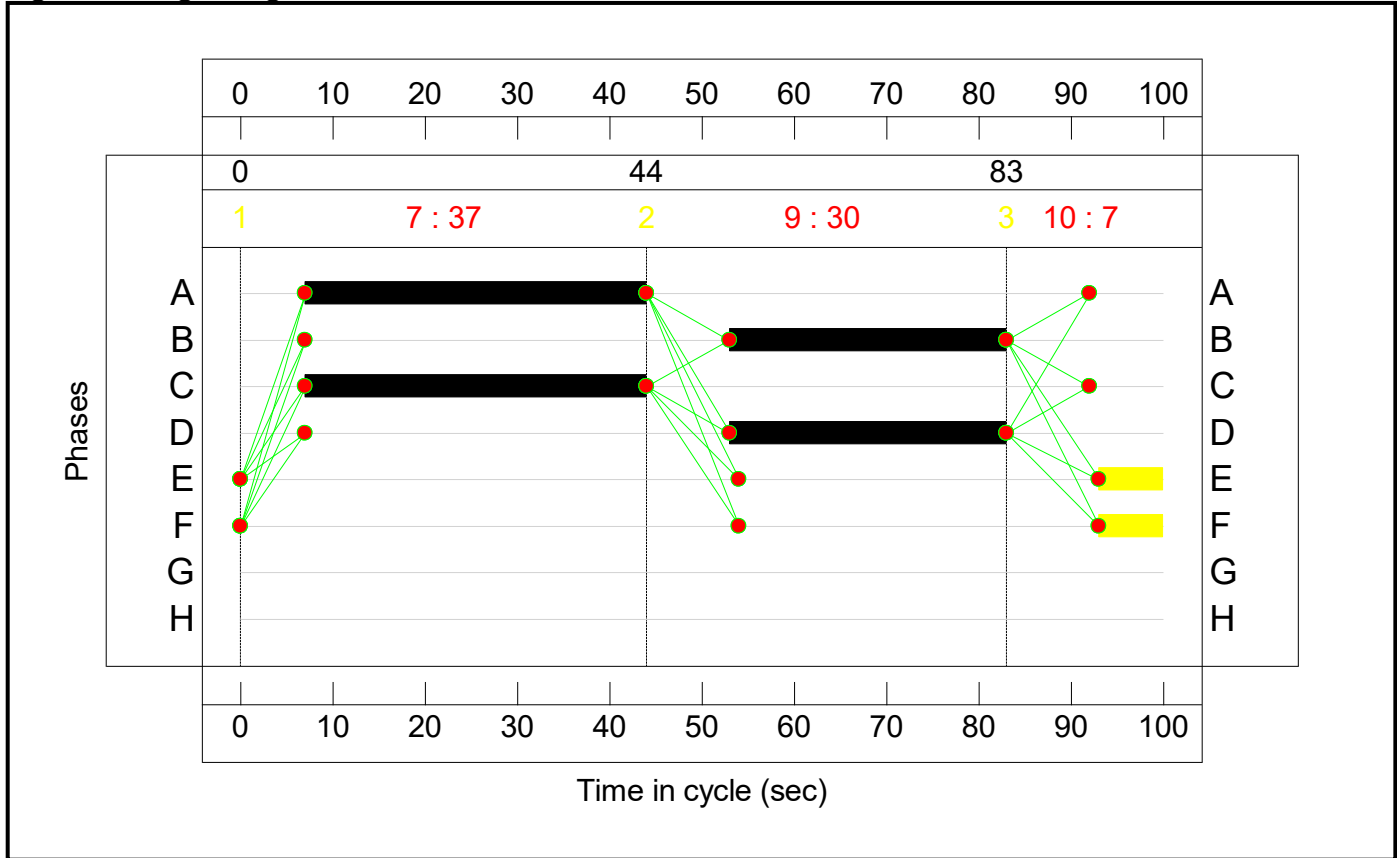
Stage Sequence Diagram



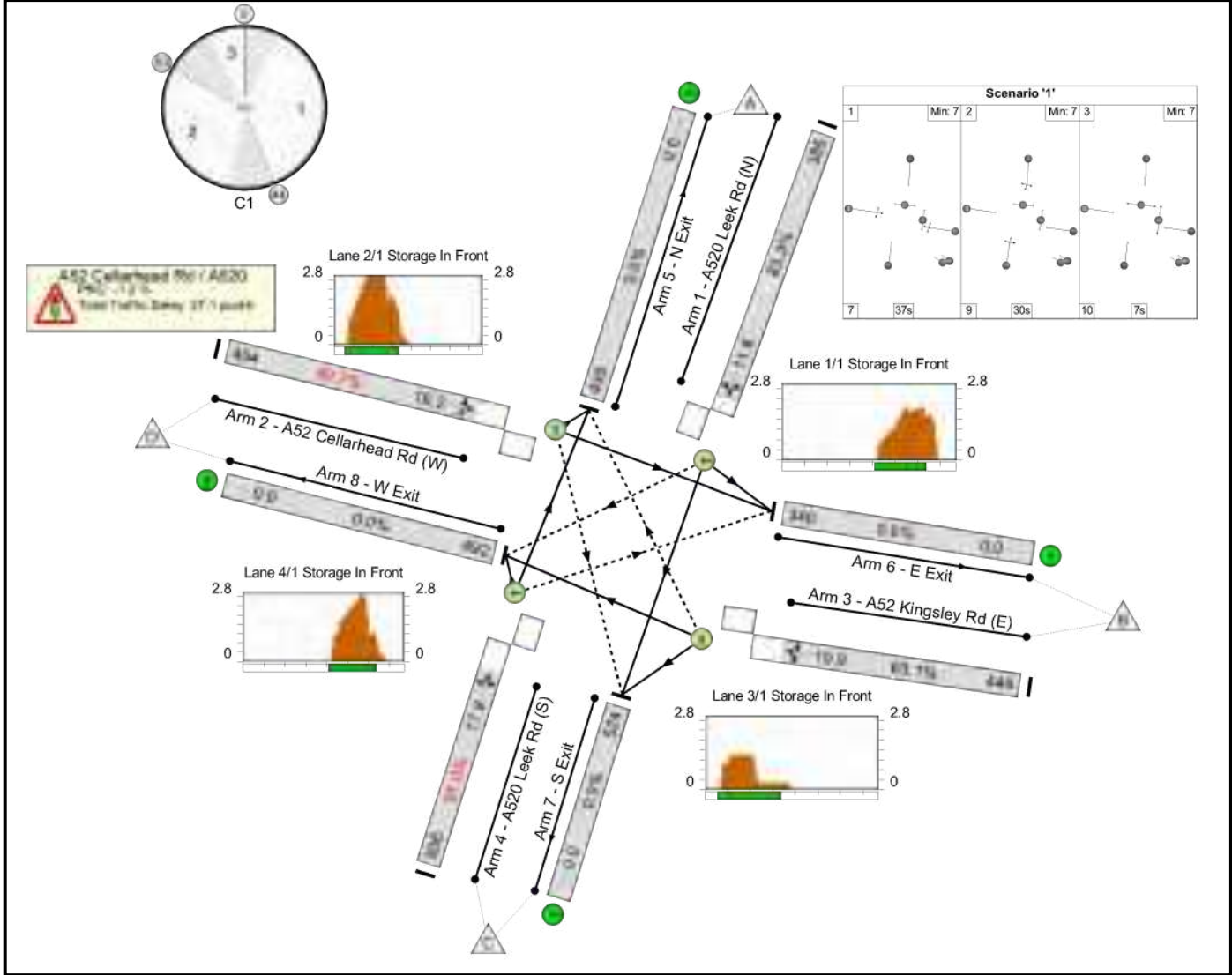
Stage Timings

Stage	1	2	3
Duration	37	30	7
Change Point	0	44	83

Signal Timings Diagram



Network Layout Diagram



Full Input Data And Results

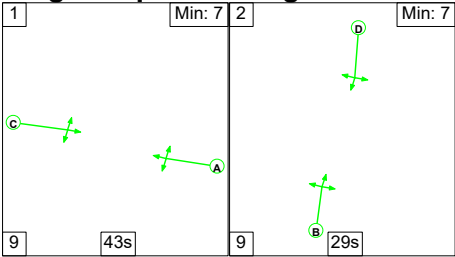
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 Cellarhead Rd / A520	-	-	N/A	-	-		-	-	-	-	-	-	91.0%
A52 Cellarhead Rd / A520	-	-	N/A	-	-		-	-	-	-	-	-	91.0%
1/1	A520 Leek Rd (N) Left Ahead Right	O	N/A	N/A	D		1	30	-	385	1913	462	83.3%
2/1	A52 Cellarhead Rd (W) Left Ahead Right	O	N/A	N/A	C		1	37	-	454	1842	501	90.7%
3/1	A52 Kingsley Rd (E) Right Left Ahead	O	N/A	N/A	A		1	37	-	446	1860	707	63.1%
4/1	A520 Leek Rd (S) Ahead Right Left	O	N/A	N/A	B		1	30	-	506	1889	556	91.0%
5/1	N Exit	U	N/A	N/A	-		-	-	-	435	Inf	Inf	0.0%
6/1	E Exit	U	N/A	N/A	-		-	-	-	340	Inf	Inf	0.0%
7/1	S Exit	U	N/A	N/A	-		-	-	-	524	Inf	Inf	0.0%
8/1	W Exit	U	N/A	N/A	-		-	-	-	492	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A52 Cellarhead Rd / A520	-	-	289	0	55	14.4	11.7	1.0	27.1	-	-	-	-
A52 Cellarhead Rd / A520	-	-	289	0	55	14.4	11.7	1.0	27.1	-	-	-	-
1/1	385	385	39	0	50	3.2	2.4	0.4	5.9	55.3	9.2	2.4	11.6
2/1	454	454	143	0	3	3.5	4.1	0.4	8.1	63.9	12.1	4.1	16.2
3/1	446	446	23	0	0	3.1	0.8	0.0	4.0	32.2	10.0	0.8	10.9
4/1	506	506	84	0	2	4.6	4.3	0.2	9.1	64.8	13.5	4.3	17.8
5/1	435	435	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	340	340	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	524	524	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	492	492	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -1.2 Total Delay for Signalled Lanes (pcuHr): 27.07 Cycle Time (s): 100 PRC Over All Lanes (%): -1.2 Total Delay Over All Lanes(pcuHr): 27.07													

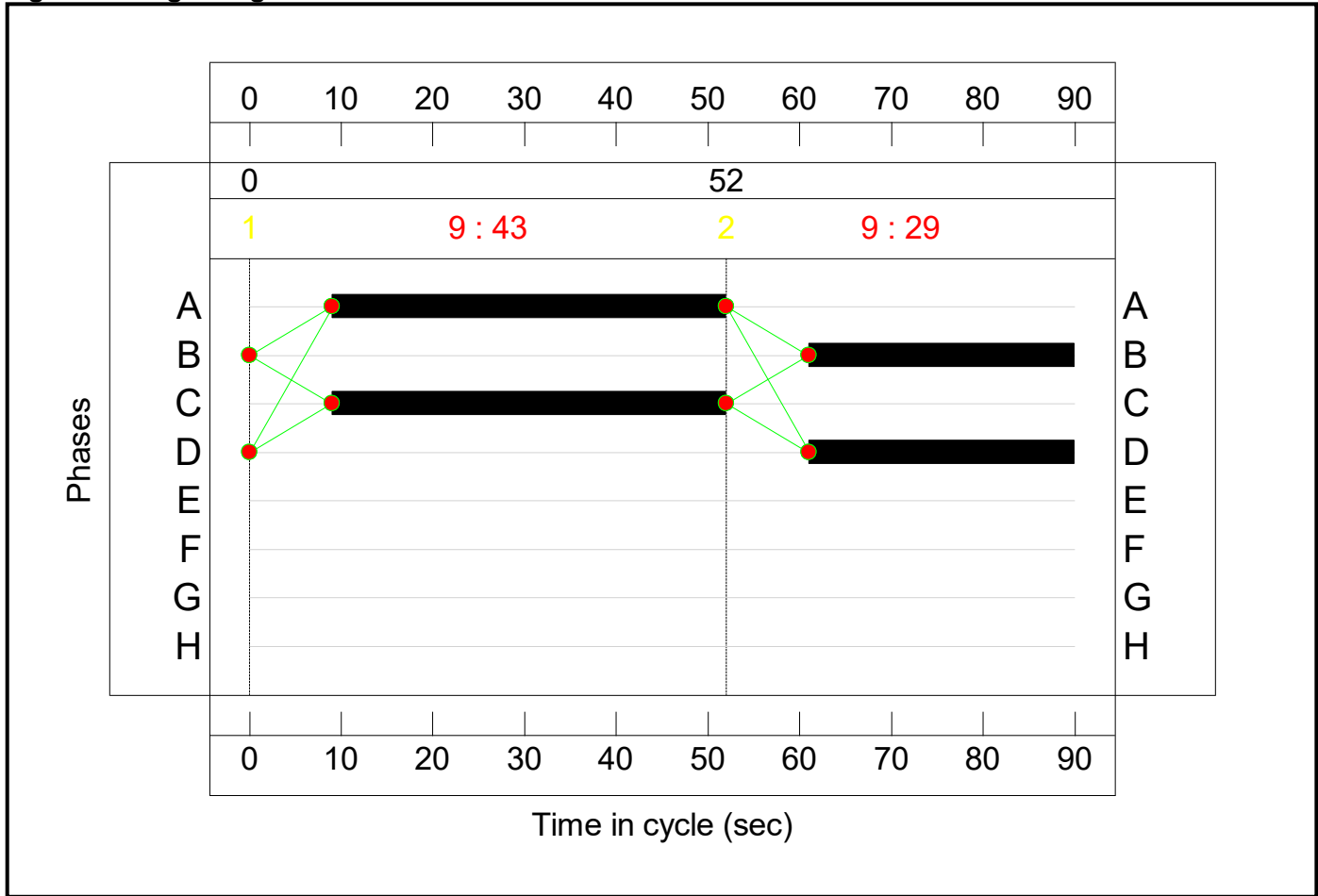
Stage Sequence Diagram



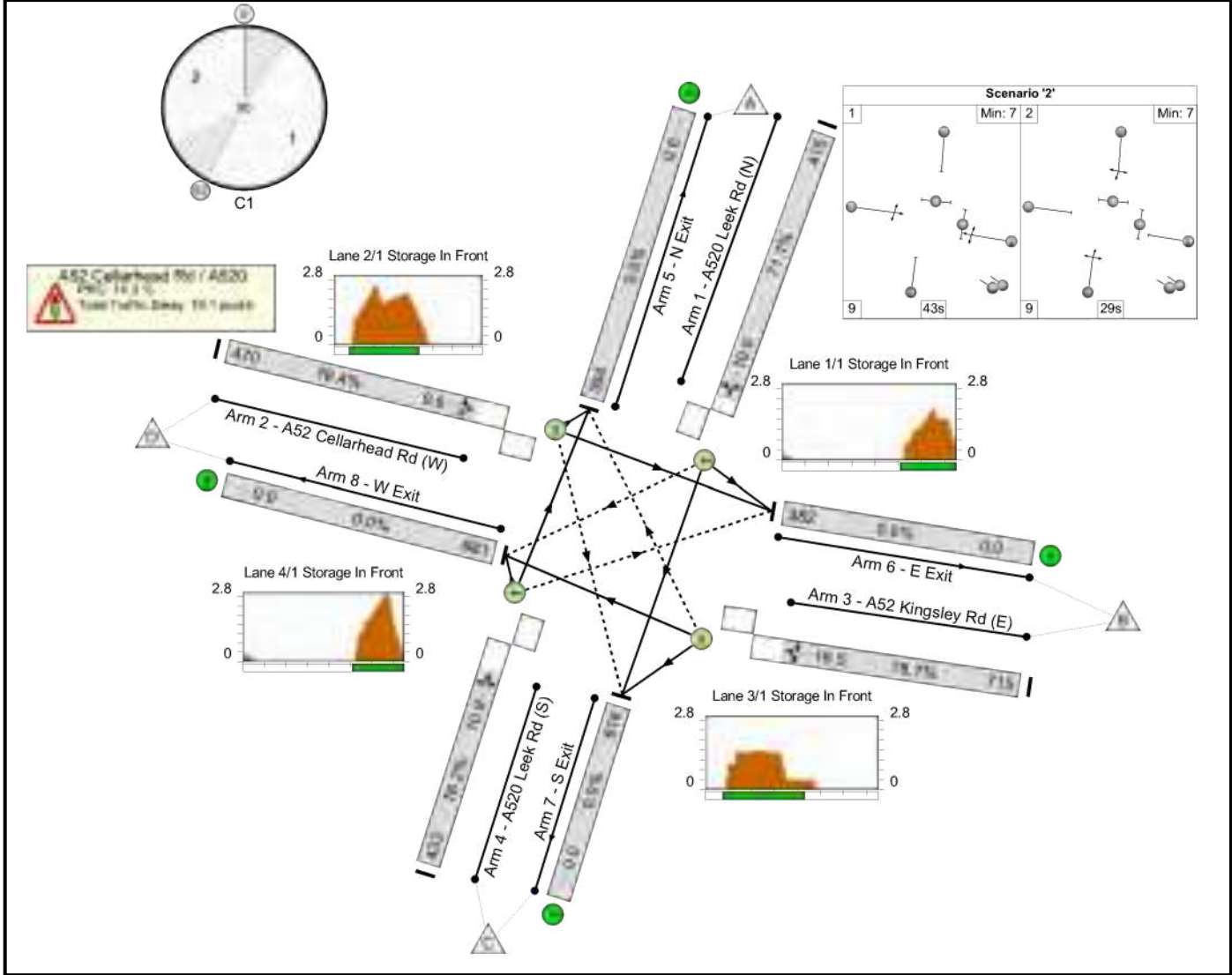
Stage Timings

Stage	1	2
Duration	43	29
Change Point	0	52

Signal Timings Diagram



Network Layout Diagram



Full Input Data And Results

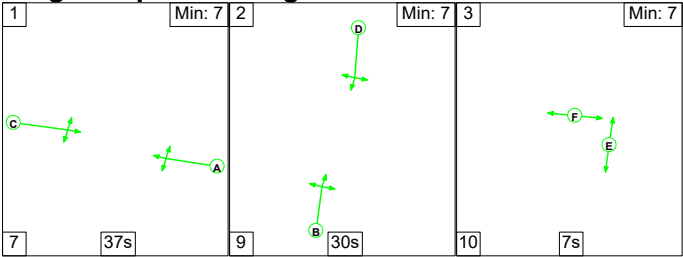
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 Cellarhead Rd / A520	-	-	N/A	-	-		-	-	-	-	-	-	78.7%
A52 Cellarhead Rd / A520	-	-	N/A	-	-		-	-	-	-	-	-	78.7%
1/1	A520 Leek Rd (N) Left Ahead Right	O	N/A	N/A	D		1	29	-	415	1931	584	71.1%
2/1	A52 Cellarhead Rd (W) Left Ahead Right	O	N/A	N/A	C		1	43	-	470	1855	615	76.4%
3/1	A52 Kingsley Rd (E) Right Left Ahead	O	N/A	N/A	A		1	43	-	715	1858	908	78.7%
4/1	A520 Leek Rd (S) Ahead Right Left	O	N/A	N/A	B		1	29	-	433	1868	568	76.2%
5/1	N Exit	U	N/A	N/A	-		-	-	-	354	Inf	Inf	0.0%
6/1	E Exit	U	N/A	N/A	-		-	-	-	382	Inf	Inf	0.0%
7/1	S Exit	U	N/A	N/A	-		-	-	-	616	Inf	Inf	0.0%
8/1	W Exit	U	N/A	N/A	-		-	-	-	681	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A52 Cellarhead Rd / A520	-	-	286	0	11	11.9	6.2	1.0	19.1	-	-	-	-
A52 Cellarhead Rd / A520	-	-	286	0	11	11.9	6.2	1.0	19.1	-	-	-	-
1/1	415	415	82	0	1	2.9	1.2	0.2	4.4	37.9	8.8	1.2	10.0
2/1	470	470	100	0	7	2.1	1.6	0.5	4.2	32.0	8.0	1.6	9.6
3/1	715	715	9	0	0	3.8	1.8	0.0	5.6	28.3	14.7	1.8	16.5
4/1	433	433	96	0	2	3.1	1.6	0.2	4.9	40.9	9.4	1.6	10.9
5/1	354	354	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	382	382	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	616	616	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	681	681	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 14.3 Total Delay for Signalled Lanes (pcuHr): 19.08 Cycle Time (s): 90 PRC Over All Lanes (%): 14.3 Total Delay Over All Lanes(pcuHr): 19.08													

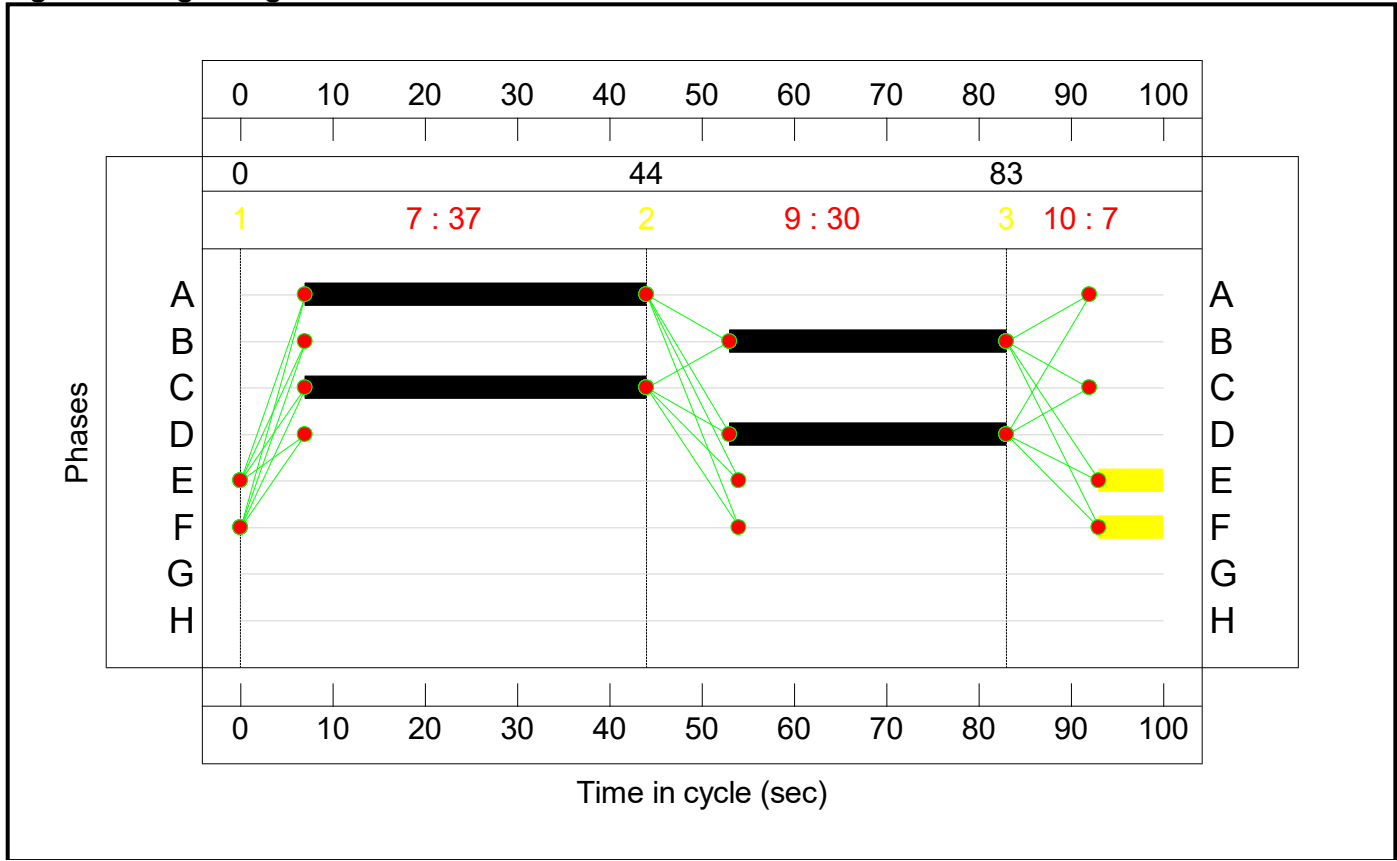
Stage Sequence Diagram



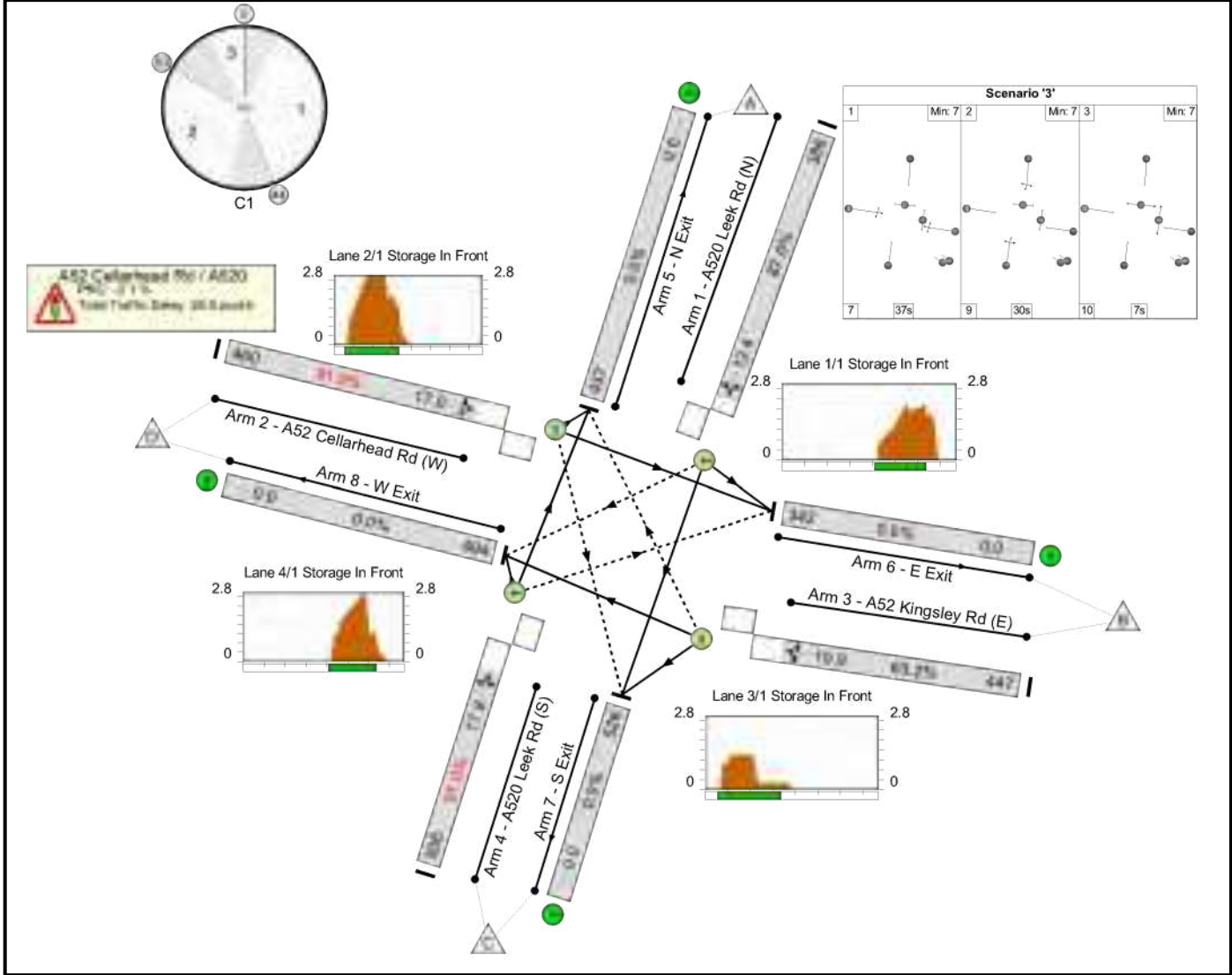
Stage Timings

Stage	1	2	3
Duration	37	30	7
Change Point	0	44	83

Signal Timings Diagram



Network Layout Diagram



Full Input Data And Results

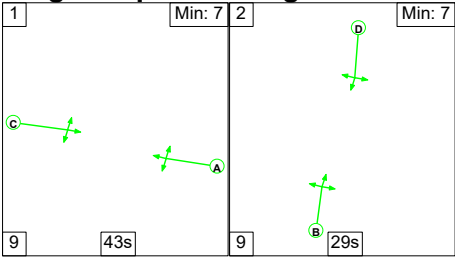
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 Cellarhead Rd / A520	-	-	N/A	-	-		-	-	-	-	-	-	91.9%
A52 Cellarhead Rd / A520	-	-	N/A	-	-		-	-	-	-	-	-	91.9%
1/1	A520 Leek Rd (N) Left Ahead Right	O	N/A	N/A	D		1	30	-	386	1913	441	87.6%
2/1	A52 Cellarhead Rd (W) Left Ahead Right	O	N/A	N/A	C		1	37	-	460	1841	501	91.9%
3/1	A52 Kingsley Rd (E) Right Left Ahead	O	N/A	N/A	A		1	37	-	447	1860	707	63.2%
4/1	A520 Leek Rd (S) Ahead Right Left	O	N/A	N/A	B		1	30	-	506	1889	556	91.0%
5/1	N Exit	U	N/A	N/A	-		-	-	-	437	Inf	Inf	0.0%
6/1	E Exit	U	N/A	N/A	-		-	-	-	342	Inf	Inf	0.0%
7/1	S Exit	U	N/A	N/A	-		-	-	-	526	Inf	Inf	0.0%
8/1	W Exit	U	N/A	N/A	-		-	-	-	494	Inf	Inf	0.0%

Full Input Data And Results

[illegible]

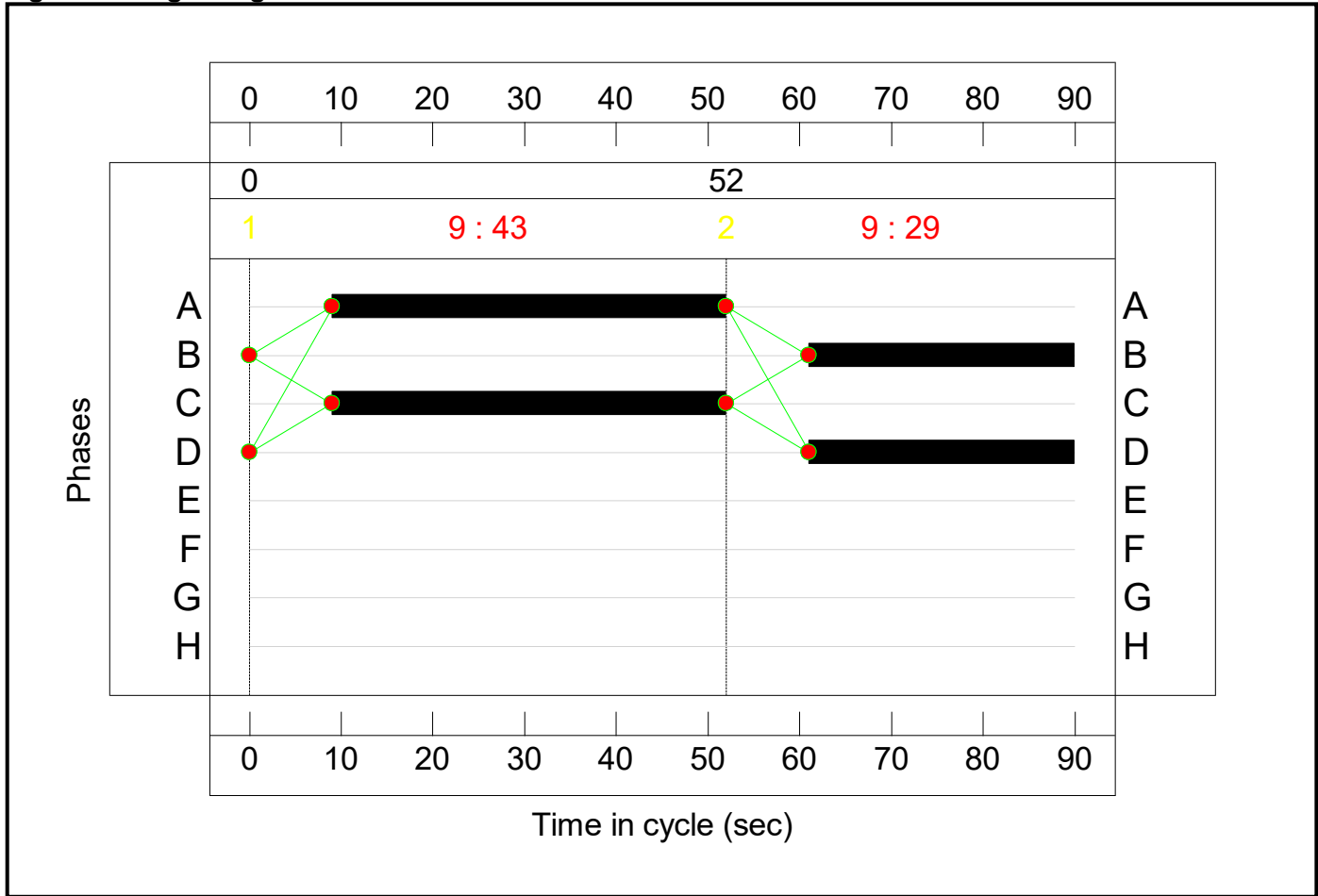
Stage Sequence Diagram



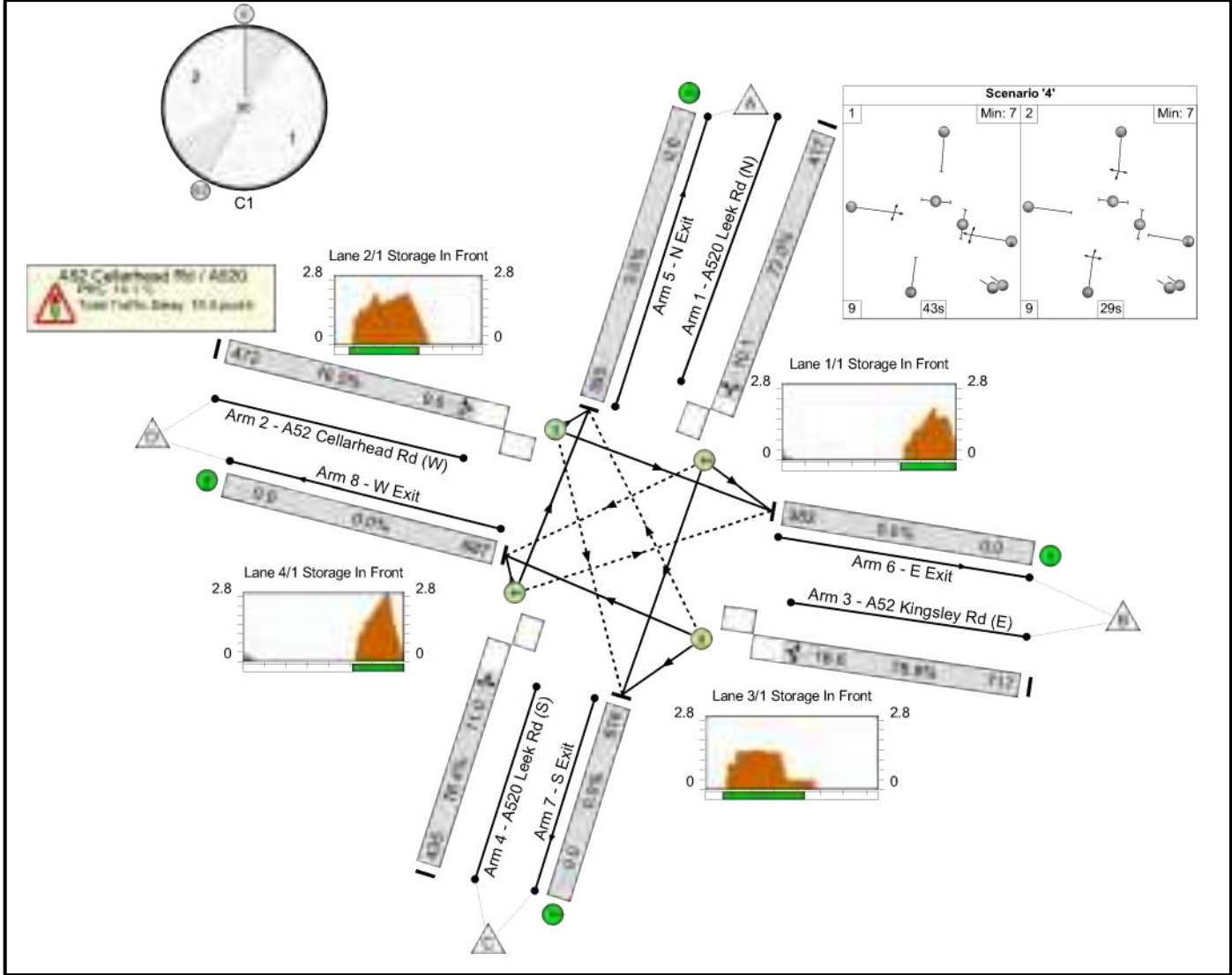
Stage Timings

Stage	1	2
Duration	43	29
Change Point	0	52

Signal Timings Diagram



Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 Cellarhead Rd / A520	-	-	N/A	-	-		-	-	-	-	-	-	78.9%
A52 Cellarhead Rd / A520	-	-	N/A	-	-		-	-	-	-	-	-	78.9%
1/1	A520 Leek Rd (N) Left Ahead Right	O	N/A	N/A	D		1	29	-	417	1930	579	72.0%
2/1	A52 Cellarhead Rd (W) Left Ahead Right	O	N/A	N/A	C		1	43	-	472	1855	617	76.5%
3/1	A52 Kingsley Rd (E) Right Left Ahead	O	N/A	N/A	A		1	43	-	717	1859	909	78.9%
4/1	A520 Leek Rd (S) Ahead Right Left	O	N/A	N/A	B		1	29	-	435	1867	569	76.4%
5/1	N Exit	U	N/A	N/A	-		-	-	-	355	Inf	Inf	0.0%
6/1	E Exit	U	N/A	N/A	-		-	-	-	383	Inf	Inf	0.0%
7/1	S Exit	U	N/A	N/A	-		-	-	-	616	Inf	Inf	0.0%
8/1	W Exit	U	N/A	N/A	-		-	-	-	687	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A52 Cellarhead Rd / A520	-	-	287	0	12	12.0	6.3	1.0	19.3	-	-	-	-
A52 Cellarhead Rd / A520	-	-	287	0	12	12.0	6.3	1.0	19.3	-	-	-	-
1/1	417	417	84	0	1	3.0	1.3	0.2	4.5	38.4	8.8	1.3	10.1
2/1	472	472	98	0	9	2.1	1.6	0.5	4.2	32.0	8.0	1.6	9.6
3/1	717	717	9	0	0	3.8	1.8	0.0	5.7	28.4	14.7	1.8	16.6
4/1	435	435	96	0	2	3.2	1.6	0.2	5.0	41.0	9.4	1.6	11.0
5/1	355	355	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	383	383	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	616	616	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	687	687	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 14.1 Total Delay for Signalled Lanes (pcuHr): 19.26 Cycle Time (s): 90 PRC Over All Lanes (%): 14.1 Total Delay Over All Lanes(pcuHr): 19.26													

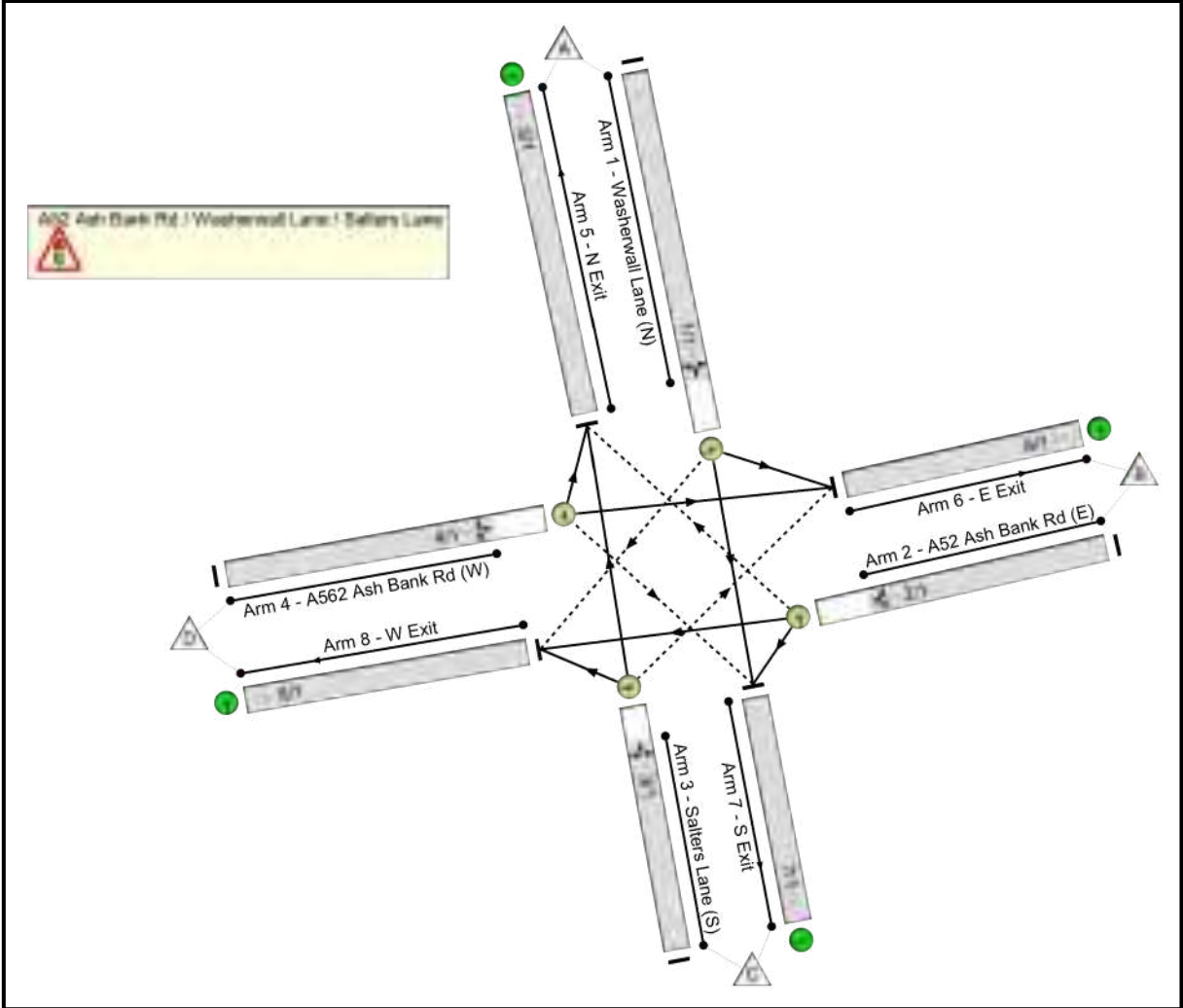
Full Input Data And Results

Full Input Data And Results

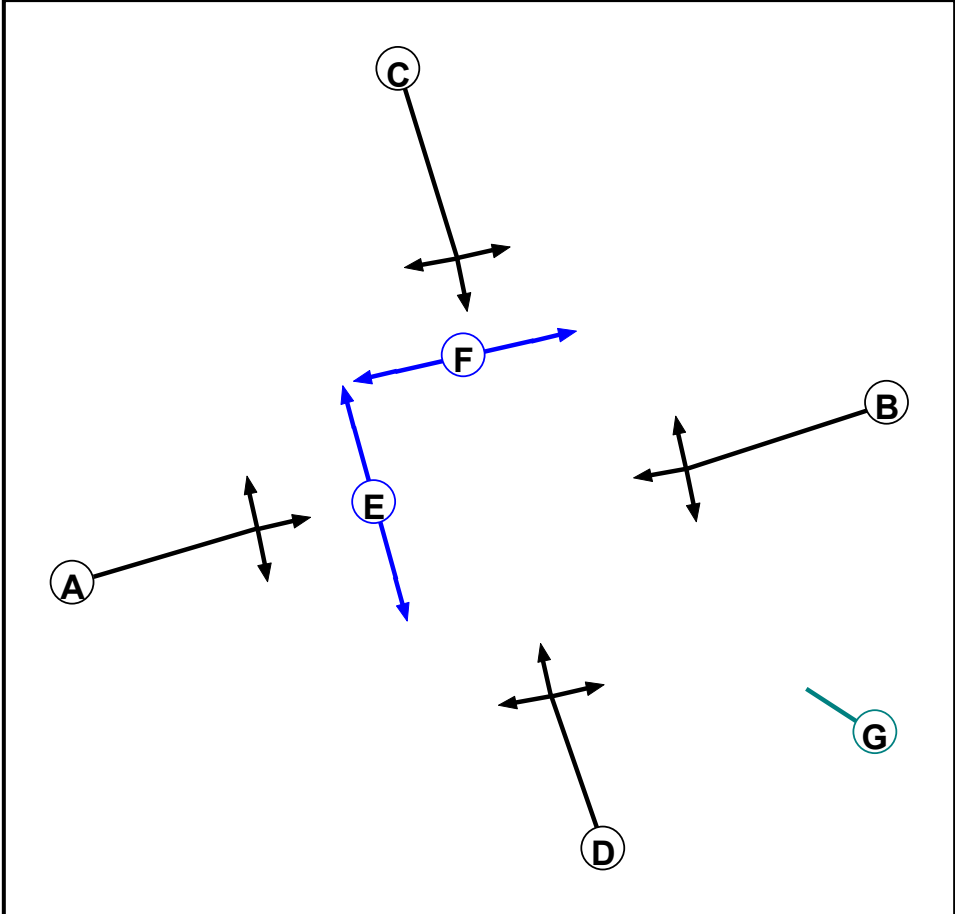
User and Project Details

Project:	
Title:	A52 Ash Bank Rd / Washerwall Lane / Salters Lane
Location:	
Additional detail:	
File name:	A52_Washerwall Ln.lsg3x
Author:	al
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		7	7
F	Pedestrian		7	7
G	Dummy		0	0

Full Input Data And Results

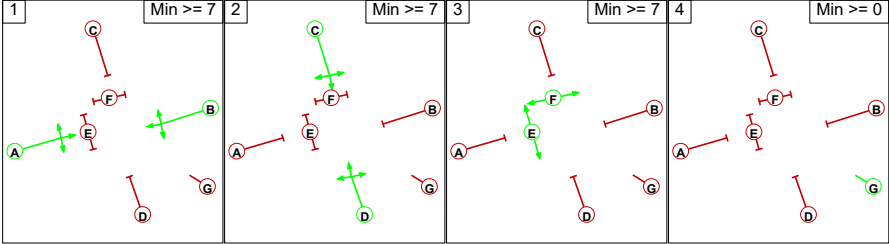
Phase Intergreens Matrix

		Starting Phase						
Terminating Phase		A	B	C	D	E	F	G
	A	-	7	7	11	11	3	
	B	-	7	7	11	11	3	
	C	5	5	-	9	9	3	
	D	5	5	-	9	9	3	
	E	5	5	5	-	3		
	F	5	5	5	5	-	3	
	G	2	2	2	2	2	2	-

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	C D
3	E F
4	G

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

		To Stage			
From Stage		1	2	3	4
	1	-	7	11	3
	2	5	-	9	3
	3	5	5	-	3
	4	2	2	2	-

Full Input Data And Results

Give-Way Lane Input Data

Junction: A52 Ash Bank Rd / Washerwall Lane / Salters Lane											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (Washerwall Lane (N))	8/1 (Right)	1439	0	3/1	1.09	To 5/1 (Ahead) To 8/1 (Left)	3.00	-	0.50	3	2.00
2/1 (A52 Ash Bank Rd (E))	5/1 (Right)	1439	0	4/1	1.09	To 5/1 (Left) To 6/1 (Ahead)	3.00	-	0.50	3	2.00
3/1 (Salters Lane (S))	6/1 (Right)	1439	0	1/1	1.09	To 6/1 (Left) To 7/1 (Ahead)	2.00	-	0.50	2	2.00
4/1 (A562 Ash Bank Rd (W))	7/1 (Right)	1439	0	2/1	1.09	To 7/1 (Left) To 8/1 (Ahead)	3.00	-	0.50	3	2.00

Full Input Data And Results

Lane Input Data

Junction: A52 Ash Bank Rd / Washerwall Lane / Salters Lane												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Washerwall Lane (N))	O	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Left	8.12
											Arm 7 Ahead	164.88
											Arm 8 Right	12.62
2/1 (A52 Ash Bank Rd (E))	O	B	2	3	60.0	Geom	-	3.61	0.00	Y	Arm 5 Right	11.82
											Arm 7 Left	7.74
											Arm 8 Ahead	Inf
3/1 (Salters Lane (S))	O	D	2	3	60.0	Geom	-	4.11	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	12.32
											Arm 8 Left	6.38
4/1 (A562 Ash Bank Rd (W))	O	A	2	3	60.0	Geom	-	3.82	0.00	Y	Arm 5 Left	10.51
											Arm 6 Ahead	Inf
											Arm 7 Right	9.10
5/1 (N Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (E Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (S Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (W Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2026 AM Base'	08:00	09:00	01:00	
2: '2026 PM Base'	17:00	18:00	01:00	
3: '2026 AM Base + Dev'	08:00	09:00	01:00	
4: '2026 PM Base + Dev'	17:00	18:00	01:00	

Scenario 1: '1' (FG1: '2026 AM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	41	64	107	212
	B	32	0	97	442	571
	C	22	100	0	34	156
	D	85	456	36	0	577
	Tot.	139	597	197	583	1516

Traffic Lane Flows

Lane	Scenario 1: 1
Junction: A52 Ash Bank Rd / Washerwall Lane / Salters Lane	
1/1	212
2/1	571
3/1	156
4/1	577
5/1	139
6/1	597
7/1	197
8/1	583

Lane Saturation Flows

Junction: A52 Ash Bank Rd / Washerwall Lane / Salters Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Washerwall Lane (N))	3.00	0.00	Y	Arm 6 Left	8.12	19.3 %	1743	1743
				Arm 7 Ahead	164.88	30.2 %		
				Arm 8 Right	12.62	50.5 %		
2/1 (A52 Ash Bank Rd (E))	3.61	0.00	Y	Arm 5 Right	11.82	5.6 %	1900	1900
				Arm 7 Left	7.74	17.0 %		
				Arm 8 Ahead	Inf	77.4 %		
3/1 (Salters Lane (S))	4.11	0.00	Y	Arm 5 Ahead	Inf	14.1 %	1794	1794
				Arm 6 Right	12.32	64.1 %		
				Arm 8 Left	6.38	21.8 %		
4/1 (A562 Ash Bank Rd (W))	3.82	0.00	Y	Arm 5 Left	10.51	14.7 %	1936	1936
				Arm 6 Ahead	Inf	79.0 %		
				Arm 7 Right	9.10	6.2 %		
5/1 (N Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (E Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (S Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (W Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2' (FG2: '2026 PM Base', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	43	31	115	189
	B	46	0	50	554	650
	C	79	143	0	23	245
	D	141	414	13	0	568
	Tot.	266	600	94	692	1652

Traffic Lane Flows

Lane	Scenario 2: 2
Junction: A52 Ash Bank Rd / Washerwall Lane / Salters Lane	
1/1	189
2/1	650
3/1	245
4/1	568
5/1	266
6/1	600
7/1	94
8/1	692

Lane Saturation Flows

Junction: A52 Ash Bank Rd / Washerwall Lane / Salters Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Washerwall Lane (N))	3.00	0.00	Y	Arm 6 Left Arm 7 Ahead Arm 8 Right	8.12 164.88 12.62	22.8 % 16.4 % 60.8 %	1716	1716
2/1 (A52 Ash Bank Rd (E))	3.61	0.00	Y	Arm 5 Right	11.82	7.1 %	1930	1930
3/1 (Salters Lane (S))	4.11	0.00	Y	Arm 7 Left	7.74	7.7 %		
				Arm 8 Ahead	Inf	85.2 %		
				Arm 5 Ahead	Inf	32.2 %		
				Arm 6 Right	12.32	58.4 %	1853	1853
				Arm 8 Left	6.38	9.4 %	1922	1922
4/1 (A562 Ash Bank Rd (W))	3.82	0.00	Y	Arm 5 Left	10.51	24.8 %		
5/1 (N Exit Lane 1)				Arm 6 Ahead	Inf	72.9 %		
				Arm 7 Right	9.10	2.3 %		
				Infinite Saturation Flow			Inf	Inf
				Infinite Saturation Flow			Inf	Inf
6/1 (E Exit Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (S Exit Lane 1)				Infinite Saturation Flow			Inf	Inf
8/1 (W Exit Lane 1)				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

Scenario 3: '3' (FG3: '2026 AM Base + Dev', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin	A	A	B	C	D	Tot.
	A	0	41	64	107	212
	B	32	0	104	456	592
	C	22	102	0	34	158
	D	85	462	36	0	583
	Tot.	139	605	204	597	1545

Traffic Lane Flows

Lane	Scenario 3: 3
Junction: A52 Ash Bank Rd / Washerwall Lane / Salters Lane	
1/1	212
2/1	592
3/1	158
4/1	583
5/1	139
6/1	605
7/1	204
8/1	597

Lane Saturation Flows

Junction: A52 Ash Bank Rd / Washerwall Lane / Salters Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Washerwall Lane (N))	3.00	0.00	Y	Arm 6 Left	8.12	19.3 %	1743	1743
				Arm 7 Ahead	164.88	30.2 %		
				Arm 8 Right	12.62	50.5 %		
2/1 (A52 Ash Bank Rd (E))	3.61	0.00	Y	Arm 5 Right	11.82	5.4 %	1898	1898
				Arm 7 Left	7.74	17.6 %		
				Arm 8 Ahead	Inf	77.0 %		
3/1 (Salters Lane (S))	4.11	0.00	Y	Arm 5 Ahead	Inf	13.9 %	1794	1794
				Arm 6 Right	12.32	64.6 %		
				Arm 8 Left	6.38	21.5 %		
4/1 (A562 Ash Bank Rd (W))	3.82	0.00	Y	Arm 5 Left	10.51	14.6 %	1937	1937
				Arm 6 Ahead	Inf	79.2 %		
				Arm 7 Right	9.10	6.2 %		
5/1 (N Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (E Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (S Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (W Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '4' (FG4: '2026 PM Base + Dev', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired
Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	43	31	115	189
	B	46	0	53	560	659
	C	79	148	0	23	250
	D	141	426	13	0	580
	Tot.	266	617	97	698	1678

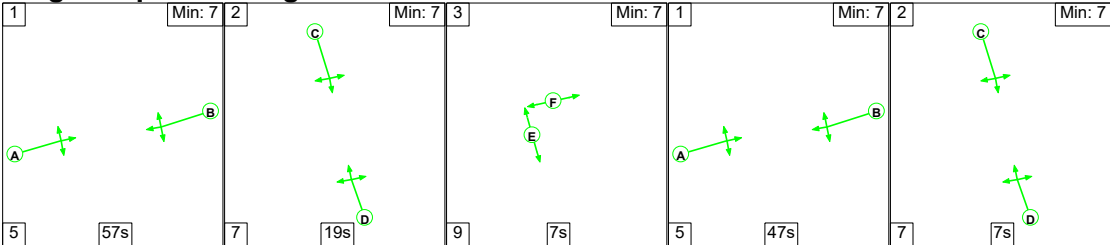
Traffic Lane Flows

Lane	Scenario 4: 4
Junction: A52 Ash Bank Rd / Washerwall Lane / Salters Lane	
1/1	189
2/1	659
3/1	250
4/1	580
5/1	266
6/1	617
7/1	97
8/1	698

Lane Saturation Flows

Junction: A52 Ash Bank Rd / Washerwall Lane / Salters Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Washerwall Lane (N))	3.00	0.00	Y	Arm 6 Left Arm 7 Ahead Arm 8 Right	8.12 164.88 12.62	22.8 % 16.4 % 60.8 %	1716	1716
2/1 (A52 Ash Bank Rd (E))	3.61	0.00	Y	Arm 5 Right Arm 7 Left Arm 8 Ahead	11.82 7.74 Inf	7.0 % 8.0 % 85.0 %	1929	1929
3/1 (Salters Lane (S))	4.11	0.00	Y	Arm 5 Ahead Arm 6 Right Arm 8 Left	Inf 12.32 6.38	31.6 % 59.2 % 9.2 %	1852	1852
4/1 (A562 Ash Bank Rd (W))	3.82	0.00	Y	Arm 5 Left Arm 6 Ahead Arm 7 Right	10.51 Inf 9.10	24.3 % 73.4 % 2.2 %	1923	1923
5/1 (N Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (E Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (S Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (W Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

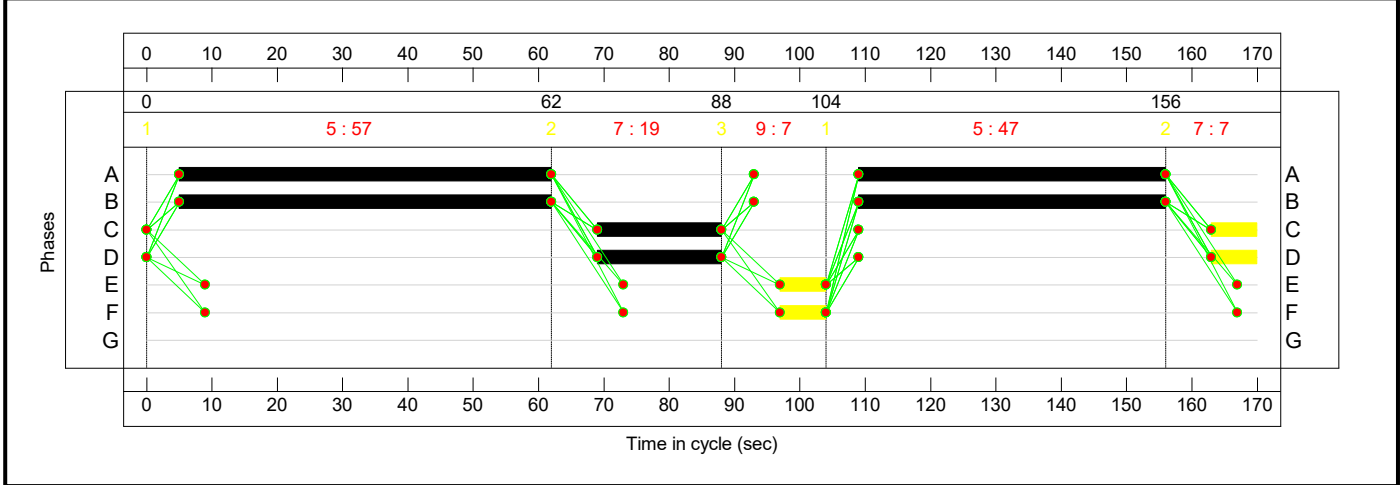
Scenario 1: '1' (FG1: '2026 AM Base', Plan 1: 'Network Control Plan 1')
Stage Sequence Diagram



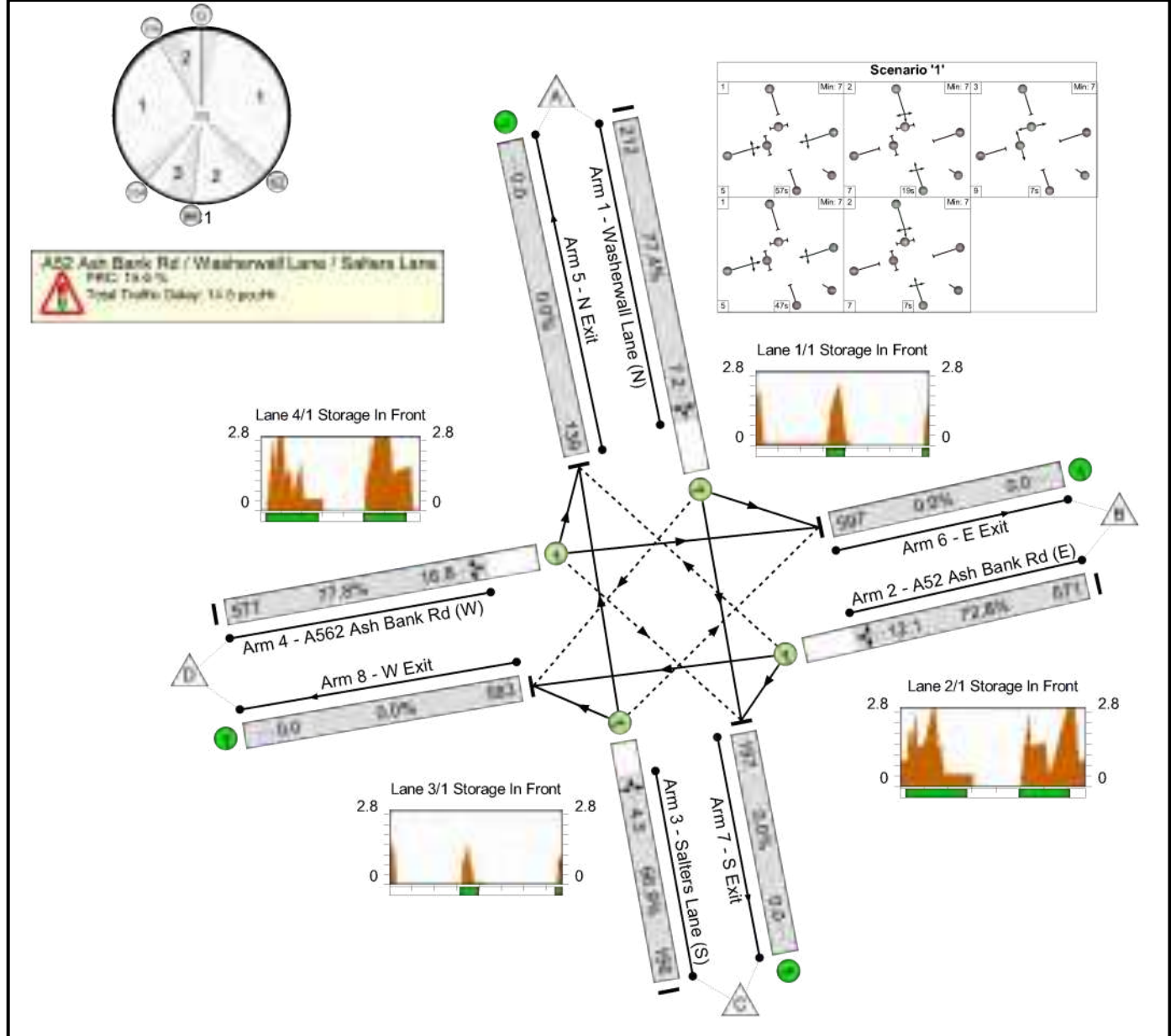
Stage Timings

Stage	1	2	3	1	2
Duration	57	19	7	47	7
Change Point	0	62	88	104	156

Signal Timings Diagram



Network Layout Diagram



Full Input Data And Results

Network Results

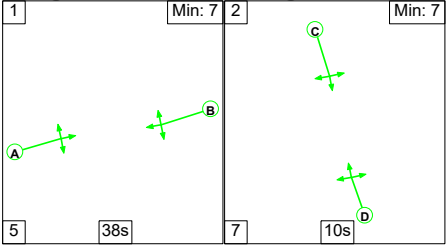
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	N/A	-	-		-	-	-	-	-	-	77.8%
A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	N/A	-	-		-	-	-	-	-	-	77.8%
1/1	Washerwall Lane (N) Left Ahead Right	O	N/A	N/A	C		2	26	-	212	1743	274	77.4%
2/1	A52 Ash Bank Rd (E) Right Left Ahead	O	N/A	N/A	B		2	104	-	571	1900	784	72.8%
3/1	Salters Lane (S) Ahead Right Left	O	N/A	N/A	D		2	26	-	156	1794	233	66.9%
4/1	A562 Ash Bank Rd (W) Left Ahead Right	O	N/A	N/A	A		2	104	-	577	1936	741	77.8%
5/1	N Exit	U	N/A	N/A	-		-	-	-	139	Inf	Inf	0.0%
6/1	E Exit	U	N/A	N/A	-		-	-	-	597	Inf	Inf	0.0%
7/1	S Exit	U	N/A	N/A	-		-	-	-	197	Inf	Inf	0.0%
8/1	W Exit	U	N/A	N/A	-		-	-	-	583	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	225	0	50	8.6	5.7	0.2	14.5	-	-	-	-
A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	225	0	50	8.6	5.7	0.2	14.5	-	-	-	-
1/1	212	212	84	0	23	2.4	1.6	0.1	4.1	70.2	5.6	1.6	7.2
2/1	571	571	29	0	3	1.9	1.3	0.0	3.3	20.7	10.8	1.3	12.1
3/1	156	156	79	0	21	1.4	1.0	0.0	2.4	56.3	3.5	1.0	4.5
4/1	577	577	33	0	3	2.9	1.7	0.0	4.6	29.0	15.1	1.7	16.8
5/1	139	139	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	197	197	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	583	583	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 15.6 Total Delay for Signalled Lanes (pcuHr): 14.50 Cycle Time (s): 170 PRC Over All Lanes (%): 15.6 Total Delay Over All Lanes(pcuHr): 14.50													

Full Input Data And Results
Scenario 2: '2' (FG2: '2026 PM Base', Plan 2: 'Network Control Plan 2')

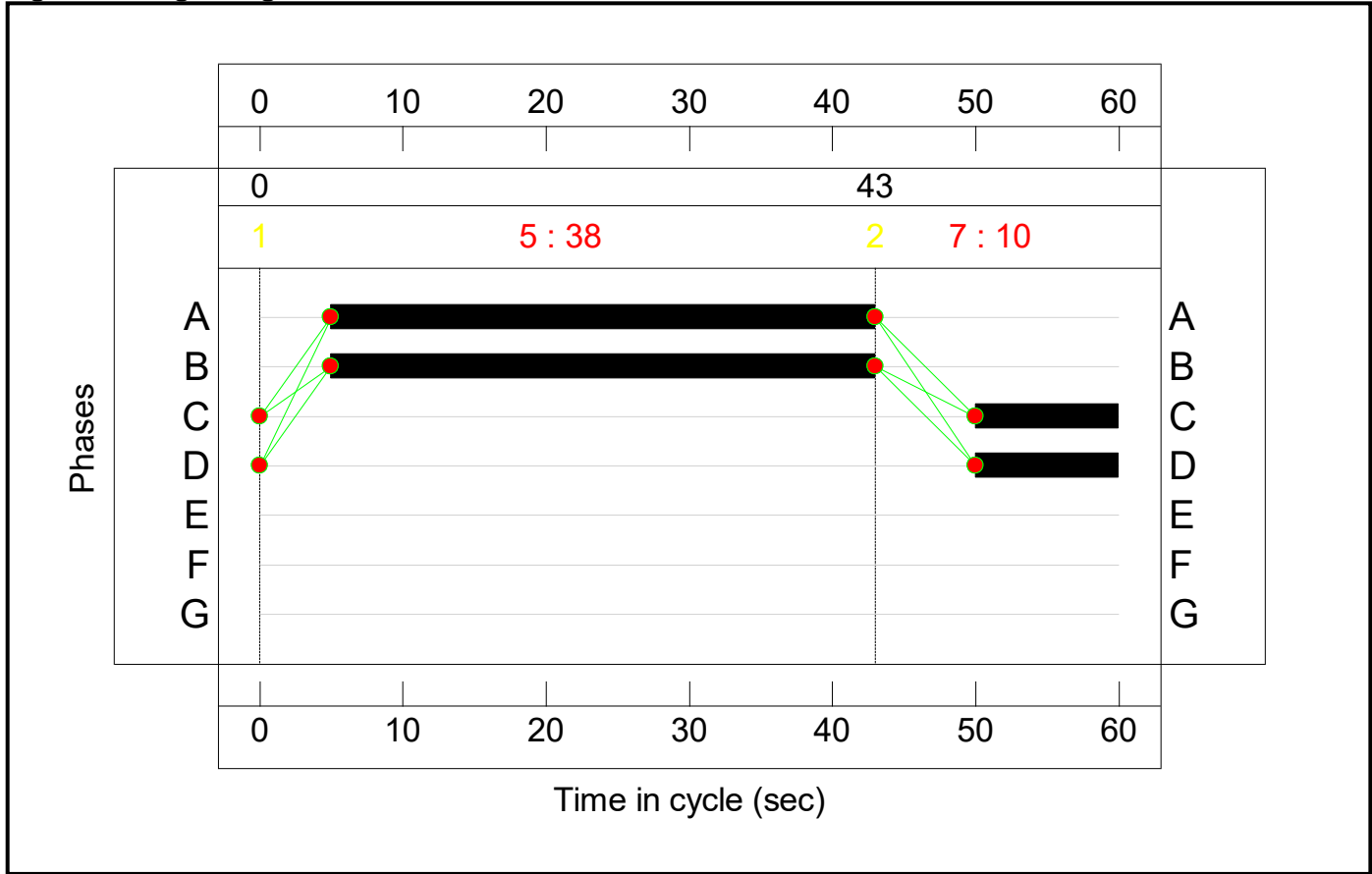
Stage Sequence Diagram



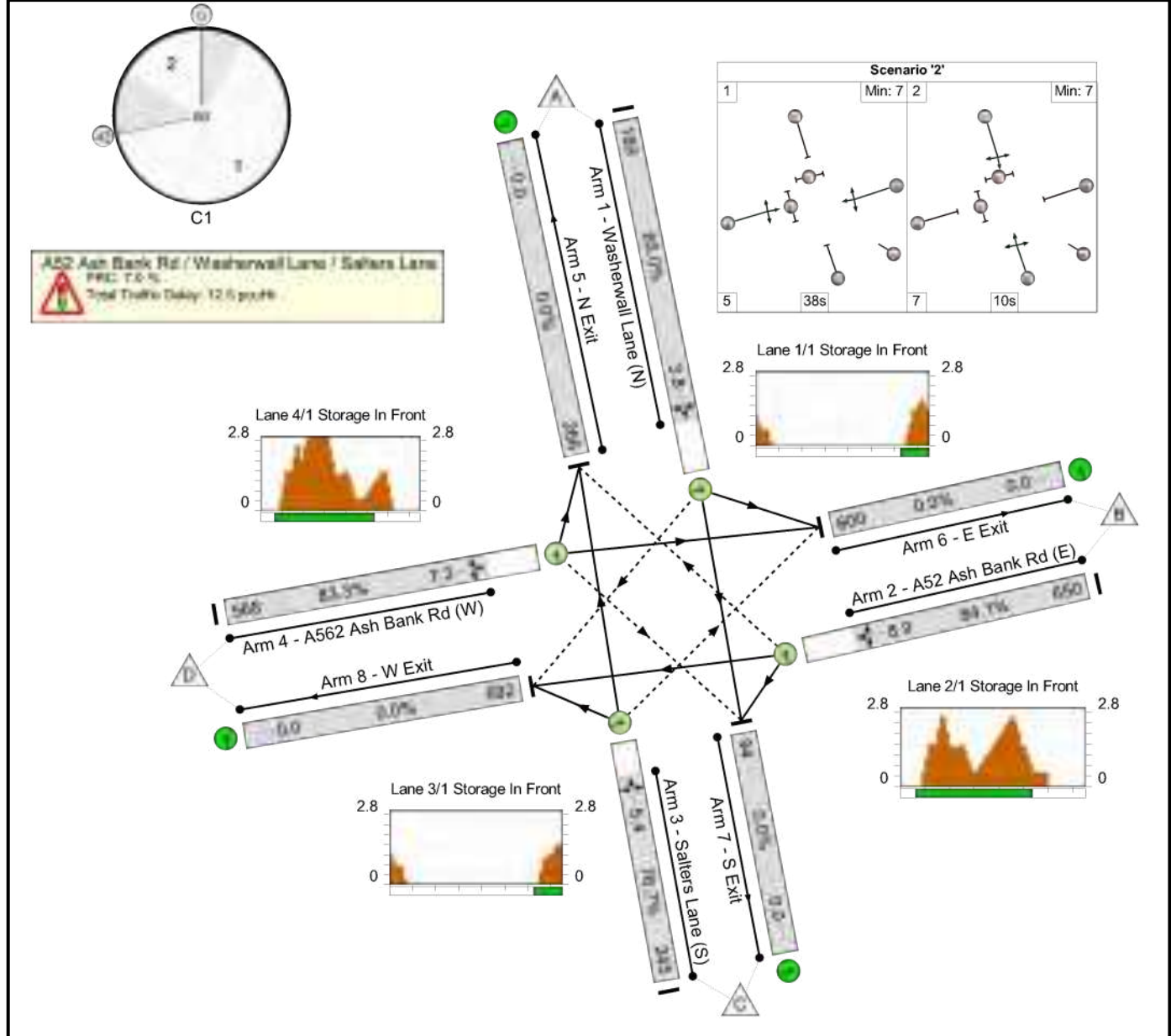
Stage Timings

Stage	1	2
Duration	38	10
Change Point	0	43

Signal Timings Diagram



Network Layout Diagram



Full Input Data And Results

Network Results

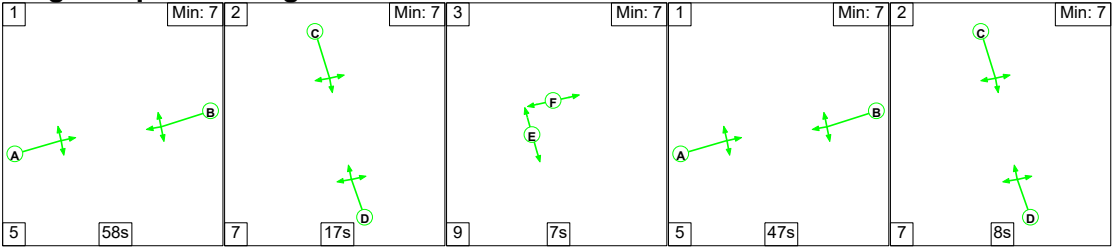
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	N/A	-	-		-	-	-	-	-	-	84.1%
A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	N/A	-	-		-	-	-	-	-	-	84.1%
1/1	Washerwall Lane (N) Left Ahead Right	O	N/A	N/A	C		1	10	-	189	1716	291	65.0%
2/1	A52 Ash Bank Rd (E) Right Left Ahead	O	N/A	N/A	B		1	38	-	650	1930	773	84.1%
3/1	Salters Lane (S) Ahead Right Left	O	N/A	N/A	D		1	10	-	245	1853	320	76.7%
4/1	A562 Ash Bank Rd (W) Left Ahead Right	O	N/A	N/A	A		1	38	-	568	1922	681	83.3%
5/1	N Exit	U	N/A	N/A	-		-	-	-	266	Inf	Inf	0.0%
6/1	E Exit	U	N/A	N/A	-		-	-	-	600	Inf	Inf	0.0%
7/1	S Exit	U	N/A	N/A	-		-	-	-	94	Inf	Inf	0.0%
8/1	W Exit	U	N/A	N/A	-		-	-	-	692	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	262	0	55	4.9	7.4	0.2	12.5	-	-	-	-
A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	262	0	55	4.9	7.4	0.2	12.5	-	-	-	-
1/1	189	189	91	0	24	1.2	0.9	0.1	2.2	41.0	2.9	0.9	3.8
2/1	650	650	44	0	2	1.1	2.5	0.0	3.7	20.2	6.3	2.5	8.9
3/1	245	245	117	0	26	1.6	1.6	0.1	3.2	47.1	3.8	1.6	5.4
4/1	568	568	11	0	2	1.0	2.4	0.0	3.5	22.0	4.9	2.4	7.3
5/1	266	266	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	600	600	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	94	94	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	692	692	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 7.0 Total Delay for Signalled Lanes (pcuHr): 12.48 Cycle Time (s): 60 PRC Over All Lanes (%): 7.0 Total Delay Over All Lanes(pcuHr): 12.48													

Full Input Data And Results
Scenario 3: '3' (FG3: '2026 AM Base + Dev', Plan 1: 'Network Control Plan 1')

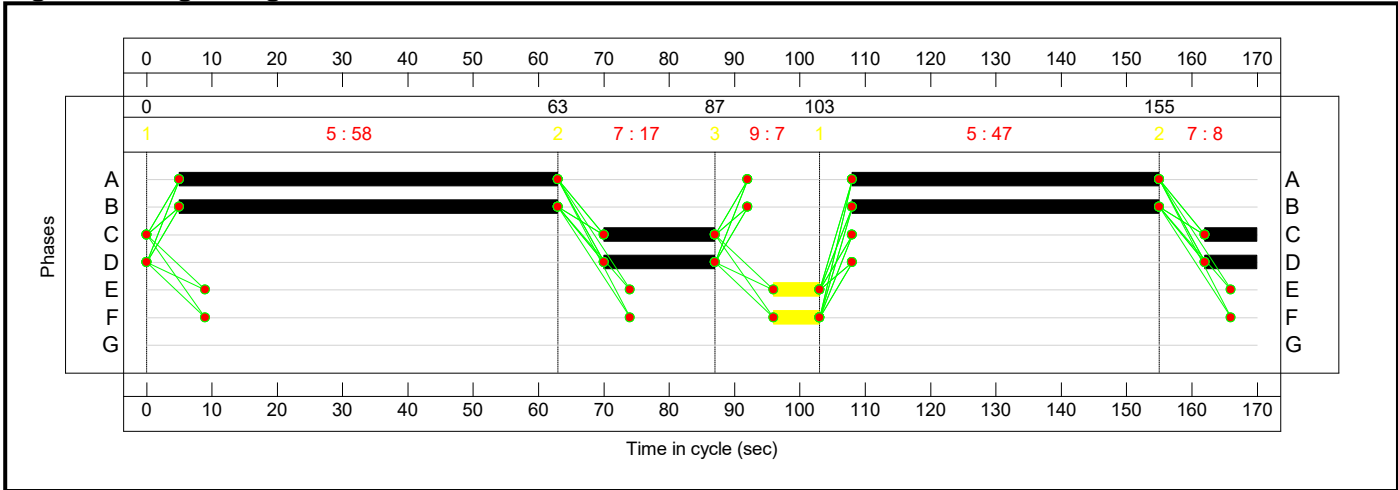
Stage Sequence Diagram



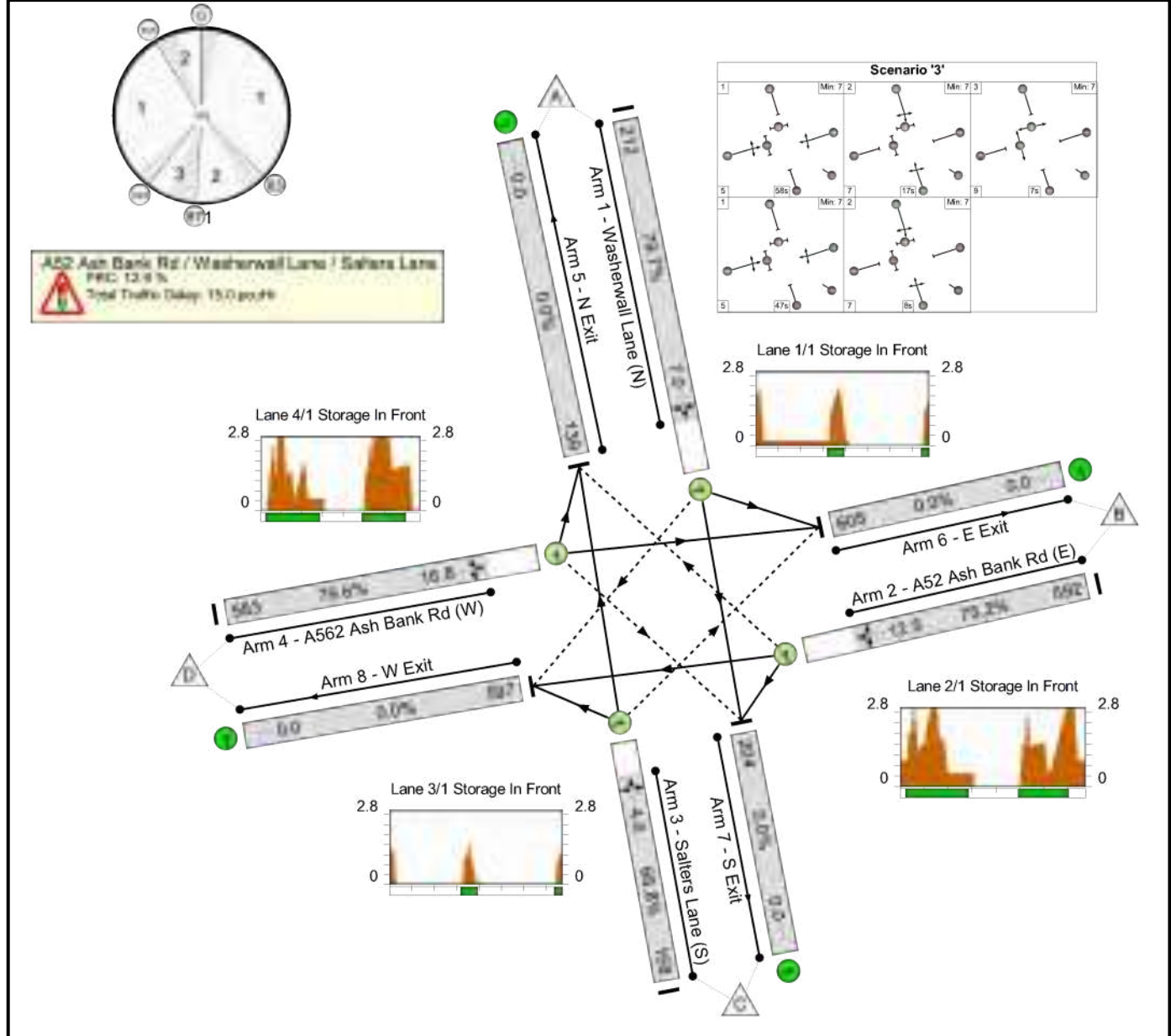
Stage Timings

Stage	1	2	3	1	2
Duration	58	17	7	47	8
Change Point	0	63	87	103	155

Signal Timings Diagram



Network Layout Diagram



Full Input Data And Results

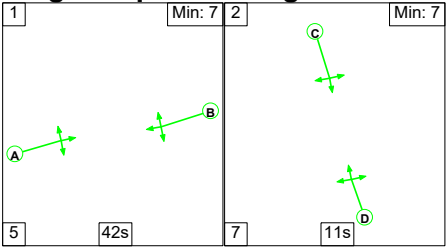
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	N/A	-	-		-	-	-	-	-	-	79.7%
A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	N/A	-	-		-	-	-	-	-	-	79.7%
1/1	Washerwall Lane (N) Left Ahead Right	O	N/A	N/A	C		2	25	-	212	1743	266	79.7%
2/1	A52 Ash Bank Rd (E) Right Left Ahead	O	N/A	N/A	B		2	105	-	592	1898	787	75.2%
3/1	Salters Lane (S) Ahead Right Left	O	N/A	N/A	D		2	25	-	158	1794	230	68.8%
4/1	A562 Ash Bank Rd (W) Left Ahead Right	O	N/A	N/A	A		2	105	-	583	1937	733	79.6%
5/1	N Exit	U	N/A	N/A	-		-	-	-	139	Inf	Inf	0.0%
6/1	E Exit	U	N/A	N/A	-		-	-	-	605	Inf	Inf	0.0%
7/1	S Exit	U	N/A	N/A	-		-	-	-	204	Inf	Inf	0.0%
8/1	W Exit	U	N/A	N/A	-		-	-	-	597	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	229	0	48	8.4	6.3	0.2	15.0	-	-	-	-
A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	229	0	48	8.4	6.3	0.2	15.0	-	-	-	-
1/1	212	212	84	0	23	2.3	1.8	0.1	4.2	71.4	5.2	1.8	7.0
2/1	592	592	29	0	3	2.0	1.5	0.0	3.5	21.3	11.0	1.5	12.5
3/1	158	158	83	0	19	1.4	1.1	0.1	2.6	58.6	3.6	1.1	4.6
4/1	583	583	33	0	3	2.8	1.9	0.0	4.7	29.0	14.9	1.9	16.8
5/1	139	139	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	605	605	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	204	204	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 12.9 Total Delay for Signalled Lanes (pcuHr): 14.98 Cycle Time (s): 170 PRC Over All Lanes (%): 12.9 Total Delay Over All Lanes(pcuHr): 14.98													

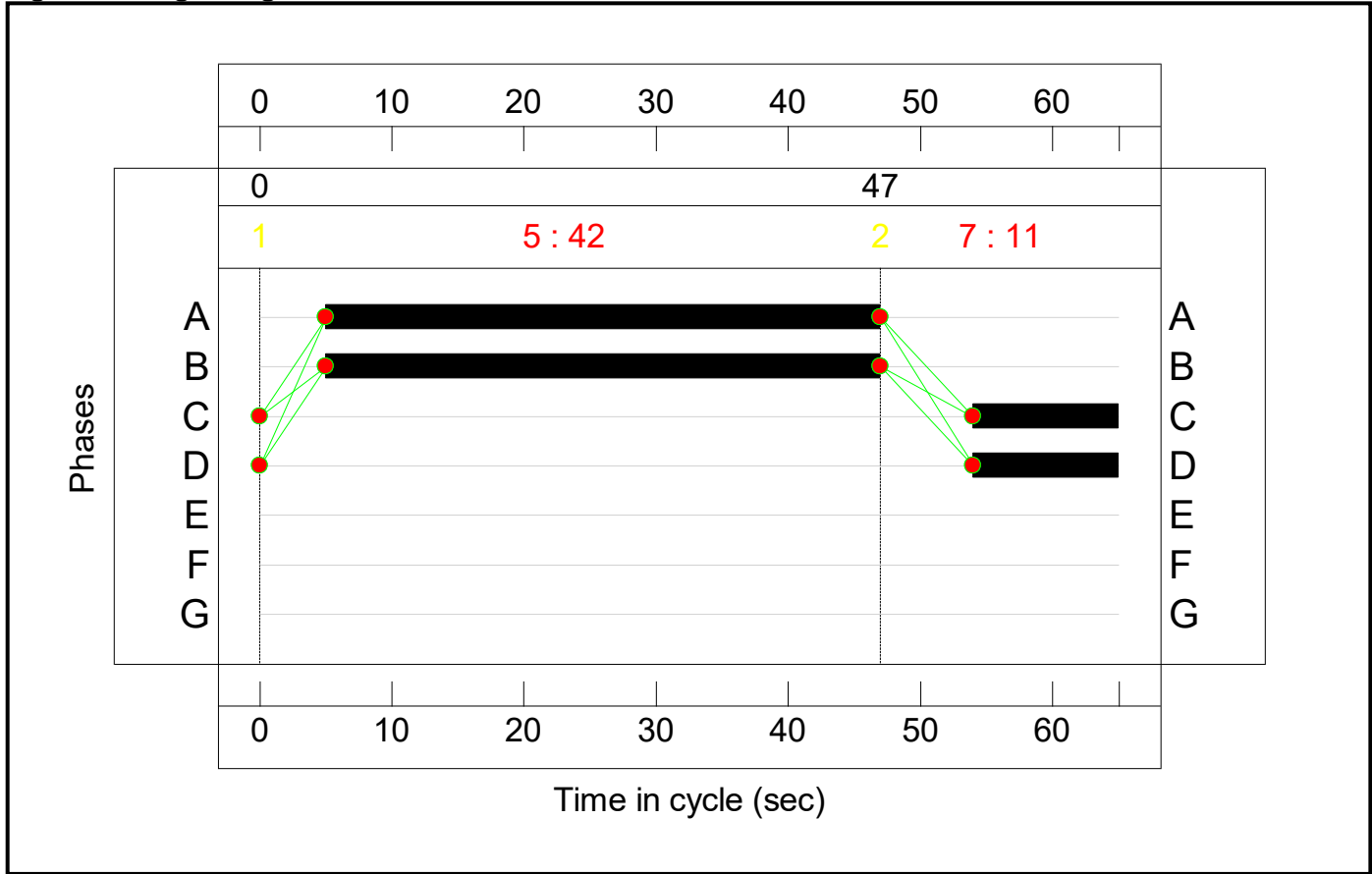
Stage Sequence Diagram



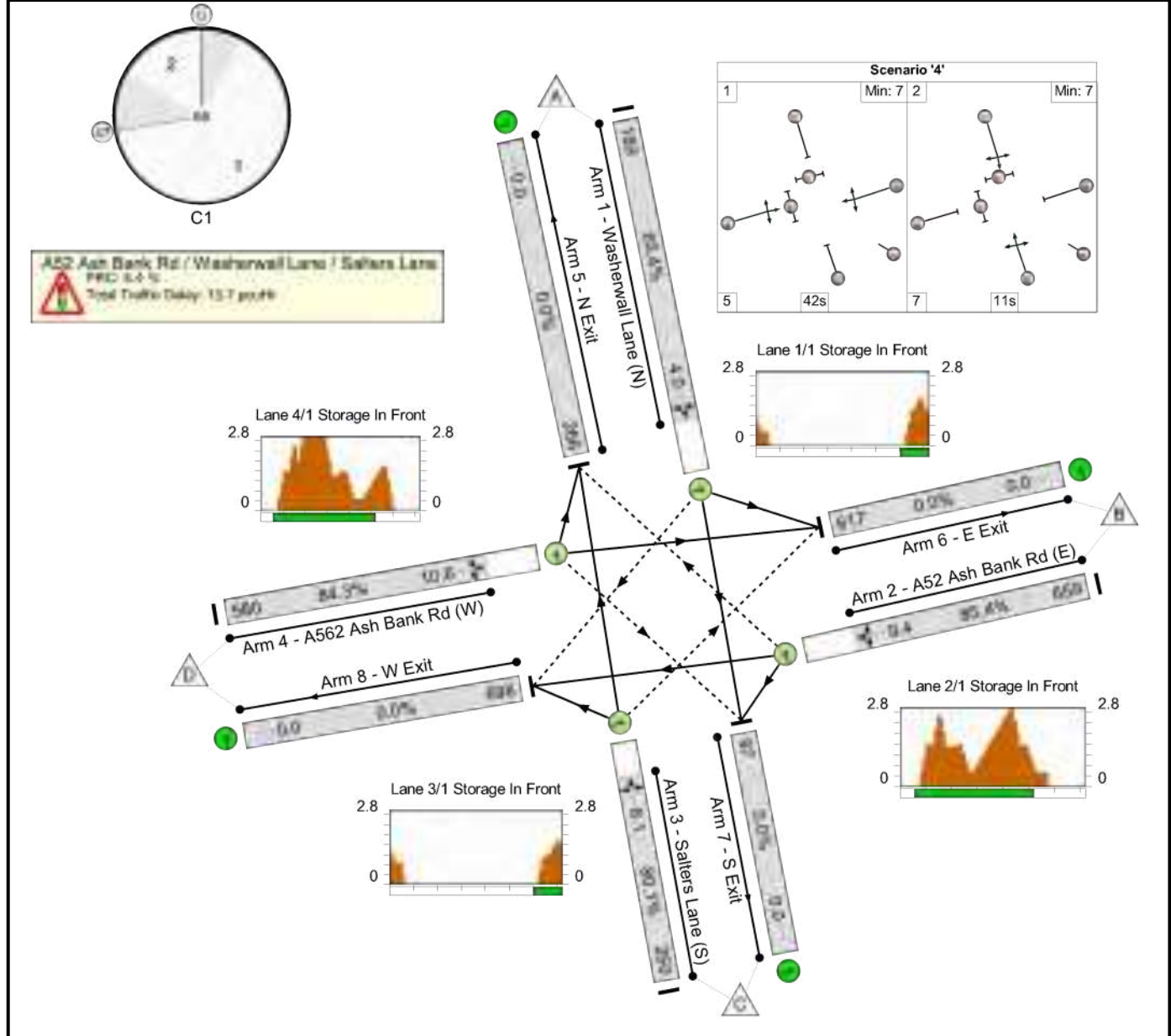
Stage Timings

Stage	1	2
Duration	42	11
Change Point	0	47

Signal Timings Diagram



Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	N/A	-	-		-	-	-	-	-	-	85.4%
A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	N/A	-	-		-	-	-	-	-	-	85.4%
1/1	Washerwall Lane (N) Left Ahead Right	O	N/A	N/A	C		1	11	-	189	1716	289	65.4%
2/1	A52 Ash Bank Rd (E) Right Left Ahead	O	N/A	N/A	B		1	42	-	659	1929	772	85.4%
3/1	Salters Lane (S) Ahead Right Left	O	N/A	N/A	D		1	11	-	250	1852	312	80.1%
4/1	A562 Ash Bank Rd (W) Left Ahead Right	O	N/A	N/A	A		1	42	-	580	1923	688	84.3%
5/1	N Exit	U	N/A	N/A	-		-	-	-	266	Inf	Inf	0.0%
6/1	E Exit	U	N/A	N/A	-		-	-	-	617	Inf	Inf	0.0%
7/1	S Exit	U	N/A	N/A	-		-	-	-	97	Inf	Inf	0.0%
8/1	W Exit	U	N/A	N/A	-		-	-	-	698	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	270	0	52	5.3	8.2	0.2	13.7	-	-	-	-
A52 Ash Bank Rd / Washerwall Lane / Salters Lane	-	-	270	0	52	5.3	8.2	0.2	13.7	-	-	-	-
1/1	189	189	96	0	19	1.3	0.9	0.1	2.3	43.1	3.1	0.9	4.0
2/1	659	659	44	0	2	1.1	2.8	0.0	4.0	21.6	6.6	2.8	9.4
3/1	250	250	119	0	29	1.7	1.9	0.1	3.7	53.5	4.2	1.9	6.1
4/1	580	580	11	0	2	1.2	2.6	0.0	3.8	23.4	8.1	2.6	10.6
5/1	266	266	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	617	617	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	97	97	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	698	698	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 5.4 Total Delay for Signalled Lanes (pcuHr): 13.71 Cycle Time (s): 65 PRC Over All Lanes (%): 5.4 Total Delay Over All Lanes(pcuHr): 13.71													



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