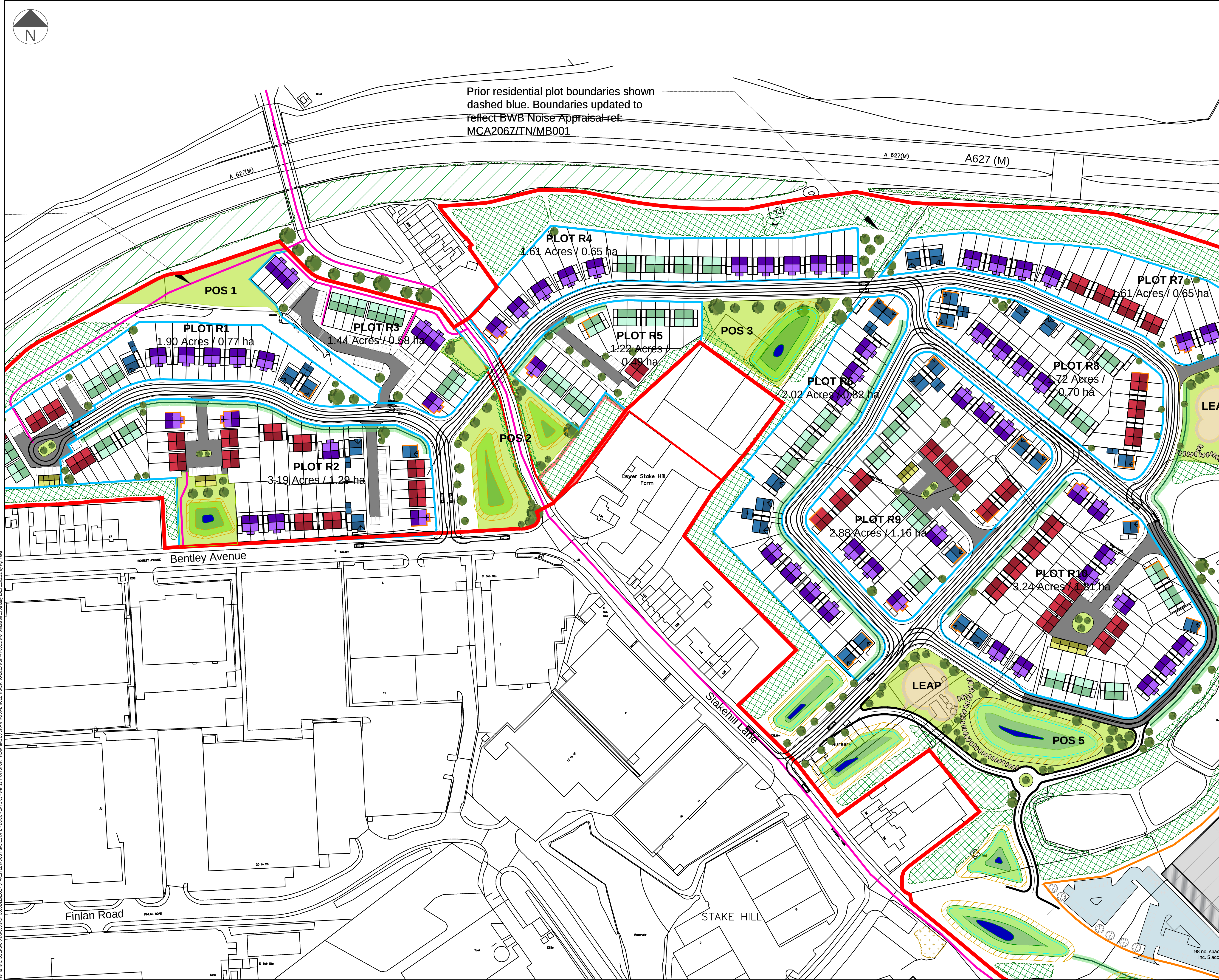
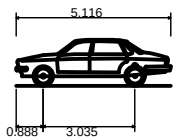




File name: C:\Users\WANDSWP\OneDrive\Documents\WSP\VT-001.DWG, printed on 15 January 2025 11:01:13 by Mr. Peter

DO NOT SCALE



Large Car (2016)
Overall Length 5.116m
Overall Width 1.899m
Overall Body Height 1.526m
Min Body Ground Clearance 0.311m
Track Width 1.854m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 6.150m

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P01	15/01/2025	PN	FIRST ISSUE	XXX	XXX
REV	DATE	BY	DESCRIPTION	CHK	APP

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CLIENT:

ARCHITECT:

SITE/PROJECT:

STAKEHILL INDUSTRIAL ESTATE

TITLE:

VEHICLE TRACKING
PRIVATE CAR

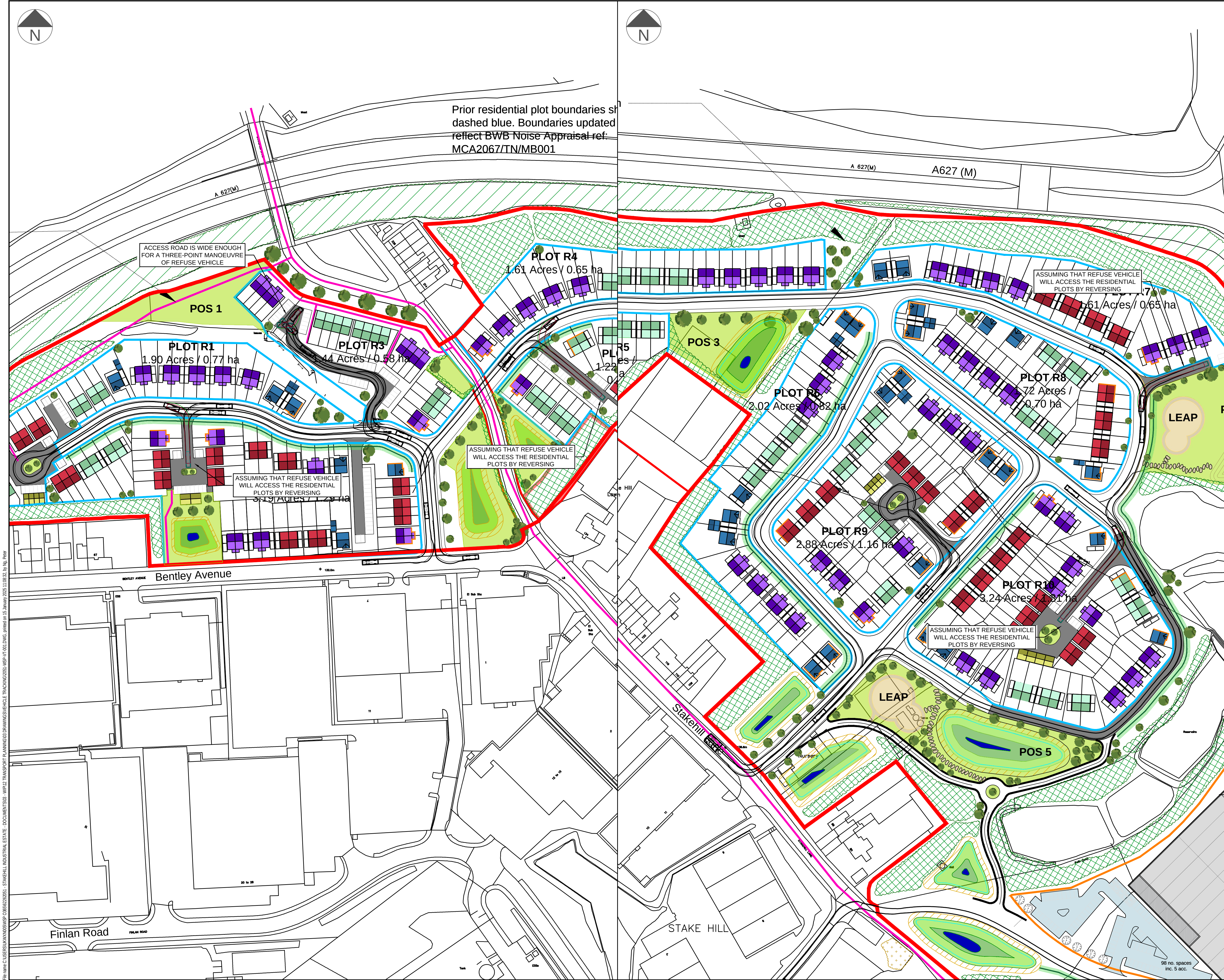
SCALE @ A1: 1:1000

PROJECT NO: 62262051

DRAWING NO: 2051-WSP-VT-001

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P01



DO NOT SCALE

Medium Refuse Vehicle (3 axle)
Overall Length 9.010m
Overall Body Height 2.450m
Overall Body Ground Clearance 3.742m
Track Width 0.295m
Lock to lock time 2.450m
Kerb to Kerb Turning Radius 4.00s
8.200m

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P01	15/01/2025	PN	FIRST ISSUE	XXX	XXX
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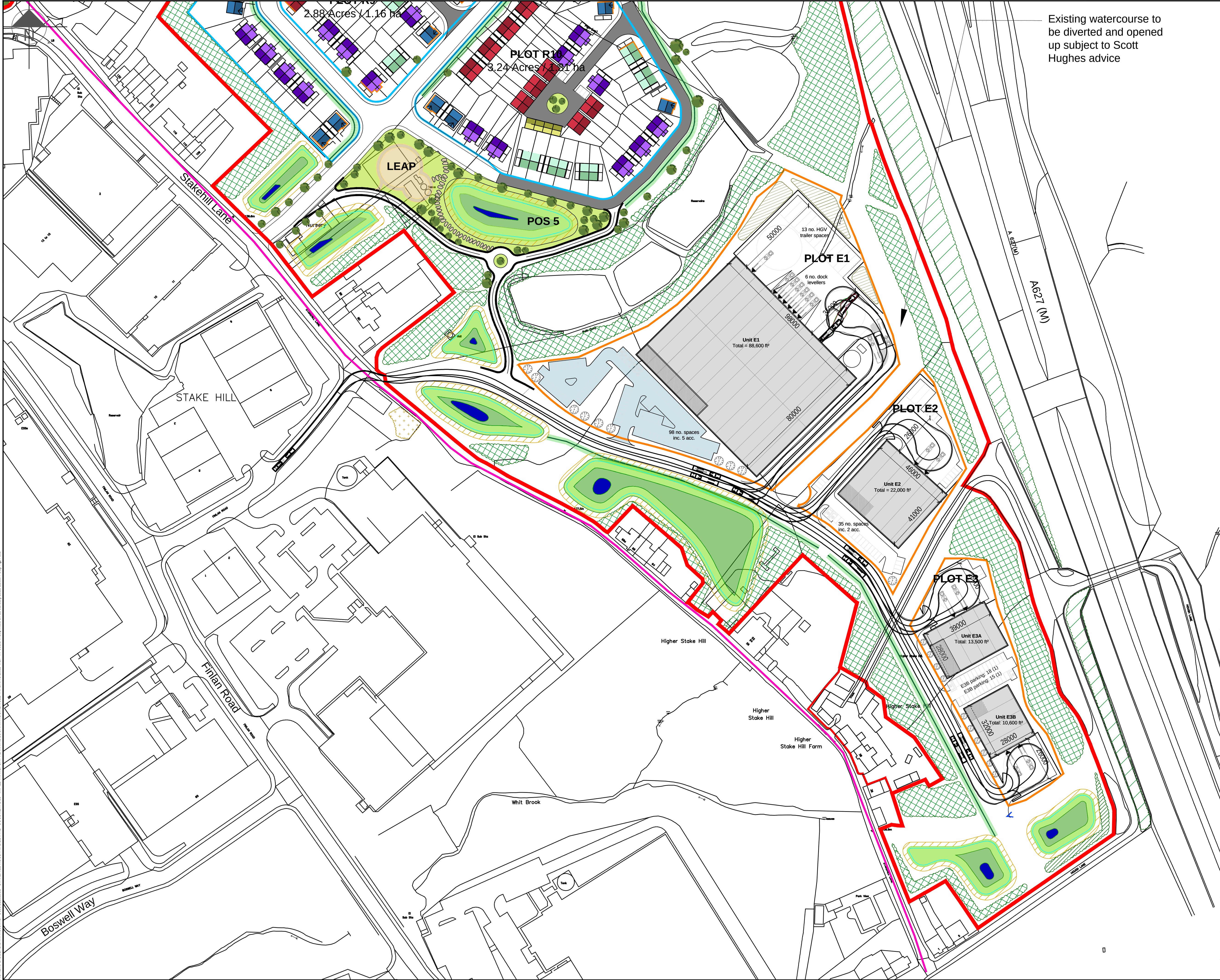
SITE/PROJECT: STAKEHILL INDUSTRIAL ESTATE

TITLE: VEHICLE TRACKING REFUSE VEHICLE

SCALE @ A1: 1:1000	CHECKED:	APPROVED:
PROJECT NO: 62262051	DESIGNED: PN	DRAWN: PN
DRAWING NO: 2051-WSP-VT-002		REV: P01

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File name: C:\Users\WV\OneDrive\WSP\0662262051-STAKEHILL INDUSTRIAL ESTATE-DOCUMENTS\303-WP12 TRANSPORT PLANNING\303 DRAWINGS\303 WSP-VT-001.DWG, printed on 15 January 2025 11:08:32 by Mr. Peter



Existing watercourse to be diverted and opened up subject to Scott Hughes advice

DO NOT SCALE

FTA Design Articulated Vehicle (1998)

Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.570m
Min Body Ground Clearance	0.515m
Max Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	6.550m

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CLIENT:

ARCHITECT:

SITE/PROJECT: STAKEHILL INDUSTRIAL ESTATE

TITLE: VEHICLE TRACKING
16.5M ARTIC VEHICLE

SCALE @ A1: 1:1000	CHECKED:	APPROVED:
PROJECT NO: 62262051	DESIGNED: PN	DRAWN: PN
DRAWING NO: 2051-WSP-VT-003	DATE: JAN 25	REV: P01
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Appendix D

TRICS OUTPUT



WSP Queen Street Manchester

Licence No: 100323

Calculation Reference: AUDIT-100323-241031-1024

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	EN ENFIELD	2 days
02	SOUTH EAST	
	CT CENTRAL BEDFORDSHIRE	1 days
	ES EAST SUSSEX	6 days
	EX ESSEX	2 days
	HC HAMPSHIRE	11 days
	HF HERTFORDSHIRE	3 days
	IW ISLE OF WIGHT	1 days
	KC KENT	7 days
	MW MEDWAY	1 days
	SC SURREY	2 days
	SP SOUTHAMPTON	1 days
	WB WEST BERKSHIRE	1 days
	WS WEST SUSSEX	5 days
03	SOUTH WEST	
	DC DORSET	2 days
	SD SWINDON	1 days
04	EAST ANGLIA	
	NF NORFOLK	16 days
	PB PETERBOROUGH	1 days
05	EAST MIDLANDS	
	DY DERBY	1 days
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	2 days
	WK WARWICKSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	2 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
	LC LANCASHIRE	1 days
09	NORTH	
	DH DURHAM	2 days
10	WALES	
	VG VALE OF GLAMORGAN	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	1 days
	HI HIGHLAND	1 days
14	LEINSTER	
	CC CARLOW	1 days
	WC WICKLOW	1 days
15	GREATER DUBLIN	
	DL DUBLIN	1 days
16	ULSTER (REPUBLIC OF IRELAND)	
	CV CAVAN	2 days
	DN DONEGAL	1 days
17	ULSTER (NORTHERN IRELAND)	
	AN ANTRIM	1 days
	DE DERRY	2 days
	TY TYRONE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 6 to 1146 (units:)
Range Selected by User: 4 to 4334 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	15 days
Tuesday	28 days
Wednesday	26 days
Thursday	12 days
Friday	7 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	84 days
Directional ATC Count	4 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	12
Edge of Town	75
Free Standing (PPS6 Out of Town)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	2
Residential Zone	75
Out of Town	4
No Sub Category	7

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	36 days - Selected
Servicing vehicles Excluded	113 days - Selected

Secondary Filtering selection:

Use Class:

C3

88 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	10 days
5,001 to 10,000	24 days
10,001 to 15,000	27 days
15,001 to 20,000	14 days
20,001 to 25,000	9 days
25,001 to 50,000	3 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,000 or Less	1 days
5,001 to 25,000	16 days
25,001 to 50,000	12 days
50,001 to 75,000	13 days
75,001 to 100,000	8 days
100,001 to 125,000	2 days
125,001 to 250,000	27 days
250,001 to 500,000	8 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	24 days
1.1 to 1.5	58 days
1.6 to 2.0	6 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	47 days
No	41 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	85 days
1a (Low) Very poor	1 days
1b Very poor	1 days
2 Poor	1 days

This data displays the number of selected surveys with PTAL Ratings.

WSP Queen Street Manchester

Licence No: 100323

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AN-03-A-09	DETACHED & SEMI-DETACHED		ANTRIM
	SLOEFIELD DRIVE			
	CARRICKFERGUS			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	151		
	Survey date: WEDNESDAY	12/10/16	Survey Type: MANUAL	
3	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
4	CC-03-A-01	DETACHED HOUSES		CARLOW
	R417 ANTHY ROAD			
	CARLOW			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	23		
	Survey date: WEDNESDAY	25/05/16	Survey Type: MANUAL	
5	CT-03-A-03	MIXED HOUSES		CENTRAL BEDFORDSHIRE
	ARLESEY ROAD			
	STOTFOLD			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	73		
	Survey date: TUESDAY	27/06/23	Survey Type: MANUAL	
6	CV-03-A-02	DETACHED & SEMI DETACHED		CAVAN
	R212 DUBLIN ROAD			
	CAVAN			
	KILLYNEBBER			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	80		
	Survey date: MONDAY	22/05/17	Survey Type: MANUAL	
7	CV-03-A-03	DETACHED HOUSES		CAVAN
	R212 DUBLIN ROAD			
	CAVAN			
	PULLAMORE NEAR			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	37		
	Survey date: MONDAY	22/05/17	Survey Type: MANUAL	

WSP Queen Street Manchester

Licence No: 100323

LIST OF SITES relevant to selection parameters (Cont.)

8	DC-03-A-10 ADDISON CLOSE GILLINGHAM	MIXED HOUSES		DORSET
	Edge of Town Residential Zone Total No of Dwellings:		26	
	Survey date: WEDNESDAY		09/11/22	Survey Type: MANUAL
9	DC-03-A-11 A350 SHAFTESBURY	MIXED HOUSES		DORSET
	Edge of Town No Sub Category Total No of Dwellings:		141	
	Survey date: TUESDAY		31/10/23	Survey Type: MANUAL
10	DE-03-A-04 GREENHALL HIGHWAY COLERAINE	SEMI-DETACHED & TERRACED		DERRY
	Edge of Town Residential Zone Total No of Dwellings:		38	
	Survey date: THURSDAY		19/05/22	Survey Type: MANUAL
11	DE-03-A-05 CLOYFIN ROAD COLERAINE LOGUESTOWN IND. ESTATE	SEMI-DETACHED & TERRACED		DERRY
	Edge of Town Industrial Zone Total No of Dwellings:		51	
	Survey date: FRIDAY		20/05/22	Survey Type: MANUAL
12	DH-03-A-01 GREENFIELDS ROAD BISHOP AUCKLAND	SEMI DETACHED		DURHAM
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:		50	
	Survey date: TUESDAY		28/03/17	Survey Type: MANUAL
13	DH-03-A-03 PILGRIMS WAY DURHAM	SEMI-DETACHED & TERRACED		DURHAM
	Edge of Town Residential Zone Total No of Dwellings:		57	
	Survey date: FRIDAY		19/10/18	Survey Type: MANUAL
14	DL-03-A-10 R124 MALAHIDE SAINT HELENS	SEMI DETACHED & DETACHED		DUBLIN
	Edge of Town Residential Zone Total No of Dwellings:		65	
	Survey date: WEDNESDAY		20/06/18	Survey Type: MANUAL
15	DN-03-A-06 GLENFIN ROAD BALLYBOFEY	DETACHED HOUSING		DONEGAL
	Edge of Town Residential Zone Total No of Dwellings:		6	
	Survey date: WEDNESDAY		10/10/18	Survey Type: MANUAL

WSP Queen Street Manchester

Licence No: 100323

LIST OF SITES relevant to selection parameters (Cont.)

16	DY-03-A-01 RADBOURNE LANE DERBY	MIXED HOUSES	DERBY
	Edge of Town Residential Zone Total No of Dwellings:	371	
	Survey date: TUESDAY	10/07/18	Survey Type: MANUAL
17	EN-03-A-01 BOLLINGBROKE PARK COCKFOSTERS	TERRACED & SEMI-DETACHED	ENFIELD
	Edge of Town Residential Zone Total No of Dwellings:	32	
	Survey date: WEDNESDAY	24/11/21	Survey Type: MANUAL
18	EN-03-A-02 DUCHY ROAD HADLEY WOOD	DETACHED HOUSES	ENFIELD
	Edge of Town Residential Zone Total No of Dwellings:	9	
	Survey date: WEDNESDAY	14/09/22	Survey Type: MANUAL
19	ES-03-A-03 SHEPHAM LANE POLEGATE	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:	212	
	Survey date: MONDAY	11/07/16	Survey Type: MANUAL
20	ES-03-A-07 NEW ROAD HAILSHAM HELLINGLY	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:	91	
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL
21	ES-03-A-08 WRESTWOOD ROAD BEXHILL	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:	110	
	Survey date: WEDNESDAY	12/10/22	Survey Type: MANUAL
22	ES-03-A-09 THE FAIRWAY NEWHAVEN	DETACHED & SEMI-DETACHED	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:	47	
	Survey date: MONDAY	13/03/23	Survey Type: MANUAL

WSP Queen Street Manchester

Licence No: 100323

LIST OF SITES relevant to selection parameters (Cont.)

23	ES-03-A-10 WATERGATE BEXHILL-ON-SEA	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 139 Survey date: THURSDAY 28/09/23		Survey Type: MANUAL
24	ES-03-A-14 RATTLE ROAD NEAR EASTBOURNE STONE CROSS	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 120 Survey date: TUESDAY 30/04/24		Survey Type: MANUAL
25	EX-03-A-02 MANOR ROAD CHIGWELL GRANGE HILL	DETACHED & SEMI-DETACHED	ESSEX
	Edge of Town Residential Zone Total No of Dwellings: 97 Survey date: MONDAY 27/11/17		Survey Type: MANUAL
26	EX-03-A-03 KESTREL GROVE RAYLEIGH	MIXED HOUSES	ESSEX
	Edge of Town Residential Zone Total No of Dwellings: 123 Survey date: MONDAY 27/09/21		Survey Type: MANUAL
27	HC-03-A-21 PRIESTLEY ROAD BASINGSTOKE HOUNDMILLS	TERRACED & SEMI-DETACHED	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 39 Survey date: TUESDAY 13/11/18		Survey Type: MANUAL
28	HC-03-A-22 BOW LAKE GARDENS NEAR EASTLEIGH BISHOPSTOKE	MIXED HOUSES	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 40 Survey date: WEDNESDAY 31/10/18		Survey Type: MANUAL
29	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 62 Survey date: TUESDAY 19/11/19		Survey Type: MANUAL

WSP Queen Street Manchester

Licence No: 100323

LIST OF SITES relevant to selection parameters (Cont.)

30	HC-03-A-27 DAIRY ROAD ANDOVER	MIXED HOUSES	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	73	
	Survey date: TUESDAY	16/11/21	Survey Type: MANUAL
31	HC-03-A-28 EAGLE AVENUE WATERLOOVILLE LOVEDEAN	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	125	
	Survey date: MONDAY	08/11/21	Survey Type: MANUAL
32	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	44	
	Survey date: FRIDAY	07/10/22	Survey Type: MANUAL
33	HC-03-A-33 CROW LANE RINGWOOD CROW	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	195	
	Survey date: TUESDAY	04/07/23	Survey Type: MANUAL
34	HC-03-A-34 STONEHAM LANE EASTLEIGH	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	243	
	Survey date: TUESDAY	14/11/23	Survey Type: MANUAL
35	HC-03-A-35 EAGLE AVENUE WATERLOOVILLE LOVEDEAN	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	289	
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL
36	HC-03-A-36 HAVANT ROAD EMSWORTH	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	145	
	Survey date: TUESDAY	12/09/23	Survey Type: MANUAL
37	HC-03-A-37 REDFIELDS LANE FLEET CHURCH CROOKHAM	MIXED HOUSES	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	50	
	Survey date: WEDNESDAY	27/03/24	Survey Type: MANUAL

WSP Queen Street Manchester

Licence No: 100323

LIST OF SITES relevant to selection parameters (Cont.)

38	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 160 Survey date: MONDAY 08/07/19		Survey Type: MANUAL
39	HF-03-A-05 HOLMSIDE RISE WATFORD SOUTH OXHEY	TERRACED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 8 Survey date: MONDAY 05/06/23		Survey Type: MANUAL
40	HF-03-A-06 A505 ROYSTON	MIXED HOUSES & FLATS	HERTFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 180 Survey date: TUESDAY 28/11/23		Survey Type: MANUAL
41	HI-03-A-14 KING BRUDE ROAD INVERNESS SCORGUIE	SEMI-DETACHED & TERRACED	HIGHLAND
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 40 Survey date: WEDNESDAY 23/03/16		Survey Type: MANUAL
42	IW-03-A-01 MEDHAM FARM LANE NEAR COWES MEDHAM	DETACHED HOUSES	ISLE OF WIGHT
	Free Standing (PPS6 Out of Town) Out of Town Total No of Dwellings: 72 Survey date: TUESDAY 25/06/19		Survey Type: MANUAL
43	KC-03-A-03 HYTHE ROAD ASHFORD WILLESBOROUGH	MIXED HOUSES & FLATS	KENT
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 51 Survey date: THURSDAY 14/07/16		Survey Type: MANUAL
44	KC-03-A-04 KILN BARN ROAD AYLESFORD DITTON	SEMI-DETACHED & TERRACED	KENT
	Edge of Town Residential Zone Total No of Dwellings: 110 Survey date: FRIDAY 22/09/17		Survey Type: MANUAL

WSP Queen Street Manchester

Licence No: 100323

LIST OF SITES relevant to selection parameters (Cont.)

45	KC-03-A-06 MARGATE ROAD HERNE BAY	MIXED HOUSES & FLATS		KENT
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:	363		
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL	
46	KC-03-A-07 RECVLVER ROAD HERNE BAY	MIXED HOUSES		KENT
	Edge of Town Residential Zone Total No of Dwellings:	288		
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL	
47	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES		KENT
	Edge of Town Residential Zone Total No of Dwellings:	106		
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL	
48	KC-03-A-11 COLDHARBOUR ROAD GRAVESEND	MIXED HOUSES & FLATS		KENT
	Edge of Town No Sub Category Total No of Dwellings:	375		
	Survey date: MONDAY	20/03/23	Survey Type: MANUAL	
49	KC-03-A-12 WESTERN LINK FAVERSHAM DAVINGTON	MIXED HOUSES & FLATS		KENT
	Edge of Town Residential Zone Total No of Dwellings:	186		
	Survey date: TUESDAY	19/09/23	Survey Type: MANUAL	
50	LC-03-A-31 GREENSIDE PRESTON COTTAM	DETACHED HOUSES		LANCASHIRE
	Edge of Town Residential Zone Total No of Dwellings:	32		
	Survey date: FRIDAY	17/11/17	Survey Type: MANUAL	
51	MW-03-A-02 OTTERHAM QUAY LANE RAINHAM	MIXED HOUSES		MEDWAY
	Edge of Town Residential Zone Total No of Dwellings:	19		
	Survey date: MONDAY	06/06/22	Survey Type: MANUAL	
52	NF-03-A-10 HUNSTANTON ROAD HUNSTANTON	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	17		
	Survey date: WEDNESDAY	12/09/18	Survey Type: DIRECTIONAL ATC COUNT	

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LIST OF SITES relevant to selection parameters (Cont.)

53	NF-03-A-23 SILFIELD ROAD WYMONDHAM	MIXED HOUSES & FLATS	NORFOLK
	Edge of Town Out of Town Total No of Dwellings: 514 Survey date: WEDNESDAY 22/09/21		Survey Type: MANUAL
54	NF-03-A-25 WOODFARM LANE GORLESTON-ON-SEA	MIXED HOUSES & FLATS	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 55 Survey date: TUESDAY 21/09/21		Survey Type: MANUAL
55	NF-03-A-28 ATLANTIC AVENUE NORWICH SPROWSTON	MIXED HOUSES & FLATS	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 1146 Survey date: THURSDAY 22/09/22		Survey Type: MANUAL
56	NF-03-A-31 BRANDON ROAD SWAFFHAM	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 321 Survey date: THURSDAY 22/09/22		Survey Type: DIRECTIONAL ATC COUNT
57	NF-03-A-32 HUNSTANTON ROAD HUNSTANTON	MIXED HOUSES & FLATS	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 164 Survey date: WEDNESDAY 21/09/22		Survey Type: DIRECTIONAL ATC COUNT
58	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 143 Survey date: THURSDAY 29/09/22		Survey Type: MANUAL
59	NF-03-A-34 NORWICH ROAD SWAFFHAM	MIXED HOUSES	NORFOLK
	Edge of Town Out of Town Total No of Dwellings: 80 Survey date: TUESDAY 27/09/22		Survey Type: MANUAL

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LIST OF SITES relevant to selection parameters (Cont.)

60	NF-03-A-35 REPTON AVENUE NORWICH	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	116		
	Survey date: WEDNESDAY	28/09/22	Survey Type: MANUAL	
61	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category Total No of Dwellings:	75		
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL	
62	NF-03-A-37 GREENFIELDS ROAD DEREHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	44		
	Survey date: TUESDAY	27/09/22	Survey Type: MANUAL	
63	NF-03-A-38 BEAUFORT WAY GREAT YARMOUTH BRADWELL	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	537		
	Survey date: TUESDAY	20/09/22	Survey Type: MANUAL	
64	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	212		
	Survey date: TUESDAY	27/09/22	Survey Type: MANUAL	
65	NF-03-A-47 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	300		
	Survey date: WEDNESDAY	21/09/22	Survey Type: DIRECTIONAL ATC COUNT	
66	NF-03-A-51 CITY ROAD NORWICH LAKENHAM	SEMI-DETACHED		NORFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:	34		
	Survey date: TUESDAY	13/09/22	Survey Type: MANUAL	

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LIST OF SITES relevant to selection parameters (Cont.)

67	NF-03-A-52 LYNNSPORT WAY KING'S LYNN	MIXED HOUSES		NORFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 130 Survey date: TUESDAY 07/11/23 Survey Type: MANUAL			
68	NT-03-A-08 WIGHAY ROAD HUCKNALL	DETACHED HOUSES		NOTTINGHAMSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 36 Survey date: MONDAY 18/10/21 Survey Type: MANUAL			
69	NY-03-A-13 CATTERICK ROAD CATTERICK GARRISON OLD HOSPITAL COMPOUND	TERRACED HOUSES		NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 10 Survey date: WEDNESDAY 10/05/17 Survey Type: MANUAL			
70	NY-03-A-14 PALACE ROAD RIPON	DETACHED & BUNGALOWS		NORTH YORKSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 45 Survey date: WEDNESDAY 18/05/22 Survey Type: MANUAL			
71	PB-03-A-04 EASTFIELD ROAD PETERBOROUGH	DETACHED HOUSES		PETERBOROUGH
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 28 Survey date: MONDAY 17/10/16 Survey Type: MANUAL			
72	SC-03-A-08 REIGATE ROAD HORLEY	MIXED HOUSES		SURREY
	Edge of Town Residential Zone Total No of Dwellings: 790 Survey date: WEDNESDAY 04/05/22 Survey Type: MANUAL			
73	SC-03-A-11 FOLLY HILL FARNHAM	MIXED HOUSES		SURREY
	Edge of Town Residential Zone Total No of Dwellings: 96 Survey date: TUESDAY 14/05/24 Survey Type: MANUAL			

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LIST OF SITES relevant to selection parameters (Cont.)

74	SD-03-A-01 HEADLANDS GROVE SWINDON	SEMI DETACHED	SWINDON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 27 Survey date: THURSDAY 22/09/16		Survey Type: MANUAL
75	SP-03-A-02 BARNFIELD WAY NEAR SOUTHAMPTON HEDGE END Edge of Town Out of Town Total No of Dwellings: 250 Survey date: TUESDAY 12/10/21	MIXED HOUSES & FLATS	SOUTHAMPTON
76	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE Edge of Town Residential Zone Total No of Dwellings: 248 Survey date: WEDNESDAY 22/11/17	DETACHED & SEMI-DETACHED	STAFFORDSHIRE
77	ST-03-A-08 SILKMORE CRESCENT STAFFORD MEADOWCROFT PARK Edge of Town Residential Zone Total No of Dwellings: 26 Survey date: WEDNESDAY 22/11/17	DETACHED HOUSES	STAFFORDSHIRE
78	TY-03-A-02 SANDHOLES ROAD COOKSTOWN DERRYLORAN Edge of Town Industrial Zone Total No of Dwellings: 101 Survey date: THURSDAY 14/03/19	SEMI DETACHED & BUNGALOWS	TYRONE
79	VG-03-A-01 ARTHUR STREET BARRY Edge of Town Residential Zone Total No of Dwellings: 12 Survey date: MONDAY 08/05/17	SEMI-DETACHED & TERRACED	VALE OF GLAMORGAN
80	WB-03-A-03 DORKING WAY READING CALCOT Edge of Town Residential Zone Total No of Dwellings: 108 Survey date: FRIDAY 09/09/22	MIXED HOUSES	WEST BERKSHIRE
81	WC-03-A-01 STATION ROAD WICKLOW CORPORATION MURRAGH Edge of Town No Sub Category Total No of Dwellings: 50 Survey date: MONDAY 28/05/18	DETACHED HOUSES	WICKLOW
			Survey Type: MANUAL

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LIST OF SITES relevant to selection parameters (Cont.)

82	WK-03-A-03 BRESE AVENUE WARWICK GUYS CLIFFE Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 23 Survey date: WEDNESDAY 25/09/19	DETACHED HOUSES	WARWICKSHIRE	Survey Type: MANUAL
83	WK-03-A-04 DALEHOUSE LANE KENILWORTH Edge of Town Residential Zone Total No of Dwellings: 49 Survey date: FRIDAY 27/09/19	DETACHED HOUSES	WARWICKSHIRE	Survey Type: MANUAL
84	WS-03-A-08 ROUNDSTONE LANE ANGMERING Edge of Town Residential Zone Total No of Dwellings: 180 Survey date: THURSDAY 19/04/18	MIXED HOUSES	WEST SUSSEX	Survey Type: MANUAL
85	WS-03-A-11 ELLIS ROAD WEST HORSHAM S BROADBRIDGE HEATH Edge of Town Residential Zone Total No of Dwellings: 918 Survey date: TUESDAY 02/04/19	MIXED HOUSES	WEST SUSSEX	Survey Type: MANUAL
86	WS-03-A-14 TODDINGTON LANE LITTLEHAMPTON WICK Edge of Town Residential Zone Total No of Dwellings: 117 Survey date: WEDNESDAY 20/10/21	MIXED HOUSES	WEST SUSSEX	Survey Type: MANUAL
87	WS-03-A-22 SHOPWHYKE ROAD CHICHESTER Edge of Town Residential Zone Total No of Dwellings: 129 Survey date: TUESDAY 19/03/24	MIXED HOUSES & FLATS	WEST SUSSEX	Survey Type: MANUAL
88	WS-03-A-23 TURNERS HILL ROAD EAST GRINSTEAD Edge of Town Residential Zone Total No of Dwellings: 197 Survey date: TUESDAY 14/05/24	MIXED HOUSES & FLATS	WEST SUSSEX	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BO-03-A-01	COVID-19
DL-03-A-11	COVID-19
DN-03-A-08	COVID-19
MG-03-A-01	COVID-19
NF-03-A-22	COVID-19
SF-03-A-09	COVID-19
SF-03-A-10	COVID-19

MANUALLY DESELECTED SITES (Cont.)

Site Ref	Reason for Deselection
TI-03-A-01	COVID-19
WO-03-A-07	COVID-19
WS-03-A-13	COVID-19

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	88	147	0.076	88	147	0.302	88	147	0.378
08:00 - 09:00	88	147	0.148	88	147	0.394	88	147	0.542
09:00 - 10:00	88	147	0.135	88	147	0.164	88	147	0.299
10:00 - 11:00	88	147	0.119	88	147	0.145	88	147	0.264
11:00 - 12:00	88	147	0.126	88	147	0.137	88	147	0.263
12:00 - 13:00	88	147	0.155	88	147	0.143	88	147	0.298
13:00 - 14:00	88	147	0.155	88	147	0.149	88	147	0.304
14:00 - 15:00	88	147	0.162	88	147	0.183	88	147	0.345
15:00 - 16:00	88	147	0.266	88	147	0.174	88	147	0.440
16:00 - 17:00	88	147	0.277	88	147	0.163	88	147	0.440
17:00 - 18:00	88	147	0.359	88	147	0.166	88	147	0.525
18:00 - 19:00	88	147	0.284	88	147	0.154	88	147	0.438
19:00 - 20:00	3	46	0.094	3	46	0.072	3	46	0.166
20:00 - 21:00	3	46	0.080	3	46	0.058	3	46	0.138
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.436			2.404			4.840

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter summary

Trip rate parameter range selected:

6 - 1146 (units:)

Survey date date range:

01/01/16 - 14/05/24

Number of weekdays (Monday-Friday):

88

Number of Saturdays:

0

Number of Sundays:

0

Surveys automatically removed from selection:

51

Surveys manually removed from selection:

10

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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Licence No: 100323

Calculation Reference: AUDIT-100323-241030-1043

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : C - INDUSTRIAL UNIT
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
	HF HERTFORDSHIRE	1 days
03	SOUTH WEST	
	DV DEVON	1 days
	SM SOMERSET	1 days
04	EAST ANGLIA	
	NF NORFOLK	2 days
	PB PETERBOROUGH	1 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
	LE LEICESTERSHIRE	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
	WM WEST MIDLANDS	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
08	NORTH WEST	
	BP BLACKPOOL	1 days
	EC CHESHIRE EAST	1 days
	LC LANCASHIRE	2 days
09	NORTH	
	CU CUMBERLAND	1 days
10	WALES	
	CF CARDIFF	1 days
11	SCOTLAND	
	FI FIFE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

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Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 150 to 17834 (units: sqm)
Range Selected by User: 150 to 67459 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 08/11/23

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	2 days
Wednesday	4 days
Thursday	10 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	20 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	8
Edge of Town	11
Free Standing (PPS6 Out of Town)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	18
Development Zone	1
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	5 days - Selected
Servicing vehicles Excluded	22 days - Selected

Secondary Filtering selection:

Use Class:

Not Known	20 days
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This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	4 days
10,001 to 15,000	2 days
15,001 to 20,000	2 days
20,001 to 25,000	3 days
25,001 to 50,000	6 days
50,001 to 100,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000	1 days
50,001 to 75,000	3 days
75,001 to 100,000	4 days
100,001 to 125,000	2 days
125,001 to 250,000	7 days
250,001 to 500,000	2 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	7 days
1.1 to 1.5	13 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	20 days
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This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	20 days
-----------------	---------

This data displays the number of selected surveys with PTAL Ratings.

1	BP-02-C-01	POWDER COATINGS	BLACKPOOL
	CHORLEY ROAD		
	BLACKPOOL		
	LITTLE CARLETON		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	1010	sqm
	Survey date:	THURSDAY	20/06/19
2	CF-02-C-02	BAKERY	CARDIFF
	MAES-Y-COED ROAD		
	CARDIFF		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	14125	sqm
	Survey date:	THURSDAY	06/10/16
3	CU-02-C-01	STEEL FABRICATION	CUMBERLAND
	BLACKDYKE ROAD		
	CARLISLE		
	KINGSTOWN IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	715	sqm
	Survey date:	FRIDAY	15/10/21
4	DS-02-C-02	GLASS SPECIALISTS	DERBYSHIRE
	STONEGRAVELS LANE		
	CHESTERFIELD		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	530	sqm
	Survey date:	WEDNESDAY	04/10/23
5	DV-02-C-02	ENERGY RECOVERY FACILITY	DEVON
	GRACE ROAD SOUTH		
	EXETER		
	MARSH BARTON TRAD. EST.		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	3513	sqm
	Survey date:	THURSDAY	06/07/17
6	EC-02-C-01	OFFICE FURNITURE	CHESHIRE EAST
	BRUNEL ROAD		
	MACCLESFIELD		
	LYME GREEN BUS. PARK		
	Edge of Town		
	Development Zone		
	Total Gross floor area:	6658	sqm
	Survey date:	MONDAY	19/09/16
7	FI-02-C-02	GLASS SPECIALISTS	FIFE
	DICKSON STREET		
	DUNFERMLINE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	1240	sqm
	Survey date:	THURSDAY	20/04/23
8	HC-02-C-01	ENGINEERING COMPANY	HAMPSHIRE
	JAYS CLOSE		
	BASINGSTOKE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3000	sqm
	Survey date:	THURSDAY	16/06/16

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LIST OF SITES relevant to selection parameters (Cont.)

9	HF-02-C-02 COCKERELL CLOSE STEVENAGE	FRESH PRODUCE	HERTFORDSHIRE
	Edge of Town Industrial Zone Total Gross floor area:	17834 sqm	
	Survey date: WEDNESDAY	08/11/23	Survey Type: MANUAL
10	LC-02-C-03 GOLDEN HILL LANE LEYLAND	TIMBER SUPPLIES	LANCASHIRE
	Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area:	150 sqm	
	Survey date: TUESDAY	06/11/18	Survey Type: MANUAL
11	LC-02-C-06 TOLLGATE ROAD BURSCOUGH	STEEL FABRICATION	LANCASHIRE
	Edge of Town Industrial Zone Total Gross floor area:	700 sqm	
	Survey date: THURSDAY	21/04/22	Survey Type: MANUAL
12	LE-02-C-01 WYMESWOLD ROAD NEAR LOUGHBOROUGH BURTON ON THE WOLDS Free Standing (PPS6 Out of Town) Industrial Zone Total Gross floor area:	COMMERCIAL VEHICLE SERVICES	LEICESTERSHIRE
	Survey date: FRIDAY	17/06/22	Survey Type: MANUAL
13	NF-02-C-03 ELVIN WAY NORWICH HELLESDON Edge of Town Industrial Zone Total Gross floor area:	SHEET METAL CONTRACTOR	NORFOLK
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL
14	NF-02-C-04 FLETCHER WAY NORWICH UPPER HELLESDON Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area:	EXHIBITION DESIGN & MANUF.	NORFOLK
	Survey date: THURSDAY	14/11/19	Survey Type: MANUAL
15	NY-02-C-03 WETHERBY ROAD KNARESBOROUGH	WORKWEAR MANUFACTURER	NORTH YORKSHIRE
	Edge of Town Industrial Zone Total Gross floor area:	1500 sqm	
	Survey date: THURSDAY	29/06/23	Survey Type: MANUAL
16	PB-02-C-01 NEWARK ROAD PETERBOROUGH FENGATE Edge of Town Industrial Zone Total Gross floor area:	STEEL FABRICATOR	PETERBOROUGH
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL

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LIST OF SITES relevant to selection parameters (Cont.)

17	SM-02-C-01 ROBINS DRIVE BRIDGWATER	WET BLASTING EQUIPMENT	SOMERSET
	Suburban Area (PPS6 Out of Centre) No Sub Category Total Gross floor area: 2300 sqm Survey date: WEDNESDAY 14/09/22 Survey Type: MANUAL		
18	WK-02-C-01 CASTLE MOUND WAY RUGBY	MACHINE ENGINEERING	WARWICKSHIRE
	Edge of Town Industrial Zone Total Gross floor area: 9216 sqm Survey date: WEDNESDAY 10/11/21 Survey Type: MANUAL		
19	WM-02-C-04 STOURVALE ROAD STOURBRIDGE LYE	FOUNDRY	WEST MIDLANDS
	Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 4324 sqm Survey date: TUESDAY 21/11/17 Survey Type: MANUAL		
20	WM-02-C-05 ICKNIELD STREET BIRMINGHAM HOCKLEY	INDIAN CATERING	WEST MIDLANDS
	Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 256 sqm Survey date: MONDAY 22/11/21 Survey Type: MANUAL		

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BO-02-C-01	COVID-19
EC-02-C-02	COVID-19
GS-02-C-02	COVID-19
LC-02-C-05	COVID-19
NN-02-C-01	COVID-19
TV-02-C-02	COVID-19
VG-02-C-01	COVID-19

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TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	4	6981	0.014	4	6981	0.000	4	6981	0.014
05:30 - 06:00	4	6981	0.064	4	6981	0.007	4	6981	0.071
06:00 - 06:30	5	5833	0.065	5	5833	0.048	5	5833	0.113
06:30 - 07:00	5	5833	0.189	5	5833	0.093	5	5833	0.282
07:00 - 07:30	19	3669	0.146	19	3669	0.022	19	3669	0.168
07:30 - 08:00	19	3669	0.122	19	3669	0.027	19	3669	0.149
08:00 - 08:30	19	3669	0.184	19	3669	0.024	19	3669	0.208
08:30 - 09:00	19	3669	0.139	19	3669	0.034	19	3669	0.173
09:00 - 09:30	20	3498	0.100	20	3498	0.036	20	3498	0.136
09:30 - 10:00	20	3498	0.073	20	3498	0.061	20	3498	0.134
10:00 - 10:30	20	3498	0.071	20	3498	0.051	20	3498	0.122
10:30 - 11:00	20	3498	0.090	20	3498	0.067	20	3498	0.157
11:00 - 11:30	20	3498	0.057	20	3498	0.071	20	3498	0.128
11:30 - 12:00	20	3498	0.044	20	3498	0.053	20	3498	0.097
12:00 - 12:30	20	3498	0.071	20	3498	0.081	20	3498	0.152
12:30 - 13:00	20	3498	0.071	20	3498	0.094	20	3498	0.165
13:00 - 13:30	20	3498	0.080	20	3498	0.090	20	3498	0.170
13:30 - 14:00	20	3498	0.050	20	3498	0.059	20	3498	0.109
14:00 - 14:30	20	3498	0.059	20	3498	0.057	20	3498	0.116
14:30 - 15:00	20	3498	0.033	20	3498	0.059	20	3498	0.092
15:00 - 15:30	20	3498	0.049	20	3498	0.074	20	3498	0.123
15:30 - 16:00	20	3498	0.037	20	3498	0.089	20	3498	0.126
16:00 - 16:30	20	3498	0.029	20	3498	0.150	20	3498	0.179
16:30 - 17:00	20	3498	0.007	20	3498	0.120	20	3498	0.127
17:00 - 17:30	20	3498	0.033	20	3498	0.150	20	3498	0.183
17:30 - 18:00	20	3498	0.051	20	3498	0.083	20	3498	0.134
18:00 - 18:30	18	3789	0.040	18	3789	0.082	18	3789	0.122
18:30 - 19:00	18	3789	0.026	18	3789	0.045	18	3789	0.071
19:00 - 19:30	5	5636	0.000	5	5636	0.028	5	5636	0.028
19:30 - 20:00	5	5636	0.004	5	5636	0.011	5	5636	0.015
20:00 - 20:30	4	6981	0.000	4	6981	0.007	4	6981	0.007
20:30 - 21:00	4	6981	0.000	4	6981	0.004	4	6981	0.004
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.998			1.877			3.875

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

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Parameter summary

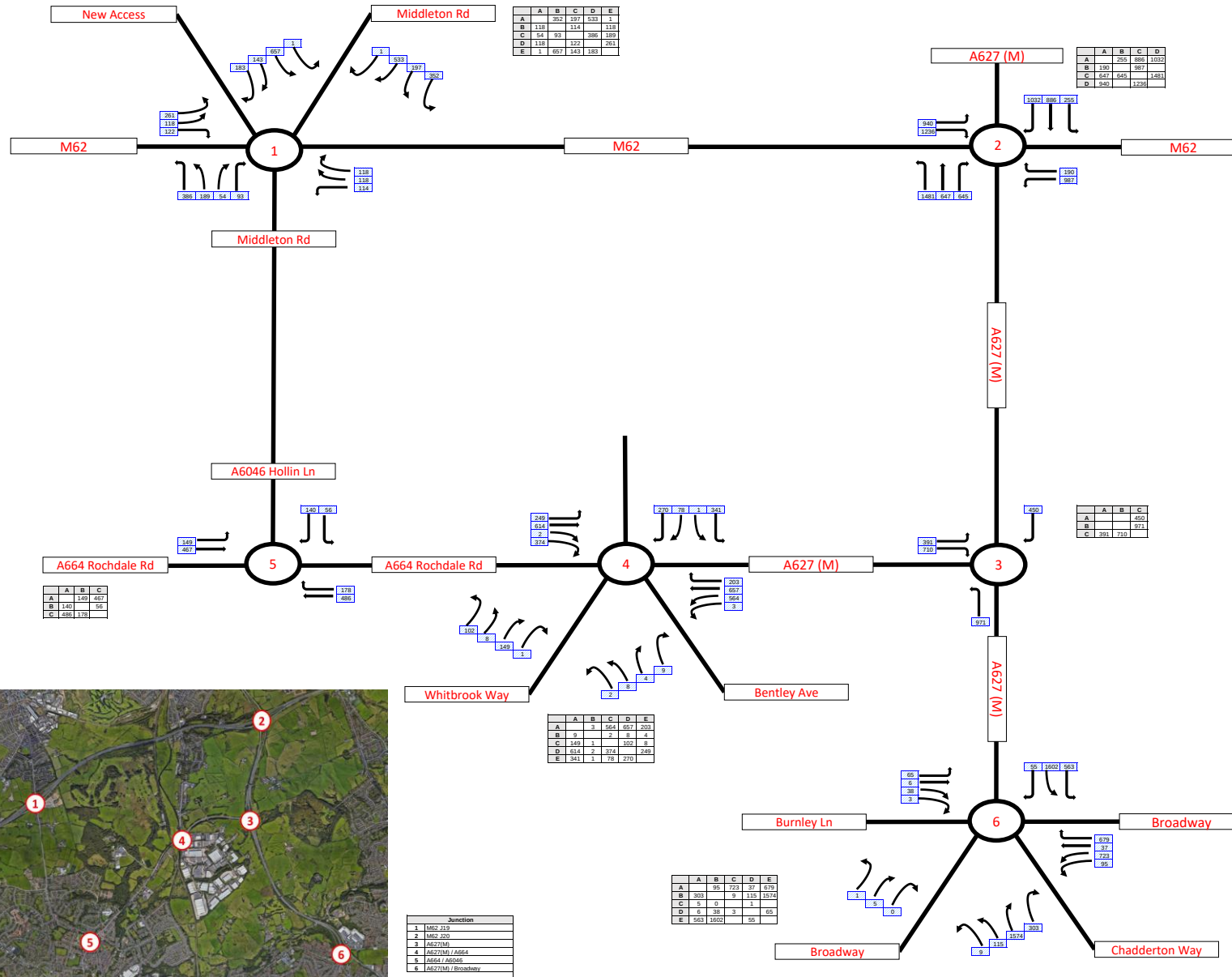
Trip rate parameter range selected:	150 - 17834 (units: sqm)
Survey date range:	01/01/16 - 08/11/23
Number of weekdays (Monday-Friday):	20
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	7

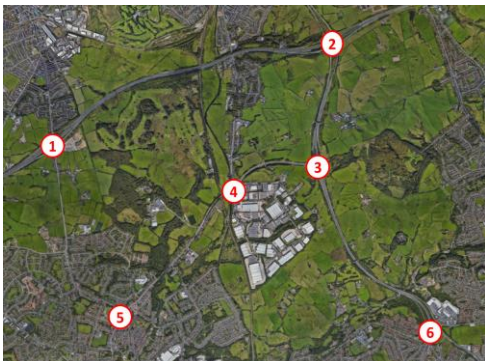
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

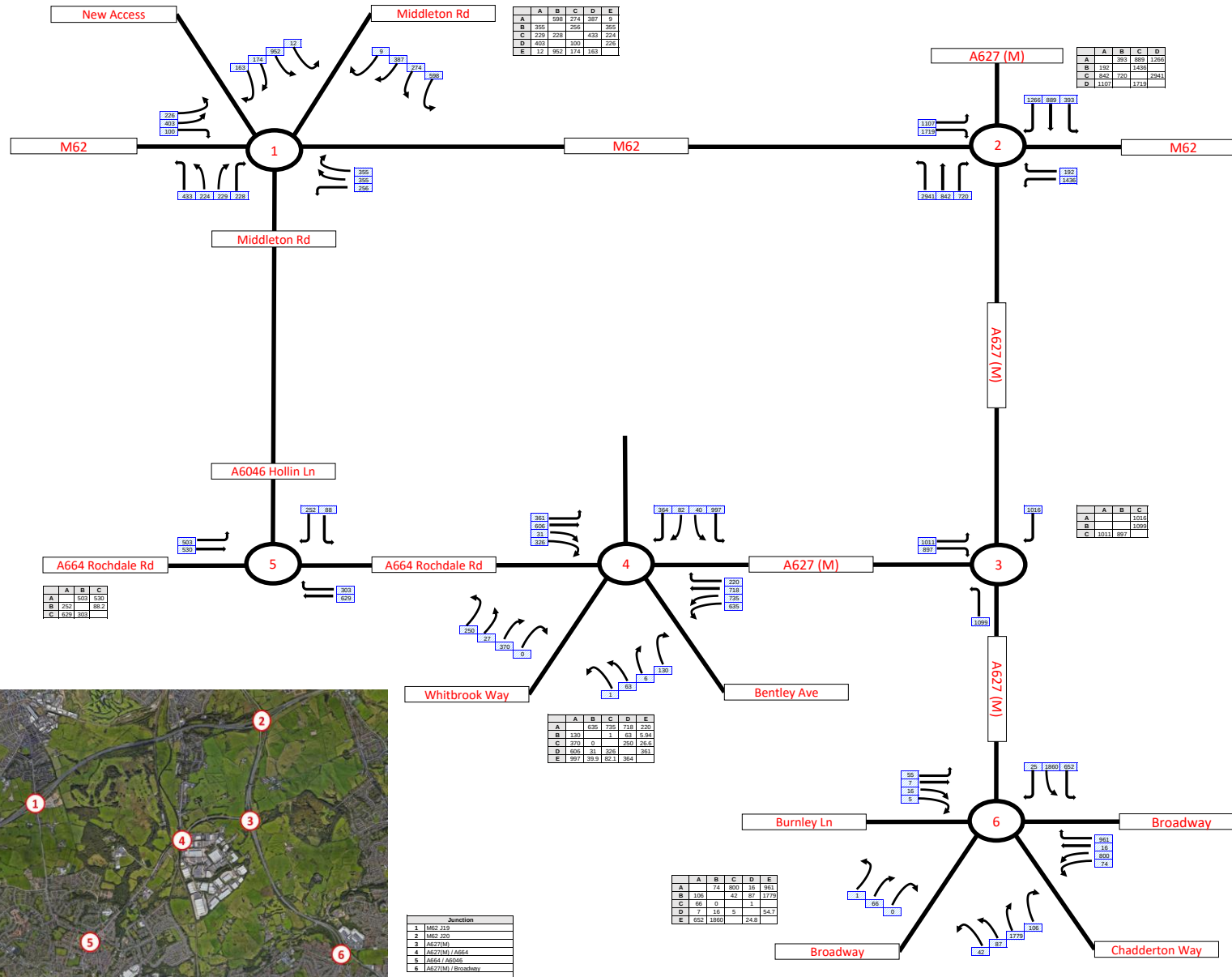
Appendix E

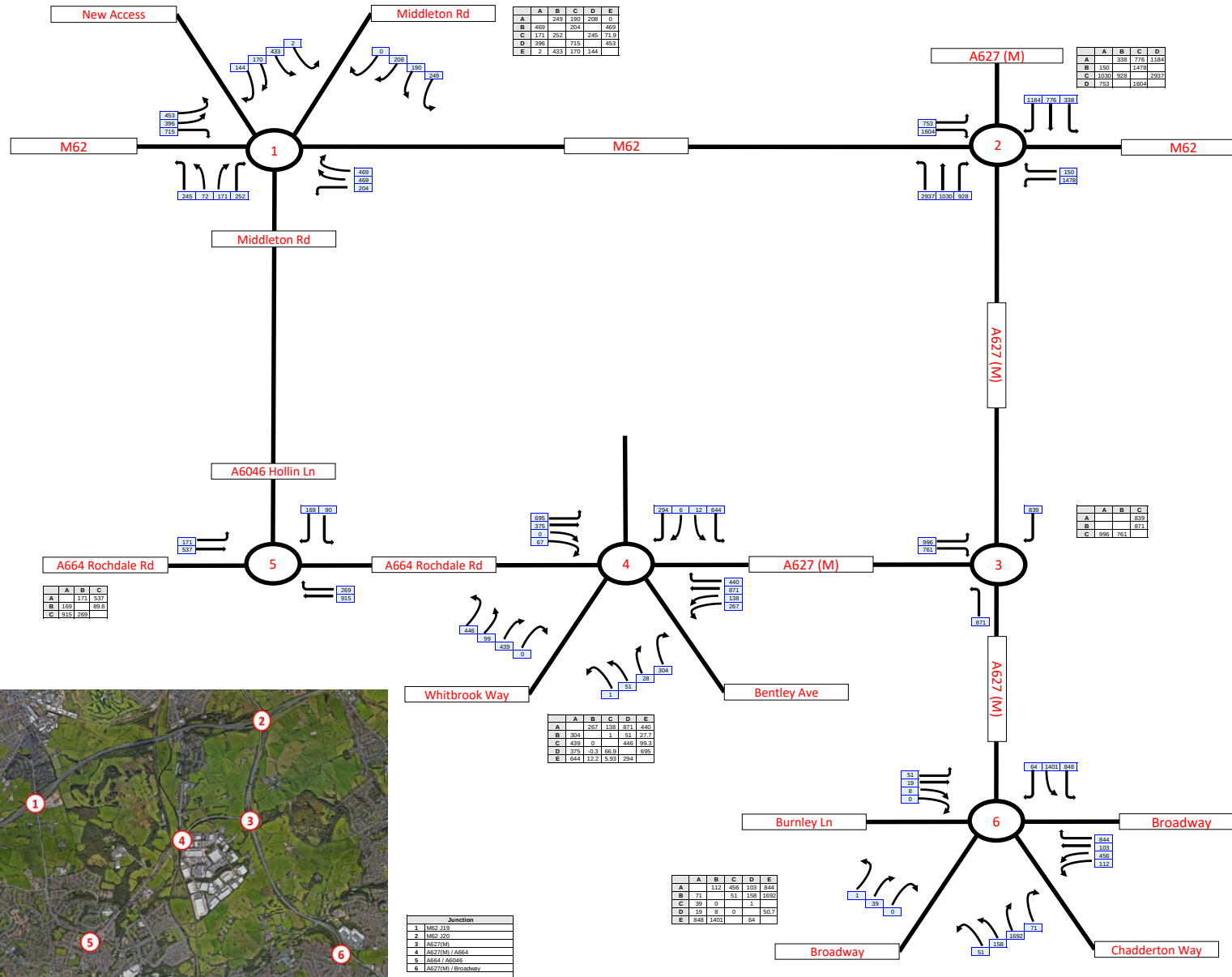
TRAFFIC FLOW DIAGRAMS

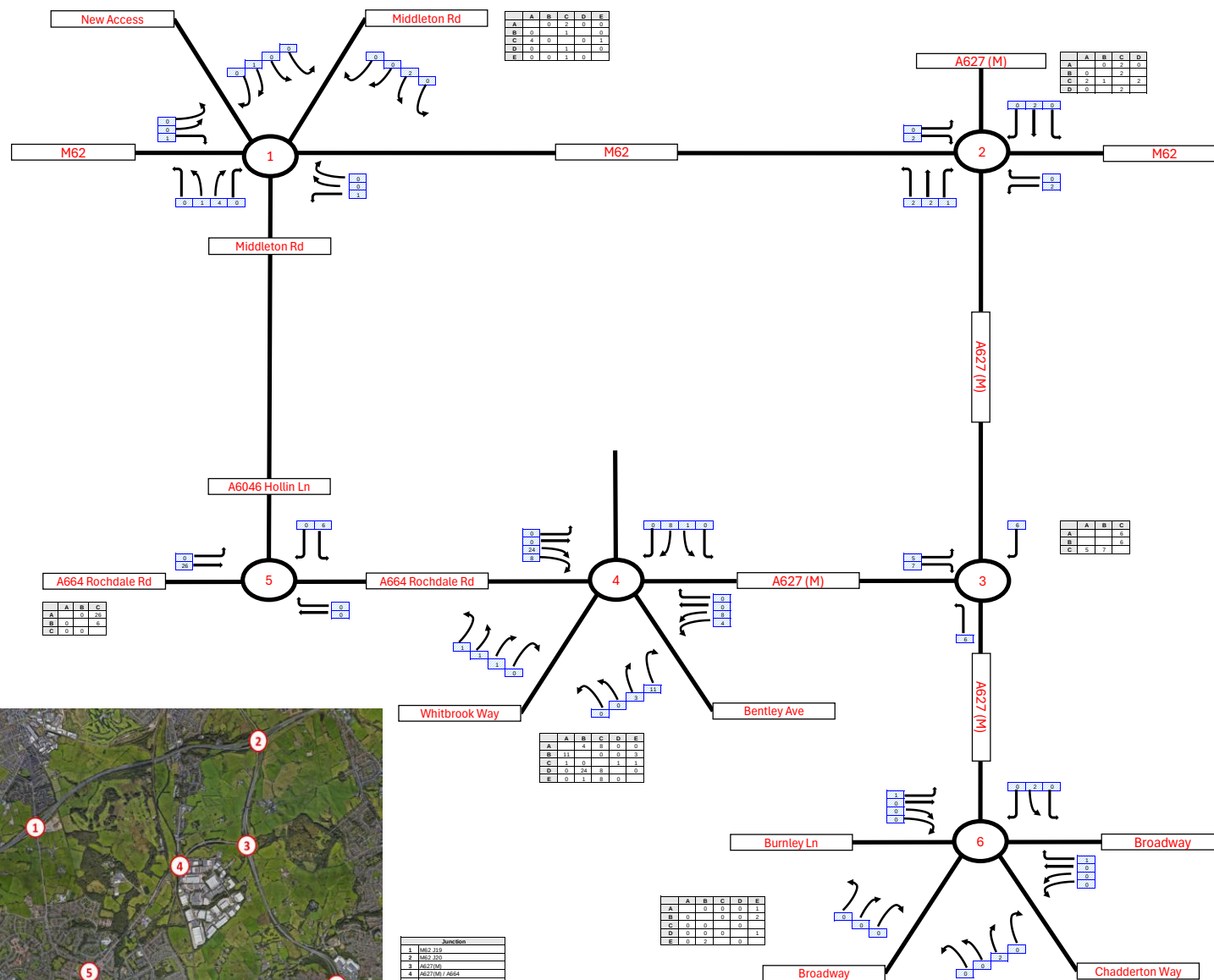


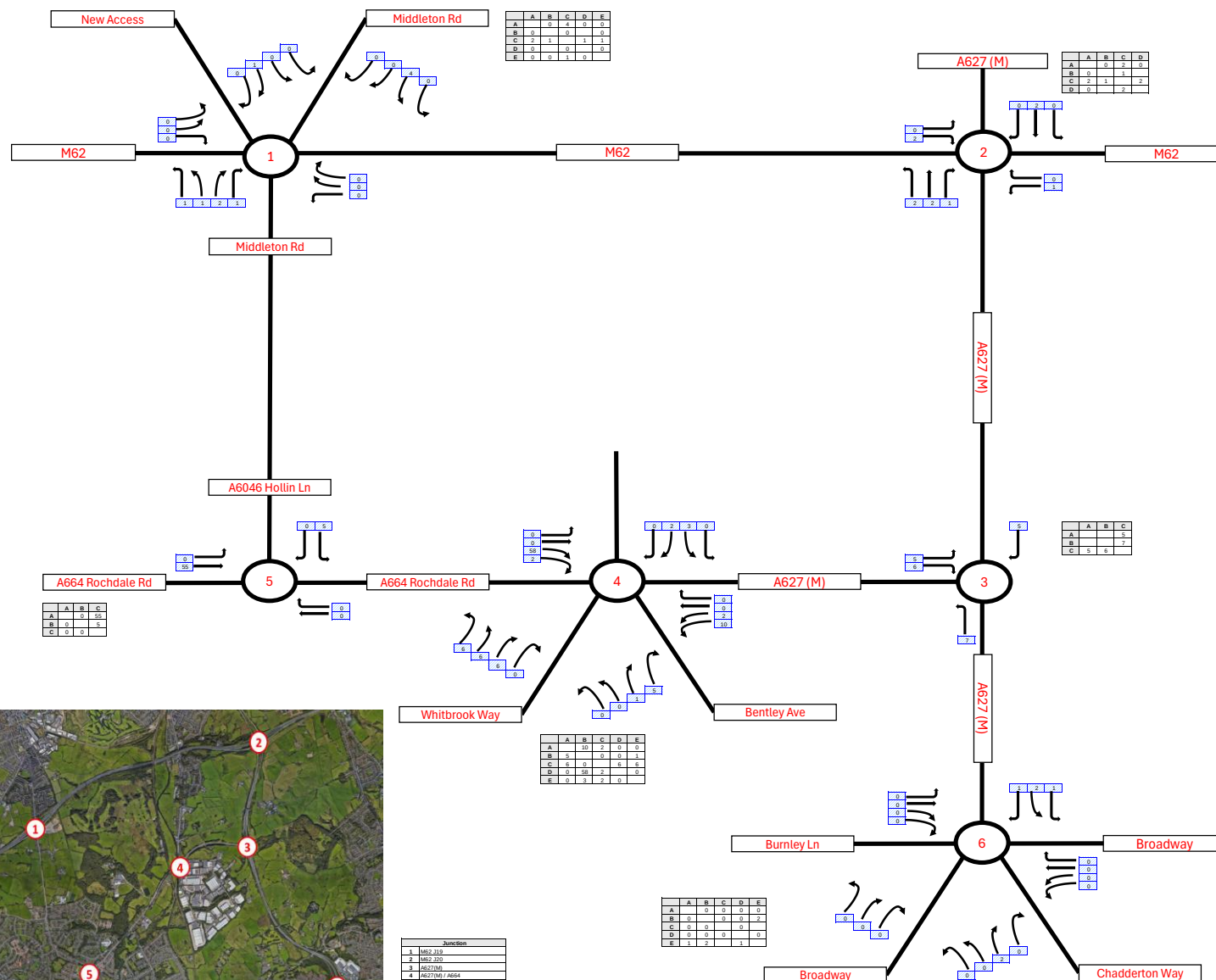
















Appendix F

JUNCTION MODELLING RESULTS

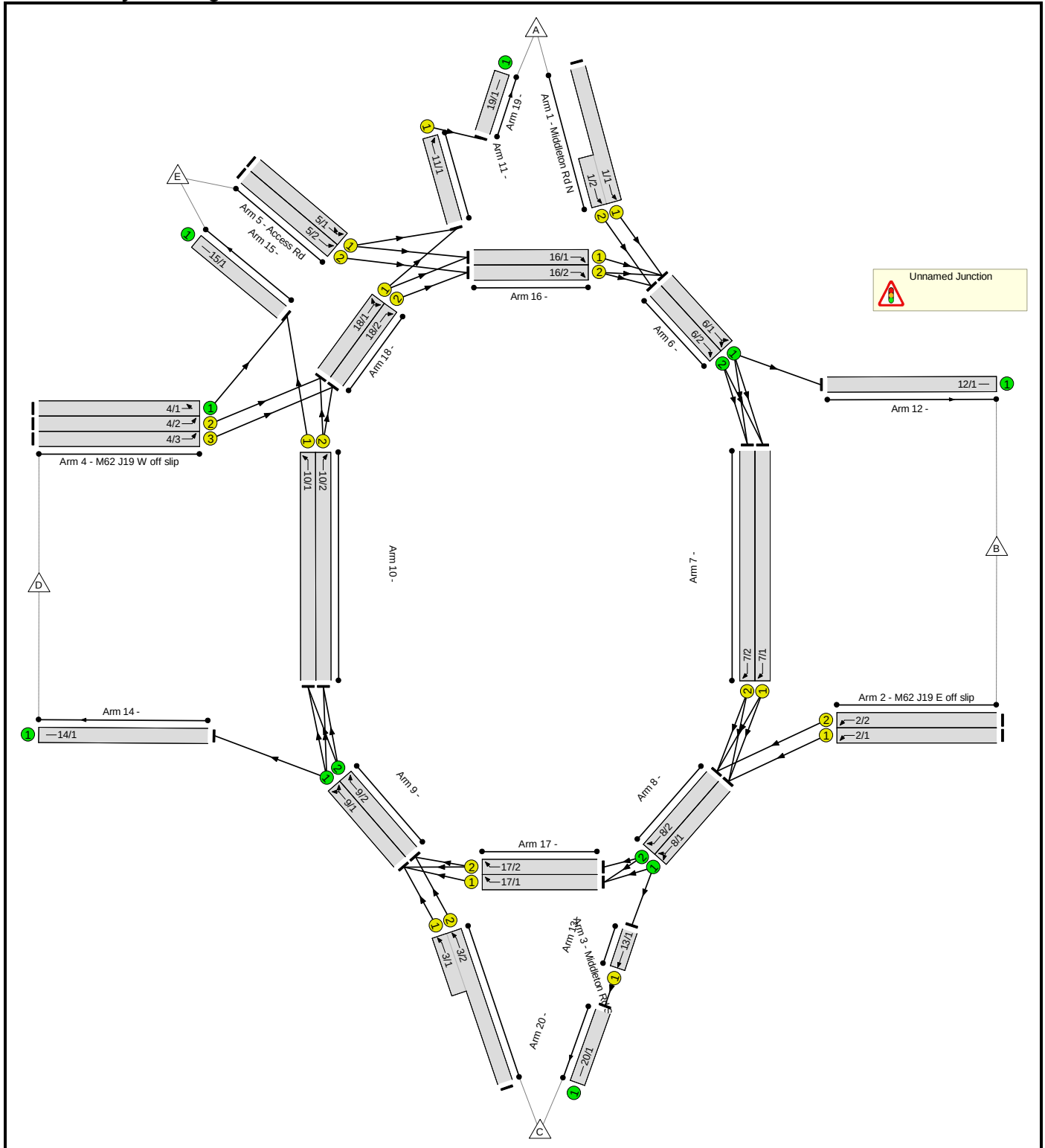


Full Input Data And Results

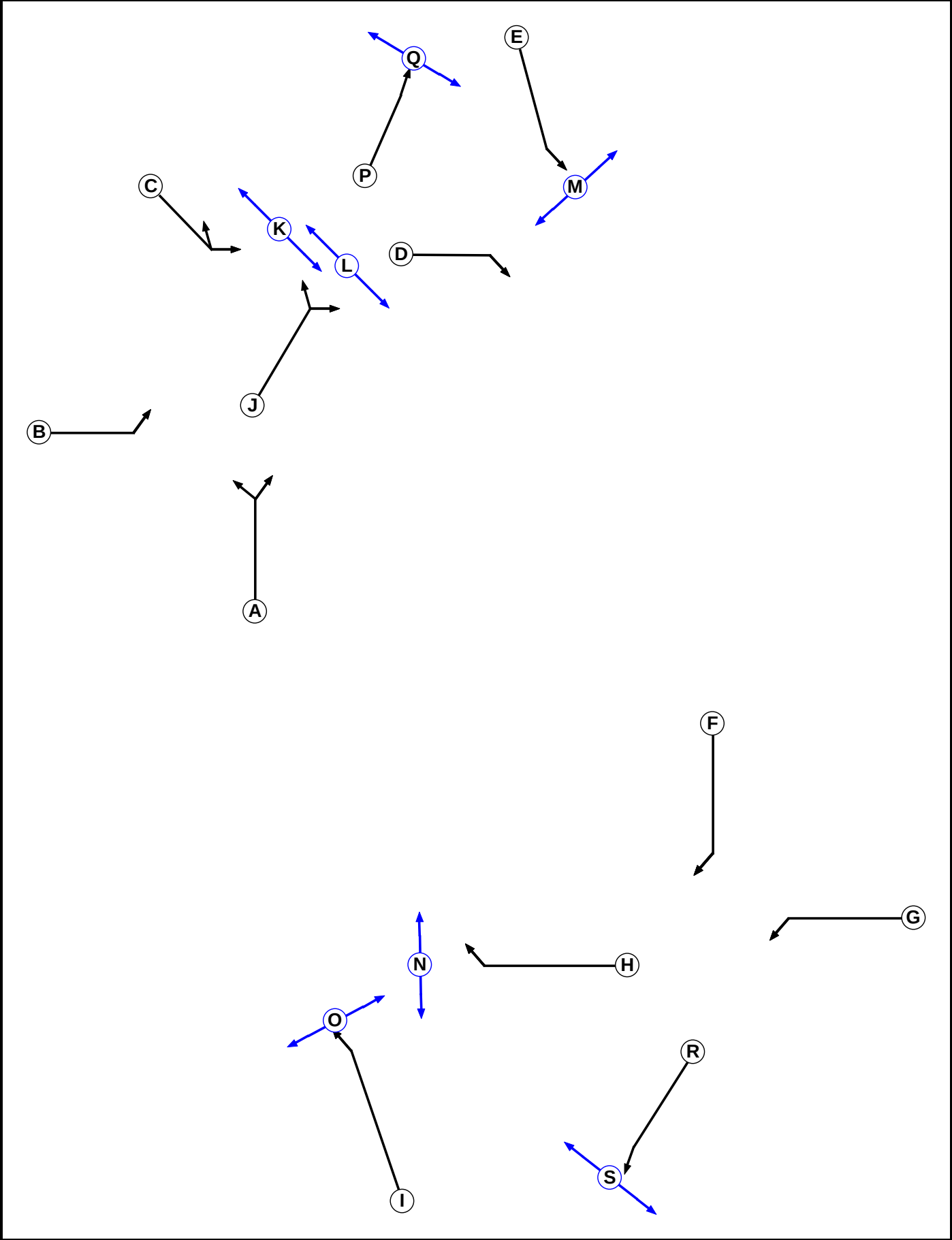
User and Project Details

Project:	GMSF Stakehill
Title:	Heywood Interchange
Location:	
Site Ref(s):	Junction 1
Design Layout Ref:	Base
Additional detail:	
File name:	J1 M62 J19 3rd Run.lsg3x
Author:	
Company:	WSP
Address:	8 First Street M15 4RP

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	4		7	7
B	Traffic	4		7	7
C	Traffic	4		7	7
D	Traffic	1		7	5
E	Traffic	1		7	7
F	Traffic	2		7	7
G	Traffic	2		7	7
H	Traffic	3		7	6
I	Traffic	3		7	5
J	Traffic	4		7	7
K	Pedestrian	4		5	5
L	Pedestrian	4		5	5
M	Pedestrian	1		5	5
N	Pedestrian	3		5	5
O	Pedestrian	3		5	5
P	Traffic	5		7	7
Q	Pedestrian	5		5	5
R	Traffic	6		7	7
S	Pedestrian	6		5	5

Phase Intergreens Matrix

Terminating Phase	Starting Phase																			
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
	A		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B	6		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-		-	-	-	-	-	-	5	5	-	-	-	-	-	-	-	-
	D	-	-	-		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	-	-	-	6		-	-	-	-	-	-	-	5	-	-	-	-	-	-
	F	-	-	-	-	-		5	-	-	-	-	-	-	-	-	-	-	-	-
	G	-	-	-	-	-	5		-	-	-	-	-	-	-	-	-	-	-	-
	H	-	-	-	-	-	-	-		4	-	-	-	-	5	-	-	-	-	-
	I	-	-	-	-	-	-	-	6		-	-	-	-	-	5	-	-	-	-
	J	-	-	5	-	-	-	-	-	-		-	5	-	-	-	-	-	-	-
	K	-	-	7	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
	L	-	-	-	-	-	-	-	-	-	8	-		-	-	-	-	-	-	-
	M	-	-	-	-	7	-	-	-	-	-	-	-		-	-	-	-	-	-
	N	-	-	-	-	-	-	-	8	-	-	-	-	-		-	-	-	-	-
	O	-	-	-	-	-	-	-	-	5	-	-	-	-	-		-	-	-	-
	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		5	-	-
	Q	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5		-	-
	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		5
S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5		

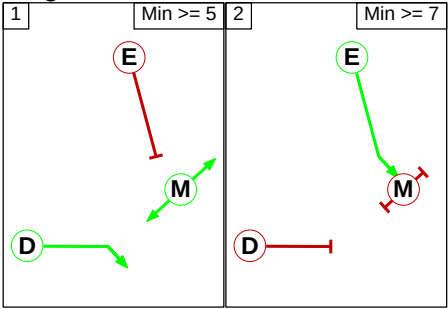
Phases in Stage

Stream	Stage No.	Phases in Stage
1	1	D M
1	2	E
2	1	F
2	2	G
3	1	H O
3	2	I N
4	1	B J K
4	2	A C L
4	3	A J K
5	1	P
5	2	Q
6	1	R
6	2	S

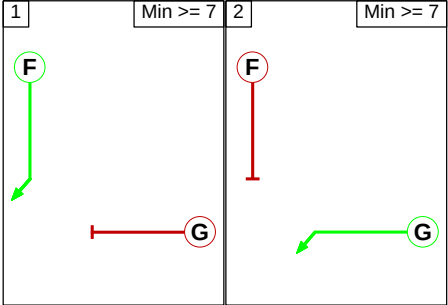
Full Input Data And Results

Stage Diagram

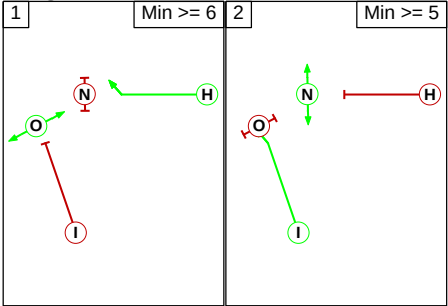
Stage Stream: 1



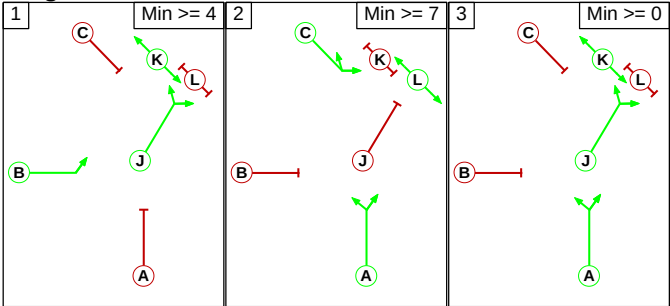
Stage Stream: 2



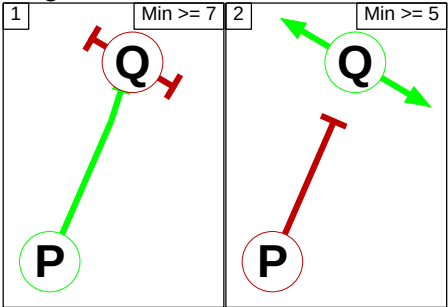
Stage Stream: 3



Stage Stream: 4

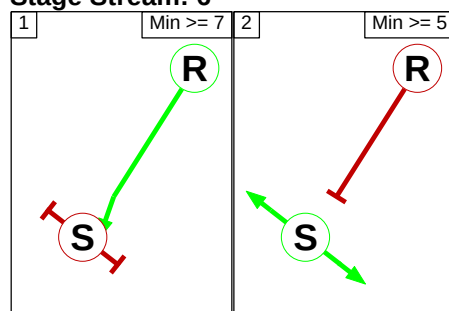


Stage Stream: 5



Full Input Data And Results

Stage Stream: 6



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	D	Losing	2	2

Stage Stream: 2

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

Stage Stream: 3

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	H	Losing	1	1
2	1	I	Losing	2	2

Stage Stream: 4

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	J	Losing	4	4
1	2	K	Losing	2	2
2	3	C	Losing	3	3

Stage Stream: 5

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

Stage Stream: 6

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

Prohibited Stage Change

Stage Stream: 1

	To Stage	
From Stage	1	2
	1	7
	2	6

Full Input Data And Results

Stage Stream: 2

	To Stage		
From Stage		1	2
	1		5
	2	5	

Stage Stream: 3

	To Stage		
From Stage		1	2
	1		6
	2	8	

Stage Stream: 4

	To Stage			
From Stage		1	2	3
	1		9	6
	2	8		8
	3	5	7	

Stage Stream: 5

	To Stage		
From Stage		1	2
	1		5
	2	5	

Stage Stream: 6

	To Stage		
From Stage		1	2
	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction												
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 (Middleton Rd N)	U	E	2	3	60.0	User	1871	-	-	-	-	-
1/2 (Middleton Rd N)	U	E	2	3	5.0	User	1871	-	-	-	-	-
2/1 (M62 J19 E off slip)	U	G	2	3	60.0	User	1829	-	-	-	-	-
2/2 (M62 J19 E off slip)	U	G	2	3	60.0	User	1963	-	-	-	-	-
3/1 (Middleton Rd S)	U	I	2	3	6.0	User	1854	-	-	-	-	-
3/2 (Middleton Rd S)	U	I	2	3	60.0	User	1854	-	-	-	-	-
4/1 (M62 J19 W off slip)	U		2	3	60.0	User	1919	-	-	-	-	-
4/2 (M62 J19 W off slip)	U	B	2	3	60.0	User	2063	-	-	-	-	-
4/3 (M62 J19 W off slip)	U	B	2	3	60.0	User	2063	-	-	-	-	-
5/1 (Access Rd)	U	C	2	3	60.0	User	1929	-	-	-	-	-
5/2 (Access Rd)	U	C	2	3	60.0	User	2062	-	-	-	-	-
6/1	U		2	3	7.0	User	2120	-	-	-	-	-
6/2	U		2	3	6.0	User	2120	-	-	-	-	-
7/1	U	F	2	3	17.0	User	2065	-	-	-	-	-
7/2	U	F	2	3	17.0	User	2205	-	-	-	-	-
8/1	U		2	3	21.0	User	2210	-	-	-	-	-
8/2	U		2	3	20.0	User	2210	-	-	-	-	-
9/1	U		2	3	10.0	User	2140	-	-	-	-	-
9/2	U		2	3	10.0	User	2140	-	-	-	-	-
10/1	U	A	2	3	22.0	User	1985	-	-	-	-	-
10/2	U	A	2	3	22.0	User	1932	-	-	-	-	-
11/1	U	P	2	3	4.0	User	1995	-	-	-	-	-
12/1	U		2	3	60.0	Inf	-	-	-	-	-	-
13/1	U	R	2	3	4.0	User	1966	-	-	-	-	-
14/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

15/1	U		2	3	60.0	Inf	-	-	-	-	-	-
16/1	U	D	2	3	12.0	User	1985	-	-	-	-	-
16/2	U	D	2	3	12.0	User	2119	-	-	-	-	-
17/1	U	H	2	3	3.0	User	1998	-	-	-	-	-
17/2	U	H	2	3	4.0	User	2134	-	-	-	-	-
18/1	U	J	2	3	7.0	User	2010	-	-	-	-	-
18/2	U	J	2	3	7.0	User	2146	-	-	-	-	-
19/1	U		2	3	60.0	Inf	-	-	-	-	-	-
20/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2025 Base AM'	08:00	09:00	01:00	
2: '2025 Base PM'	17:00	18:00	01:00	
3: '2040 DM AM'	08:00	09:00	01:00	
4: '2040 DM PM'	17:00	18:00	01:00	
5: '2040 DS AM'	08:00	09:00	01:00	
6: '2040 DS PM'	17:00	18:00	01:00	

Scenario 1: '2025 Base AM' (FG1: '2025 Base AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	352	197	533	1	1083
	B	118	0	114	0	118	350
	C	54	93	0	386	189	722
	D	118	0	122	0	261	501
	E	1	657	143	183	0	984
	Tot.	291	1102	576	1102	569	3640

Traffic Lane Flows

Lane	Scenario 1: 2025 Base AM
Junction: Unnamed Junction	
1/1 (with short)	1083(In) 384(Out)
1/2 (short)	699
2/1	163
2/2	187
3/1 (short)	387
3/2 (with short)	722(In) 335(Out)
4/1	261
4/2	120
4/3	120
5/1	516
5/2	468
6/1	1283
6/2	998
7/1	530
7/2	649
8/1	773
8/2	756
9/1	1158
9/2	517
10/1	308
10/2	265
11/1	291
12/1	1102
13/1	576
14/1	1102
15/1	569
16/1	561
16/2	637
17/1	430
17/2	523
18/1	336
18/2	169
19/1	291
20/1	576

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Middleton Rd N Lane 1)	This lane uses a directly entered Saturation Flow						1871	1871
1/2 (Middleton Rd N Lane 2)	This lane uses a directly entered Saturation Flow						1871	1871
2/1 (M62 J19 E off slip Lane 1)	This lane uses a directly entered Saturation Flow						1829	1829
2/2 (M62 J19 E off slip Lane 2)	This lane uses a directly entered Saturation Flow						1963	1963
3/1 (Middleton Rd S Lane 1)	This lane uses a directly entered Saturation Flow						1854	1854
3/2 (Middleton Rd S Lane 2)	This lane uses a directly entered Saturation Flow						1854	1854
4/1 (M62 J19 W off slip Lane 1)	This lane uses a directly entered Saturation Flow						1919	1919
4/2 (M62 J19 W off slip Lane 2)	This lane uses a directly entered Saturation Flow						2063	2063
4/3 (M62 J19 W off slip Lane 3)	This lane uses a directly entered Saturation Flow						2063	2063
5/1 (Access Rd Lane 1)	This lane uses a directly entered Saturation Flow						1929	1929
5/2 (Access Rd Lane 2)	This lane uses a directly entered Saturation Flow						2062	2062
6/1	This lane uses a directly entered Saturation Flow						2120	2120
6/2	This lane uses a directly entered Saturation Flow						2120	2120
7/1	This lane uses a directly entered Saturation Flow						2065	2065
7/2	This lane uses a directly entered Saturation Flow						2205	2205
8/1	This lane uses a directly entered Saturation Flow						2210	2210
8/2	This lane uses a directly entered Saturation Flow						2210	2210
9/1	This lane uses a directly entered Saturation Flow						2140	2140
9/2	This lane uses a directly entered Saturation Flow						2140	2140
10/1	This lane uses a directly entered Saturation Flow						1985	1985
10/2	This lane uses a directly entered Saturation Flow						1932	1932
11/1	This lane uses a directly entered Saturation Flow						1995	1995
12/1	Infinite Saturation Flow						Inf	Inf
13/1	This lane uses a directly entered Saturation Flow						1966	1966
14/1	Infinite Saturation Flow						Inf	Inf
15/1	Infinite Saturation Flow						Inf	Inf
16/1	This lane uses a directly entered Saturation Flow						1985	1985
16/2	This lane uses a directly entered Saturation Flow						2119	2119
17/1	This lane uses a directly entered Saturation Flow						1998	1998
17/2	This lane uses a directly entered Saturation Flow						2134	2134
18/1	This lane uses a directly entered Saturation Flow						2010	2010

Full Input Data And Results

18/2	This lane uses a directly entered Saturation Flow	2146	2146
19/1	Infinite Saturation Flow	Inf	Inf
20/1	Infinite Saturation Flow	Inf	Inf

Scenario 2: '2025 Base PM' (FG2: '2025 Base PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	281	264	380	0	925
	B	151	0	175	0	151	477
	C	47	78	0	208	133	466
	D	120	0	357	0	161	638
	E	1	475	133	118	0	727
	Tot.	319	834	929	706	445	3233

Traffic Lane Flows

Lane	Scenario 2: 2025 Base PM
Junction: Unnamed Junction	
1/1 (with short)	925(In) 398(Out)
1/2 (short)	527
2/1	224
2/2	253
3/1 (short)	225
3/2 (with short)	466(In) 241(Out)
4/1	161
4/2	247
4/3	230
5/1	367
5/2	360
6/1	1097
6/2	989
7/1	609
7/2	643
8/1	1021
8/2	708
9/1	806
9/2	460
10/1	284
10/2	276
11/1	319
12/1	834
13/1	929
14/1	706
15/1	445
16/1	528
16/2	633
17/1	339
17/2	461
18/1	480
18/2	273
19/1	319
20/1	929

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Middleton Rd N Lane 1)	This lane uses a directly entered Saturation Flow						1871	1871
1/2 (Middleton Rd N Lane 2)	This lane uses a directly entered Saturation Flow						1871	1871
2/1 (M62 J19 E off slip Lane 1)	This lane uses a directly entered Saturation Flow						1829	1829
2/2 (M62 J19 E off slip Lane 2)	This lane uses a directly entered Saturation Flow						1963	1963
3/1 (Middleton Rd S Lane 1)	This lane uses a directly entered Saturation Flow						1854	1854
3/2 (Middleton Rd S Lane 2)	This lane uses a directly entered Saturation Flow						1854	1854
4/1 (M62 J19 W off slip Lane 1)	This lane uses a directly entered Saturation Flow						1919	1919
4/2 (M62 J19 W off slip Lane 2)	This lane uses a directly entered Saturation Flow						2063	2063
4/3 (M62 J19 W off slip Lane 3)	This lane uses a directly entered Saturation Flow						2063	2063
5/1 (Access Rd Lane 1)	This lane uses a directly entered Saturation Flow						1929	1929
5/2 (Access Rd Lane 2)	This lane uses a directly entered Saturation Flow						2062	2062
6/1	This lane uses a directly entered Saturation Flow						2120	2120
6/2	This lane uses a directly entered Saturation Flow						2120	2120
7/1	This lane uses a directly entered Saturation Flow						2065	2065
7/2	This lane uses a directly entered Saturation Flow						2205	2205
8/1	This lane uses a directly entered Saturation Flow						2210	2210
8/2	This lane uses a directly entered Saturation Flow						2210	2210
9/1	This lane uses a directly entered Saturation Flow						2140	2140
9/2	This lane uses a directly entered Saturation Flow						2140	2140
10/1	This lane uses a directly entered Saturation Flow						1985	1985
10/2	This lane uses a directly entered Saturation Flow						1932	1932
11/1	This lane uses a directly entered Saturation Flow						1995	1995
12/1	Infinite Saturation Flow						Inf	Inf
13/1	This lane uses a directly entered Saturation Flow						1966	1966
14/1	Infinite Saturation Flow						Inf	Inf
15/1	Infinite Saturation Flow						Inf	Inf
16/1	This lane uses a directly entered Saturation Flow						1985	1985
16/2	This lane uses a directly entered Saturation Flow						2119	2119
17/1	This lane uses a directly entered Saturation Flow						1998	1998
17/2	This lane uses a directly entered Saturation Flow						2134	2134
18/1	This lane uses a directly entered Saturation Flow						2010	2010

Full Input Data And Results

18/2	This lane uses a directly entered Saturation Flow	2146	2146
19/1	Infinite Saturation Flow	Inf	Inf
20/1	Infinite Saturation Flow	Inf	Inf

Scenario 3: '2040 DM AM' (FG3: '2040 DM AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	598	274	387	9	1268
	B	355	0	256	0	355	966
	C	229	228	0	433	224	1114
	D	403	0	100	0	226	729
	E	12	952	174	163	0	1301
	Tot.	999	1778	804	983	814	5378

Traffic Lane Flows

Lane	Scenario 3: 2040 DM AM
Junction: Unnamed Junction	
1/1 (with short)	1268(In) 604(Out)
1/2 (short)	664
2/1	419
2/2	547
3/1 (short)	555
3/2 (with short)	1114(In) 559(Out)
4/1	226
4/2	403
4/3	100
5/1	783
5/2	518
6/1	1815
6/2	1070
7/1	486
7/2	621
8/1	1064
8/2	1009
9/1	1269
9/2	1114
10/1	588
10/2	812
11/1	999
12/1	1778
13/1	804
14/1	983
15/1	814
16/1	771
16/2	846
17/1	541
17/2	728
18/1	987
18/2	328
19/1	999
20/1	804

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Middleton Rd N Lane 1)	This lane uses a directly entered Saturation Flow						1871	1871
1/2 (Middleton Rd N Lane 2)	This lane uses a directly entered Saturation Flow						1871	1871
2/1 (M62 J19 E off slip Lane 1)	This lane uses a directly entered Saturation Flow						1829	1829
2/2 (M62 J19 E off slip Lane 2)	This lane uses a directly entered Saturation Flow						1963	1963
3/1 (Middleton Rd S Lane 1)	This lane uses a directly entered Saturation Flow						1854	1854
3/2 (Middleton Rd S Lane 2)	This lane uses a directly entered Saturation Flow						1854	1854
4/1 (M62 J19 W off slip Lane 1)	This lane uses a directly entered Saturation Flow						1919	1919
4/2 (M62 J19 W off slip Lane 2)	This lane uses a directly entered Saturation Flow						2063	2063
4/3 (M62 J19 W off slip Lane 3)	This lane uses a directly entered Saturation Flow						2063	2063
5/1 (Access Rd Lane 1)	This lane uses a directly entered Saturation Flow						1929	1929
5/2 (Access Rd Lane 2)	This lane uses a directly entered Saturation Flow						2062	2062
6/1	This lane uses a directly entered Saturation Flow						2120	2120
6/2	This lane uses a directly entered Saturation Flow						2120	2120
7/1	This lane uses a directly entered Saturation Flow						2065	2065
7/2	This lane uses a directly entered Saturation Flow						2205	2205
8/1	This lane uses a directly entered Saturation Flow						2210	2210
8/2	This lane uses a directly entered Saturation Flow						2210	2210
9/1	This lane uses a directly entered Saturation Flow						2140	2140
9/2	This lane uses a directly entered Saturation Flow						2140	2140
10/1	This lane uses a directly entered Saturation Flow						1985	1985
10/2	This lane uses a directly entered Saturation Flow						1932	1932
11/1	This lane uses a directly entered Saturation Flow						1995	1995
12/1	Infinite Saturation Flow						Inf	Inf
13/1	This lane uses a directly entered Saturation Flow						1966	1966
14/1	Infinite Saturation Flow						Inf	Inf
15/1	Infinite Saturation Flow						Inf	Inf
16/1	This lane uses a directly entered Saturation Flow						1985	1985
16/2	This lane uses a directly entered Saturation Flow						2119	2119
17/1	This lane uses a directly entered Saturation Flow						1998	1998
17/2	This lane uses a directly entered Saturation Flow						2134	2134
18/1	This lane uses a directly entered Saturation Flow						2010	2010

Full Input Data And Results

18/2	This lane uses a directly entered Saturation Flow	2146	2146
19/1	Infinite Saturation Flow	Inf	Inf
20/1	Infinite Saturation Flow	Inf	Inf

Scenario 4: '2040 DM PM' (FG4: '2040 DM PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	249	190	208	0	647
	B	469	0	204	0	469	1142
	C	171	252	0	245	72	740
	D	396	0	715	0	453	1564
	E	2	433	170	144	0	749
	Tot.	1038	934	1279	597	994	4842

Traffic Lane Flows

Lane	Scenario 4: 2040 DM PM
Junction: Unnamed Junction	
1/1 (with short)	647(In) 321(Out)
1/2 (short)	326
2/1	547
2/2	595
3/1 (short)	493
3/2 (with short)	740(In) 247(Out)
4/1	453
4/2	424
4/3	687
5/1	450
5/2	299
6/1	1203
6/2	1158
7/1	673
7/2	754
8/1	1626
8/2	943
9/1	1274
9/2	756
10/1	541
10/2	892
11/1	1038
12/1	934
13/1	1279
14/1	597
15/1	994
16/1	728
16/2	986
17/1	613
17/2	677
18/1	1316
18/2	687
19/1	1038
20/1	1279

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Middleton Rd N Lane 1)	This lane uses a directly entered Saturation Flow						1871	1871
1/2 (Middleton Rd N Lane 2)	This lane uses a directly entered Saturation Flow						1871	1871
2/1 (M62 J19 E off slip Lane 1)	This lane uses a directly entered Saturation Flow						1829	1829
2/2 (M62 J19 E off slip Lane 2)	This lane uses a directly entered Saturation Flow						1963	1963
3/1 (Middleton Rd S Lane 1)	This lane uses a directly entered Saturation Flow						1854	1854
3/2 (Middleton Rd S Lane 2)	This lane uses a directly entered Saturation Flow						1854	1854
4/1 (M62 J19 W off slip Lane 1)	This lane uses a directly entered Saturation Flow						1919	1919
4/2 (M62 J19 W off slip Lane 2)	This lane uses a directly entered Saturation Flow						2063	2063
4/3 (M62 J19 W off slip Lane 3)	This lane uses a directly entered Saturation Flow						2063	2063
5/1 (Access Rd Lane 1)	This lane uses a directly entered Saturation Flow						1929	1929
5/2 (Access Rd Lane 2)	This lane uses a directly entered Saturation Flow						2062	2062
6/1	This lane uses a directly entered Saturation Flow						2120	2120
6/2	This lane uses a directly entered Saturation Flow						2120	2120
7/1	This lane uses a directly entered Saturation Flow						2065	2065
7/2	This lane uses a directly entered Saturation Flow						2205	2205
8/1	This lane uses a directly entered Saturation Flow						2210	2210
8/2	This lane uses a directly entered Saturation Flow						2210	2210
9/1	This lane uses a directly entered Saturation Flow						2140	2140
9/2	This lane uses a directly entered Saturation Flow						2140	2140
10/1	This lane uses a directly entered Saturation Flow						1985	1985
10/2	This lane uses a directly entered Saturation Flow						1932	1932
11/1	This lane uses a directly entered Saturation Flow						1995	1995
12/1	Infinite Saturation Flow						Inf	Inf
13/1	This lane uses a directly entered Saturation Flow						1966	1966
14/1	Infinite Saturation Flow						Inf	Inf
15/1	Infinite Saturation Flow						Inf	Inf
16/1	This lane uses a directly entered Saturation Flow						1985	1985
16/2	This lane uses a directly entered Saturation Flow						2119	2119
17/1	This lane uses a directly entered Saturation Flow						1998	1998
17/2	This lane uses a directly entered Saturation Flow						2134	2134
18/1	This lane uses a directly entered Saturation Flow						2010	2010

Full Input Data And Results

18/2	This lane uses a directly entered Saturation Flow	2146	2146
19/1	Infinite Saturation Flow	Inf	Inf
20/1	Infinite Saturation Flow	Inf	Inf

Scenario 5: '2040 DS AM' (FG5: '2040 DS AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	598	274	387	9	1268
	B	355	0	257	0	355	967
	C	233	228	0	433	225	1119
	D	403	0	101	0	226	730
	E	12	952	175	163	0	1302
	Tot.	1003	1778	807	983	815	5386

Traffic Lane Flows

Lane	Scenario 5: 2040 DS AM
Junction: Unnamed Junction	
1/1 (with short)	1268(In) 615(Out)
1/2 (short)	653
2/1	428
2/2	539
3/1 (short)	583
3/2 (with short)	1119(In) 536(Out)
4/1	226
4/2	417
4/3	87
5/1	755
5/2	547
6/1	1847
6/2	1040
7/1	476
7/2	633
8/1	1093
8/2	983
9/1	1442
9/2	946
10/1	589
10/2	816
11/1	1003
12/1	1778
13/1	807
14/1	983
15/1	815
16/1	775
16/2	844
17/1	615
17/2	654
18/1	1023
18/2	297
19/1	1003
20/1	807

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Middleton Rd N Lane 1)	This lane uses a directly entered Saturation Flow						1871	1871
1/2 (Middleton Rd N Lane 2)	This lane uses a directly entered Saturation Flow						1871	1871
2/1 (M62 J19 E off slip Lane 1)	This lane uses a directly entered Saturation Flow						1829	1829
2/2 (M62 J19 E off slip Lane 2)	This lane uses a directly entered Saturation Flow						1963	1963
3/1 (Middleton Rd S Lane 1)	This lane uses a directly entered Saturation Flow						1854	1854
3/2 (Middleton Rd S Lane 2)	This lane uses a directly entered Saturation Flow						1854	1854
4/1 (M62 J19 W off slip Lane 1)	This lane uses a directly entered Saturation Flow						1919	1919
4/2 (M62 J19 W off slip Lane 2)	This lane uses a directly entered Saturation Flow						2063	2063
4/3 (M62 J19 W off slip Lane 3)	This lane uses a directly entered Saturation Flow						2063	2063
5/1 (Access Rd Lane 1)	This lane uses a directly entered Saturation Flow						1929	1929
5/2 (Access Rd Lane 2)	This lane uses a directly entered Saturation Flow						2062	2062
6/1	This lane uses a directly entered Saturation Flow						2120	2120
6/2	This lane uses a directly entered Saturation Flow						2120	2120
7/1	This lane uses a directly entered Saturation Flow						2065	2065
7/2	This lane uses a directly entered Saturation Flow						2205	2205
8/1	This lane uses a directly entered Saturation Flow						2210	2210
8/2	This lane uses a directly entered Saturation Flow						2210	2210
9/1	This lane uses a directly entered Saturation Flow						2140	2140
9/2	This lane uses a directly entered Saturation Flow						2140	2140
10/1	This lane uses a directly entered Saturation Flow						1985	1985
10/2	This lane uses a directly entered Saturation Flow						1932	1932
11/1	This lane uses a directly entered Saturation Flow						1995	1995
12/1	Infinite Saturation Flow						Inf	Inf
13/1	This lane uses a directly entered Saturation Flow						1966	1966
14/1	Infinite Saturation Flow						Inf	Inf
15/1	Infinite Saturation Flow						Inf	Inf
16/1	This lane uses a directly entered Saturation Flow						1985	1985
16/2	This lane uses a directly entered Saturation Flow						2119	2119
17/1	This lane uses a directly entered Saturation Flow						1998	1998
17/2	This lane uses a directly entered Saturation Flow						2134	2134
18/1	This lane uses a directly entered Saturation Flow						2010	2010

Full Input Data And Results

18/2	This lane uses a directly entered Saturation Flow	2146	2146
19/1	Infinite Saturation Flow	Inf	Inf
20/1	Infinite Saturation Flow	Inf	Inf

Scenario 6: '2040 DS PM' (FG6: '2040 DS PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	249	194	208	0	651
	B	469	0	204	0	469	1142
	C	173	253	0	246	73	745
	D	396	0	715	0	453	1564
	E	2	433	171	144	0	750
	Tot.	1040	935	1284	598	995	4852

Traffic Lane Flows

Lane	Scenario 6: 2040 DS PM
Junction: Unnamed Junction	
1/1 (with short)	1122(In) 462(Out)
1/2 (short)	660
2/1	417
2/2	533
3/1 (short)	355
3/2 (with short)	733(In) 378(Out)
4/1	207
4/2	612
4/3	513
5/1	484
5/2	503
6/1	1449
6/2	1400
7/1	863
7/2	914
8/1	1865
8/2	862
9/1	973
9/2	792
10/1	594
10/2	772
11/1	1157
12/1	1072
13/1	1695
14/1	399
15/1	801
16/1	694
16/2	1033
17/1	459
17/2	573
18/1	1367
18/2	530
19/1	1157
20/1	1695

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Middleton Rd N Lane 1)	This lane uses a directly entered Saturation Flow						1871	1871
1/2 (Middleton Rd N Lane 2)	This lane uses a directly entered Saturation Flow						1871	1871
2/1 (M62 J19 E off slip Lane 1)	This lane uses a directly entered Saturation Flow						1829	1829
2/2 (M62 J19 E off slip Lane 2)	This lane uses a directly entered Saturation Flow						1963	1963
3/1 (Middleton Rd S Lane 1)	This lane uses a directly entered Saturation Flow						1854	1854
3/2 (Middleton Rd S Lane 2)	This lane uses a directly entered Saturation Flow						1854	1854
4/1 (M62 J19 W off slip Lane 1)	This lane uses a directly entered Saturation Flow						1919	1919
4/2 (M62 J19 W off slip Lane 2)	This lane uses a directly entered Saturation Flow						2063	2063
4/3 (M62 J19 W off slip Lane 3)	This lane uses a directly entered Saturation Flow						2063	2063
5/1 (Access Rd Lane 1)	This lane uses a directly entered Saturation Flow						1929	1929
5/2 (Access Rd Lane 2)	This lane uses a directly entered Saturation Flow						2062	2062
6/1	This lane uses a directly entered Saturation Flow						2120	2120
6/2	This lane uses a directly entered Saturation Flow						2120	2120
7/1	This lane uses a directly entered Saturation Flow						2065	2065
7/2	This lane uses a directly entered Saturation Flow						2205	2205
8/1	This lane uses a directly entered Saturation Flow						2210	2210
8/2	This lane uses a directly entered Saturation Flow						2210	2210
9/1	This lane uses a directly entered Saturation Flow						2140	2140
9/2	This lane uses a directly entered Saturation Flow						2140	2140
10/1	This lane uses a directly entered Saturation Flow						1985	1985
10/2	This lane uses a directly entered Saturation Flow						1932	1932
11/1	This lane uses a directly entered Saturation Flow						1995	1995
12/1	Infinite Saturation Flow						Inf	Inf
13/1	This lane uses a directly entered Saturation Flow						1966	1966
14/1	Infinite Saturation Flow						Inf	Inf
15/1	Infinite Saturation Flow						Inf	Inf
16/1	This lane uses a directly entered Saturation Flow						1985	1985
16/2	This lane uses a directly entered Saturation Flow						2119	2119
17/1	This lane uses a directly entered Saturation Flow						1998	1998
17/2	This lane uses a directly entered Saturation Flow						2134	2134
18/1	This lane uses a directly entered Saturation Flow						2010	2010

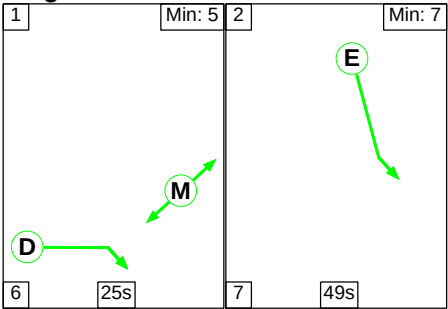
Full Input Data And Results

18/2	This lane uses a directly entered Saturation Flow	2146	2146
19/1	Infinite Saturation Flow	Inf	Inf
20/1	Infinite Saturation Flow	Inf	Inf

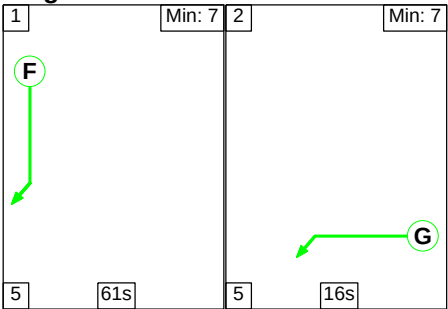
Scenario 1: '2025 Base AM' (FG1: '2025 Base AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

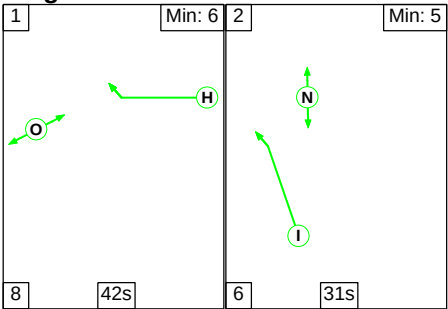
Stage Stream: 1



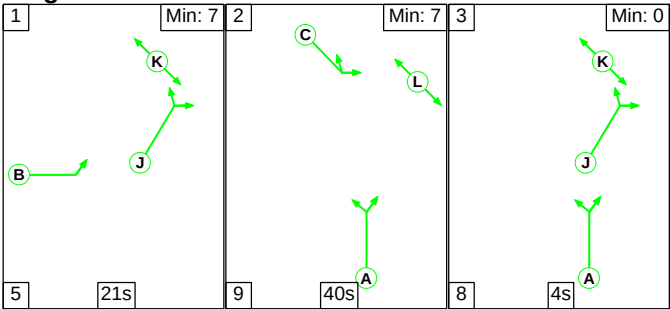
Stage Stream: 2



Stage Stream: 3

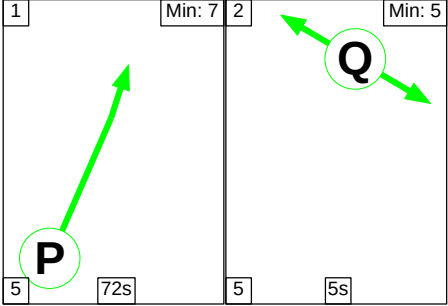


Stage Stream: 4

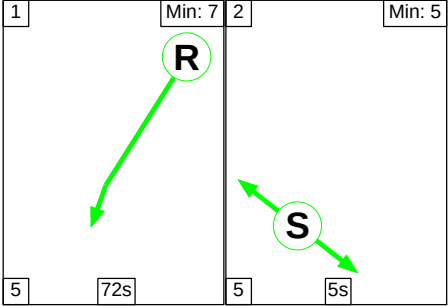


Full Input Data And Results

Stage Stream: 5



Stage Stream: 6



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	25	49
Change Point	0	31

Stage Stream: 2

Stage	1	2
Duration	61	16
Change Point	59	38

Stage Stream: 3

Stage	1	2
Duration	42	31
Change Point	37	0

Stage Stream: 4

Stage	1	2	3
Duration	21	40	4
Change Point	65	4	53

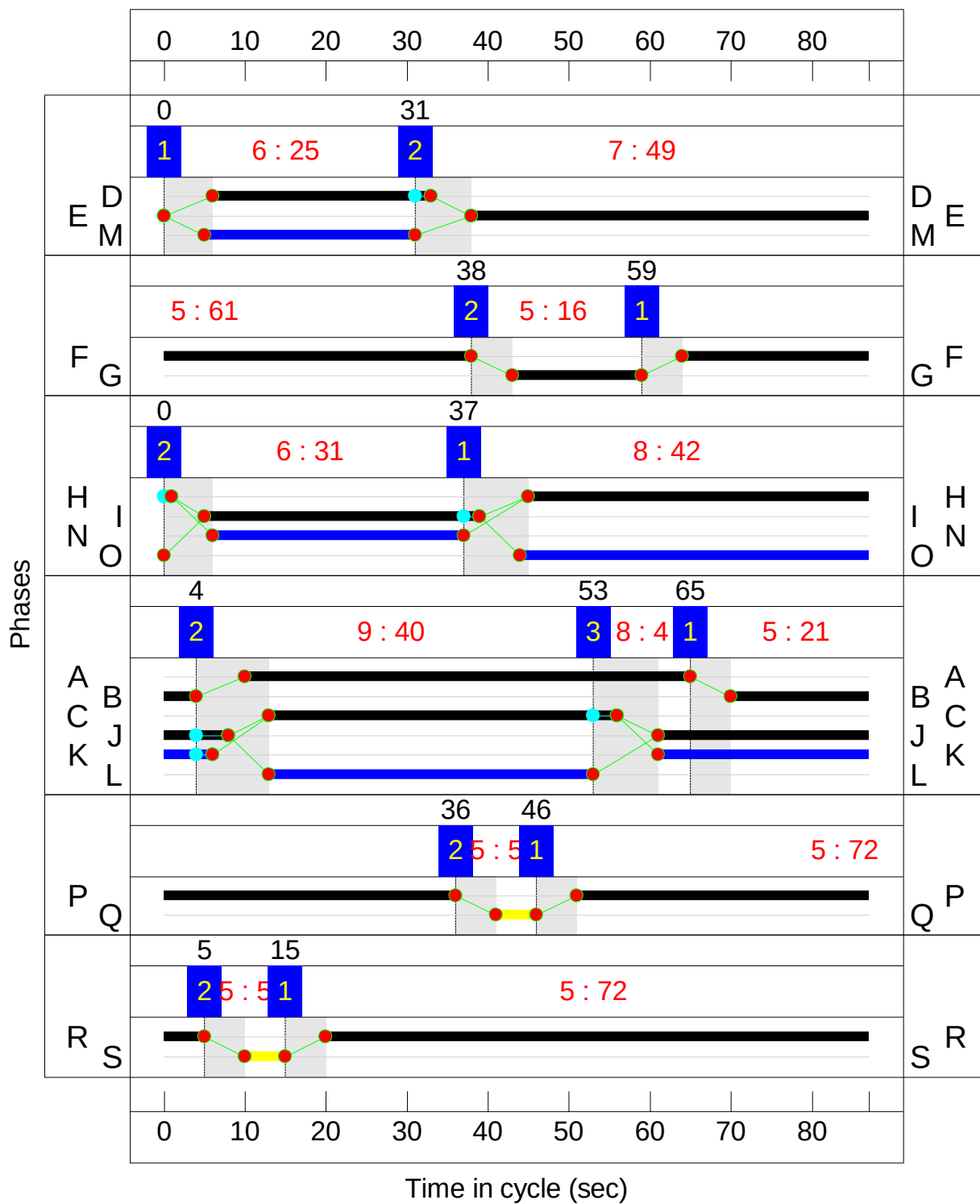
Stage Stream: 5

Stage	1	2
Duration	72	5
Change Point	46	36

Stage Stream: 6

Signal Timings Diagram

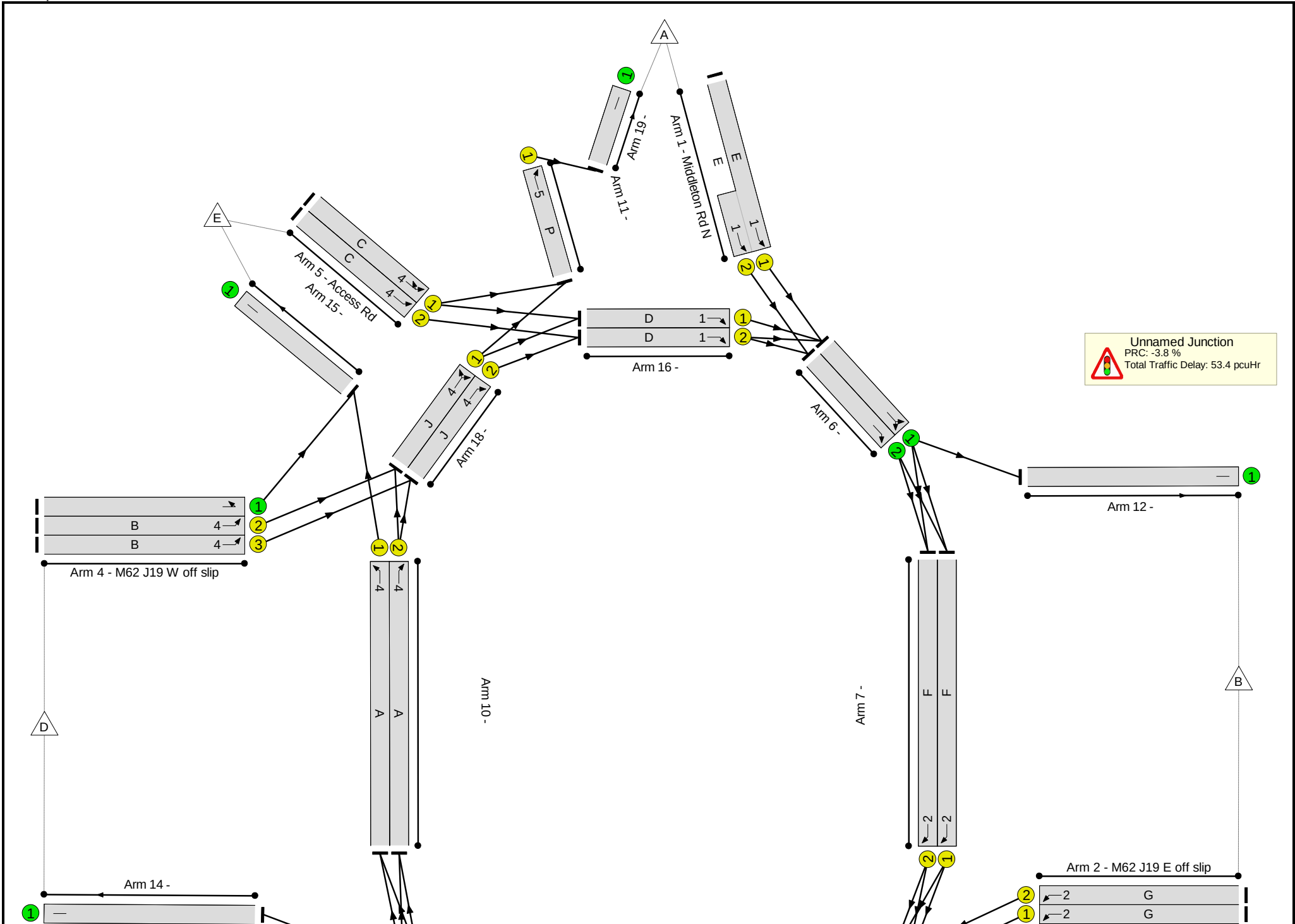
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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: Heywood Interchange	-	-	N/A	-	-		-	-	-	-	-	-	93.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	93.4%
1/1+1/2	Middleton Rd N Ahead	U	1	N/A	E		1	49	-	1083	1871:1871	419+762	91.7 : 91.7%
2/1	M62 J19 E off slip Left	U	2	N/A	G		1	16	-	163	1829	357	45.6%
2/2	M62 J19 E off slip Left	U	2	N/A	G		1	16	-	187	1963	384	48.8%
3/2+3/1	Middleton Rd S Ahead	U	3	N/A	I		1	34	-	722	1854:1854	442+511	75.7 : 75.7%
4/1	M62 J19 W off slip U-Turn	U	N/A	N/A	-		-	-	-	261	1919	1919	13.6%
4/2	M62 J19 W off slip Left	U	4	N/A	B		1	21	-	120	2063	522	23.0%
4/3	M62 J19 W off slip Left	U	4	N/A	B		1	21	-	120	2063	522	23.0%
5/1	Access Rd U-Turn Ahead	U	4	N/A	C		1	43	-	516	1929	976	52.9%
5/2	Access Rd Ahead	U	4	N/A	C		1	43	-	468	2062	1043	44.9%
6/1	Ahead Left	U	N/A	N/A	-		-	-	-	1283	2120	2120	60.5%
6/2	Ahead	U	N/A	N/A	-		-	-	-	998	2120	2120	47.1%
7/1	Ahead	U	2	N/A	F		1	61	-	530	2065	1472	36.0%
7/2	Ahead	U	2	N/A	F		1	61	-	649	2205	1571	41.3%
8/1	Ahead Right	U	N/A	N/A	-		-	-	-	773	2210	2210	35.0%
8/2	Right	U	N/A	N/A	-		-	-	-	756	2210	2210	34.2%
9/1	Ahead Left	U	N/A	N/A	-		-	-	-	1158	2140	2140	54.1%
9/2	Ahead	U	N/A	N/A	-		-	-	-	517	2140	2140	24.2%
10/1	Left	U	4	N/A	A		1	55	-	308	1985	1278	24.1%

Full Input Data And Results

10/2	Ahead	U	4	N/A	A		1	55	-	265	1932	1244	21.3%
11/1	Ahead	U	5	N/A	P		1	72	-	291	1995	1674	17.4%
12/1		U	N/A	N/A	-		-	-	-	1102	Inf	Inf	0.0%
13/1	Ahead	U	6	N/A	R		1	72	-	576	1966	1650	34.9%
14/1		U	N/A	N/A	-		-	-	-	1102	Inf	Inf	0.0%
15/1		U	N/A	N/A	-		-	-	-	569	Inf	Inf	0.0%
16/1	Right	U	1	N/A	D		1	27	-	561	1985	639	87.8%
16/2	Right	U	1	N/A	D		1	27	-	637	2119	682	93.4%
17/1	Right	U	3	N/A	H		1	43	-	430	1998	1010	42.6%
17/2	Right	U	3	N/A	H		1	43	-	523	2134	1079	48.5%
18/1	Left Right	U	4	N/A	J		1	34	-	336	2010	809	41.6%
18/2	Right	U	4	N/A	J		1	34	-	169	2146	863	19.6%
19/1		U	N/A	N/A	-		-	-	-	291	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	576	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: Heywood Interchange	-	-	0	0	0	30.5	22.9	0.0	53.4	-	-	-	-
Unnamed Junction	-	-	0	0	0	30.5	22.9	0.0	53.4	-	-	-	-
1/1+1/2	1083	1083	-	-	-	4.4	5.0	-	9.4	31.2	20.1	5.0	25.1
2/1	163	163	-	-	-	1.4	0.4	-	1.8	40.1	3.4	0.4	3.9
2/2	187	187	-	-	-	1.6	0.5	-	2.1	40.3	4.0	0.5	4.5
3/2+3/1	722	722	-	-	-	3.9	1.5	-	5.5	27.3	8.6	1.5	10.2
4/1	261	261	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
4/2	120	120	-	-	-	0.9	0.1	-	1.0	30.3	2.3	0.1	2.4
4/3	120	120	-	-	-	0.9	0.1	-	1.0	30.3	2.3	0.1	2.4
5/1	516	516	-	-	-	2.1	0.6	-	2.6	18.4	8.3	0.6	8.9
5/2	468	468	-	-	-	1.8	0.4	-	2.2	16.9	7.2	0.4	7.6
6/1	1283	1283	-	-	-	1.3	0.8	-	2.0	5.7	23.9	0.8	24.7
6/2	998	998	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
7/1	530	530	-	-	-	0.9	0.3	-	1.2	8.0	6.0	0.3	6.3
7/2	649	649	-	-	-	1.1	0.4	-	1.4	7.9	7.6	0.4	8.0
8/1	773	773	-	-	-	0.0	0.3	-	0.3	1.3	0.0	0.3	0.3
8/2	756	756	-	-	-	0.0	0.3	-	0.3	1.3	5.0	0.3	5.3
9/1	1158	1158	-	-	-	0.3	0.6	-	0.9	2.8	10.6	0.6	11.1
9/2	517	517	-	-	-	0.0	0.2	-	0.2	1.1	0.0	0.2	0.2
10/1	308	308	-	-	-	0.3	0.2	-	0.4	4.9	0.8	0.2	1.0
10/2	265	265	-	-	-	0.3	0.1	-	0.4	5.3	0.8	0.1	0.9
11/1	291	291	-	-	-	0.0	0.1	-	0.1	1.3	0.6	0.1	0.7
12/1	1102	1102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	576	576	-	-	-	0.1	0.3	-	0.3	2.1	0.8	0.3	1.1
14/1	1102	1102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

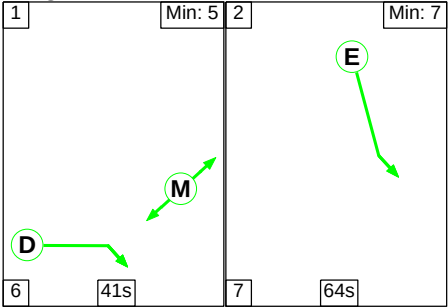
Full Input Data And Results

15/1	569	569	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	561	561	-	-	-	2.5	3.3	-	5.8	37.5	4.8	3.3	8.1
16/2	637	637	-	-	-	3.4	5.7	-	9.0	51.1	15.0	5.7	20.6
17/1	430	430	-	-	-	0.8	0.4	-	1.1	9.6	2.7	0.4	3.0
17/2	523	523	-	-	-	0.8	0.5	-	1.3	8.6	4.8	0.5	5.3
18/1	336	336	-	-	-	1.5	0.4	-	1.9	20.2	5.2	0.4	5.6
18/2	169	169	-	-	-	0.5	0.1	-	0.6	12.5	1.2	0.1	1.3
19/1	291	291	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	576	576	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): -3.8 Total Delay for Signalled Lanes (pcuHr): 24.26 Cycle Time (s): 87 C1 Stream: 2 PRC for Signalled Lanes (%): 84.6 Total Delay for Signalled Lanes (pcuHr): 6.52 Cycle Time (s): 87 C1 Stream: 3 PRC for Signalled Lanes (%): 18.8 Total Delay for Signalled Lanes (pcuHr): 7.87 Cycle Time (s): 87 C1 Stream: 4 PRC for Signalled Lanes (%): 70.2 Total Delay for Signalled Lanes (pcuHr): 10.13 Cycle Time (s): 87 C1 Stream: 5 PRC for Signalled Lanes (%): 417.7 Total Delay for Signalled Lanes (pcuHr): 0.11 Cycle Time (s): 87 C1 Stream: 6 PRC for Signalled Lanes (%): 157.8 Total Delay for Signalled Lanes (pcuHr): 0.33 Cycle Time (s): 87 PRC Over All Lanes (%): -3.8 Total Delay Over All Lanes(pcuHr): 53.37													

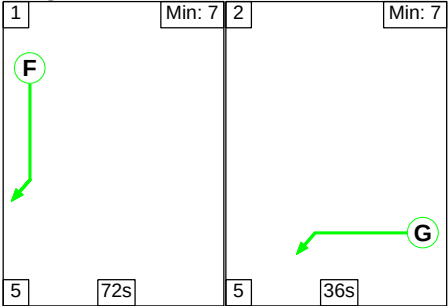
Full Input Data And Results
Scenario 2: '2025 Base PM' (FG2: '2025 Base PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

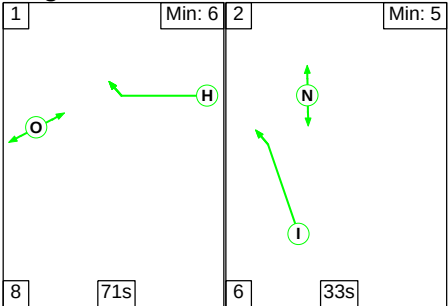
Stage Stream: 1



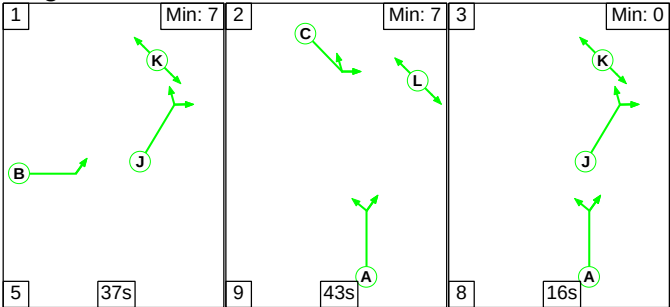
Stage Stream: 2



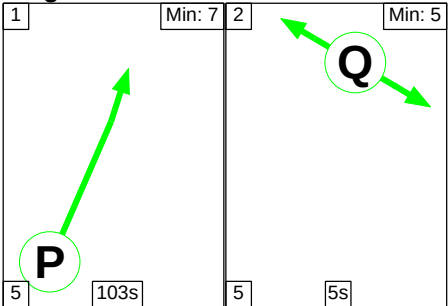
Stage Stream: 3



Stage Stream: 4

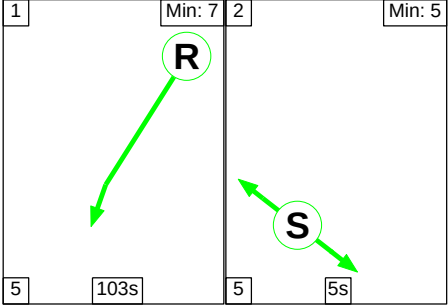


Stage Stream: 5



Full Input Data And Results

Stage Stream: 6



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	41	64
Change Point	0	47

Stage Stream: 2

Stage	1	2
Duration	72	36
Change Point	89	48

Stage Stream: 3

Stage	1	2
Duration	71	33
Change Point	60	21

Stage Stream: 4

Stage	1	2	3
Duration	37	43	16
Change Point	92	16	68

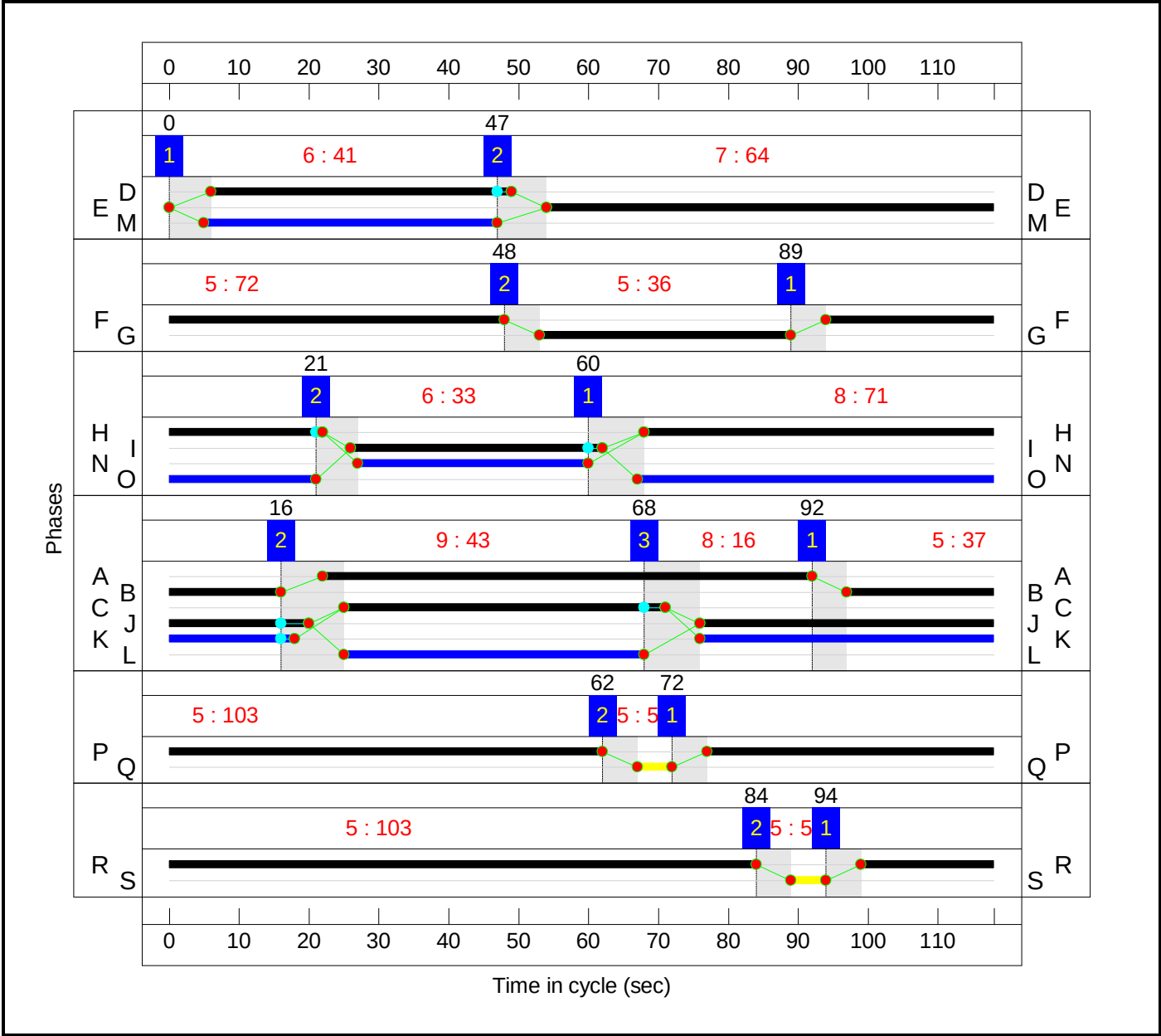
Stage Stream: 5

Stage	1	2
Duration	103	5
Change Point	72	62

Stage Stream: 6

Stage	1	2
Duration	103	5
Change Point	94	84

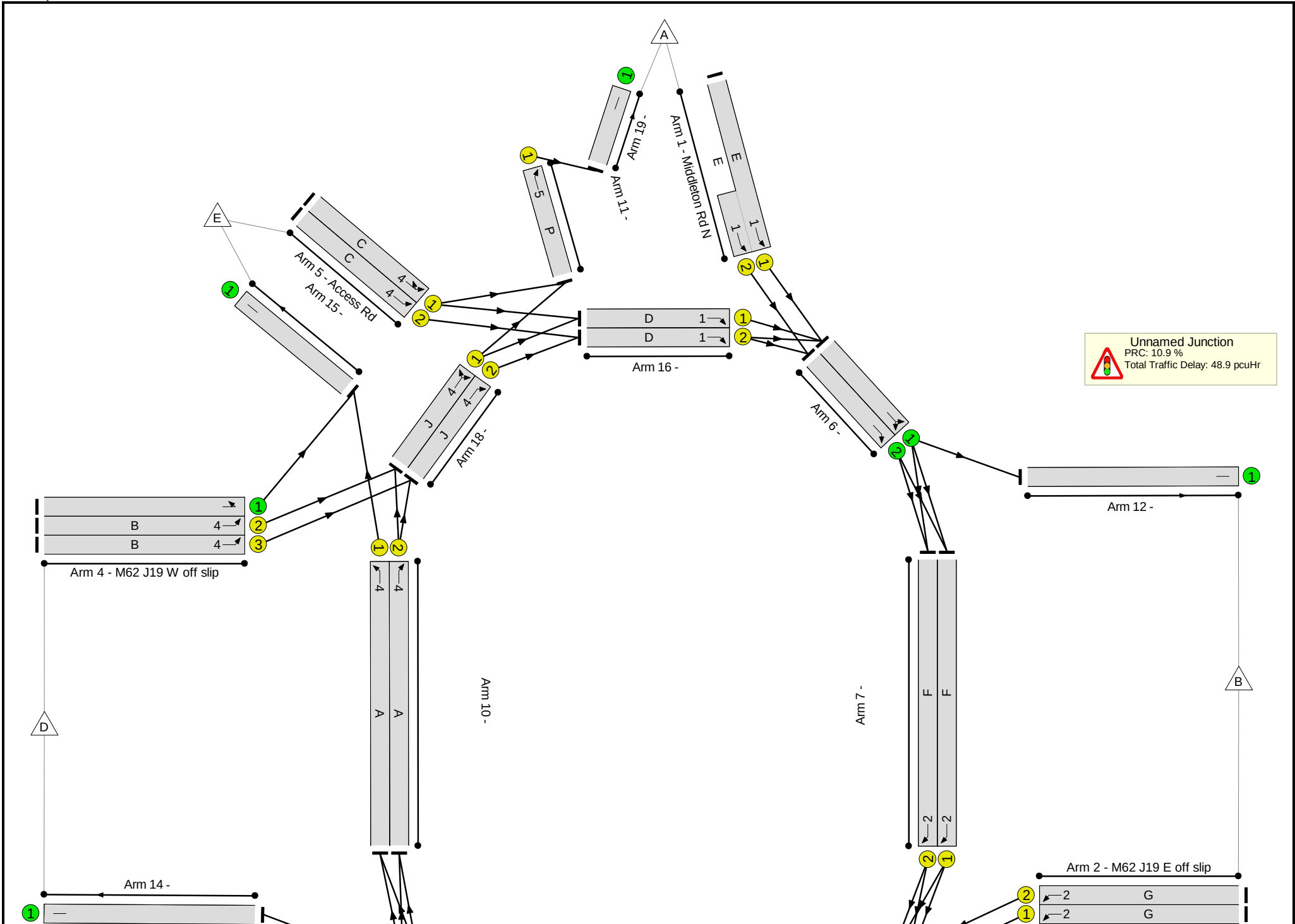
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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: Heywood Interchange	-	-	N/A	-	-		-	-	-	-	-	-	81.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	81.2%
1/1+1/2	Middleton Rd N Ahead	U	1	N/A	E		1	64	-	925	1871:1871	490+649	81.2 : 81.2%
2/1	M62 J19 E off slip Left	U	2	N/A	G		1	36	-	224	1829	574	39.1%
2/2	M62 J19 E off slip Left	U	2	N/A	G		1	36	-	253	1963	616	41.1%
3/2+3/1	Middleton Rd S Ahead	U	3	N/A	I		1	36	-	466	1854:1854	386+361	62.4 : 62.4%
4/1	M62 J19 W off slip U-Turn	U	N/A	N/A	-		-	-	-	161	1919	1919	8.4%
4/2	M62 J19 W off slip Left	U	4	N/A	B		1	37	-	247	2063	664	37.2%
4/3	M62 J19 W off slip Left	U	4	N/A	B		1	37	-	230	2063	664	34.6%
5/1	Access Rd U-Turn Ahead	U	4	N/A	C		1	46	-	367	1929	768	47.8%
5/2	Access Rd Ahead	U	4	N/A	C		1	46	-	360	2062	821	43.8%
6/1	Ahead Left	U	N/A	N/A	-		-	-	-	1097	2120	2120	51.7%
6/2	Ahead	U	N/A	N/A	-		-	-	-	989	2120	2120	46.7%
7/1	Ahead	U	2	N/A	F		1	72	-	609	2065	1277	47.7%
7/2	Ahead	U	2	N/A	F		1	72	-	643	2205	1364	47.1%
8/1	Ahead Right	U	N/A	N/A	-		-	-	-	1021	2210	2210	46.2%
8/2	Right	U	N/A	N/A	-		-	-	-	708	2210	2210	32.0%
9/1	Ahead Left	U	N/A	N/A	-		-	-	-	806	2140	2140	37.7%
9/2	Ahead	U	N/A	N/A	-		-	-	-	460	2140	2140	21.5%
10/1	Left	U	4	N/A	A		1	70	-	284	1985	1194	23.8%

Full Input Data And Results

10/2	Ahead	U	4	N/A	A		1	70	-	276	1932	1162	23.7%
11/1	Ahead	U	5	N/A	P		1	103	-	319	1995	1758	18.1%
12/1		U	N/A	N/A	-		-	-	-	834	Inf	Inf	0.0%
13/1	Ahead	U	6	N/A	R		1	103	-	929	1966	1733	53.6%
14/1		U	N/A	N/A	-		-	-	-	706	Inf	Inf	0.0%
15/1		U	N/A	N/A	-		-	-	-	445	Inf	Inf	0.0%
16/1	Right	U	1	N/A	D		1	43	-	528	1985	740	71.3%
16/2	Right	U	1	N/A	D		1	43	-	633	2119	790	80.1%
17/1	Right	U	3	N/A	H		1	72	-	339	1998	1236	27.4%
17/2	Right	U	3	N/A	H		1	72	-	461	2134	1320	34.9%
18/1	Left Right	U	4	N/A	J		1	62	-	480	2010	1073	44.7%
18/2	Right	U	4	N/A	J		1	62	-	273	2146	1146	23.8%
19/1		U	N/A	N/A	-		-	-	-	319	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	929	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: Heywood Interchange	-	-	0	0	0	35.7	13.2	0.0	48.9	-	-	-	-
Unnamed Junction	-	-	0	0	0	35.7	13.2	0.0	48.9	-	-	-	-
1/1+1/2	925	925	-	-	-	4.8	2.1	-	6.9	26.8	19.6	2.1	21.7
2/1	224	224	-	-	-	2.0	0.3	-	2.3	36.8	5.7	0.3	6.0
2/2	253	253	-	-	-	2.2	0.3	-	2.6	36.9	6.5	0.3	6.8
3/2+3/1	466	466	-	-	-	4.1	0.8	-	4.9	38.2	6.6	0.8	7.5
4/1	161	161	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
4/2	247	247	-	-	-	2.1	0.3	-	2.4	35.1	6.2	0.3	6.5
4/3	230	230	-	-	-	2.0	0.3	-	2.2	34.7	5.8	0.3	6.0
5/1	367	367	-	-	-	2.7	0.5	-	3.1	30.9	8.9	0.5	9.3
5/2	360	360	-	-	-	2.6	0.4	-	3.0	29.8	8.6	0.4	9.0
6/1	1097	1097	-	-	-	0.3	0.5	-	0.8	2.7	10.9	0.5	11.5
6/2	989	989	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
7/1	609	609	-	-	-	1.8	0.5	-	2.3	13.4	9.2	0.5	9.6
7/2	643	643	-	-	-	1.9	0.4	-	2.4	13.4	10.0	0.4	10.5
8/1	1021	1021	-	-	-	0.2	0.4	-	0.7	2.4	11.3	0.4	11.8
8/2	708	708	-	-	-	0.0	0.2	-	0.2	1.2	6.2	0.2	6.4
9/1	806	806	-	-	-	0.1	0.3	-	0.4	1.7	10.8	0.3	11.1
9/2	460	460	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
10/1	284	284	-	-	-	0.2	0.2	-	0.4	4.7	0.6	0.2	0.8
10/2	276	276	-	-	-	0.2	0.2	-	0.4	4.8	0.6	0.2	0.8
11/1	319	319	-	-	-	0.0	0.1	-	0.1	1.3	0.0	0.1	0.1
12/1	834	834	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	929	929	-	-	-	0.2	0.6	-	0.7	2.9	12.3	0.6	12.8
14/1	706	706	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

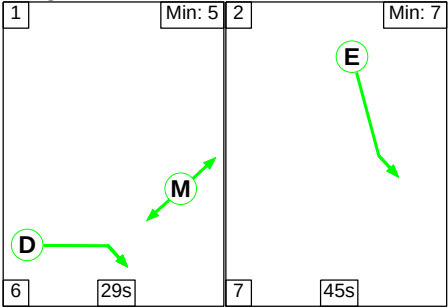
Full Input Data And Results

15/1	445	445	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	528	528	-	-	-	2.6	1.2	-	3.8	26.2	7.7	1.2	9.0
16/2	633	633	-	-	-	3.5	2.0	-	5.5	31.3	11.4	2.0	13.4
17/1	339	339	-	-	-	0.2	0.2	-	0.4	4.5	2.2	0.2	2.4
17/2	461	461	-	-	-	0.5	0.3	-	0.8	6.4	7.1	0.3	7.4
18/1	480	480	-	-	-	1.0	0.4	-	1.4	10.5	4.1	0.4	4.5
18/2	273	273	-	-	-	0.4	0.2	-	0.5	6.7	1.4	0.2	1.6
19/1	319	319	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	929	929	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1Stream: 1 PRC for Signalled Lanes (%)10.9Total Delay for Signalled Lanes (pcuHr)16.23Cycle Time (s)118 C1Stream: 2 PRC for Signalled Lanes (%)88.8Total Delay for Signalled Lanes (pcuHr)9.54Cycle Time (s)118 C1Stream: 3 PRC for Signalled Lanes (%)44.2Total Delay for Signalled Lanes (pcuHr)6.19Cycle Time (s)118 C1Stream: 4 PRC for Signalled Lanes (%)88.4Total Delay for Signalled Lanes (pcuHr)13.40Cycle Time (s)118 C1Stream: 5 PRC for Signalled Lanes (%)396.1Total Delay for Signalled Lanes (pcuHr)0.11Cycle Time (s)118 C1Stream: 6 PRC for Signalled Lanes (%)67.9Total Delay for Signalled Lanes (pcuHr)0.74Cycle Time (s)118 PRC Over All Lanes (%)10.9Total Delay Over All Lanes(pcuHr)48.93													

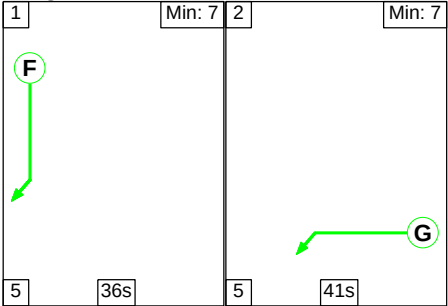
Full Input Data And Results
Scenario 3: '2040 DM AM' (FG3: '2040 DM AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

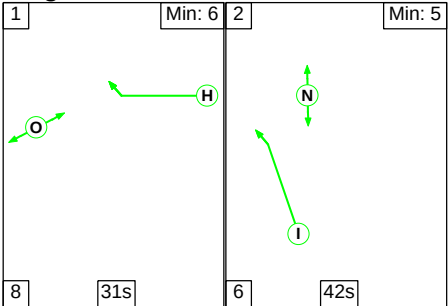
Stage Stream: 1



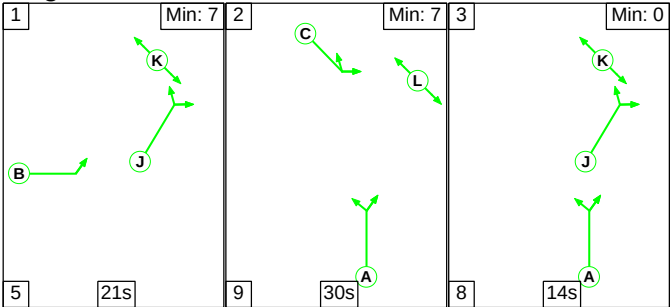
Stage Stream: 2



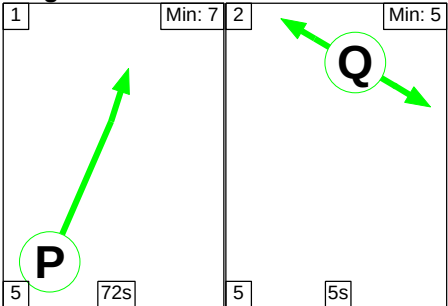
Stage Stream: 3



Stage Stream: 4

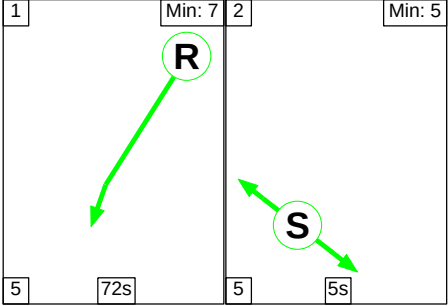


Stage Stream: 5



Full Input Data And Results

Stage Stream: 6



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	29	45
Change Point	69	17

Stage Stream: 2

Stage	1	2
Duration	36	41
Change Point	43	84

Stage Stream: 3

Stage	1	2
Duration	31	42
Change Point	74	26

Stage Stream: 4

Stage	1	2	3
Duration	21	30	14
Change Point	36	62	14

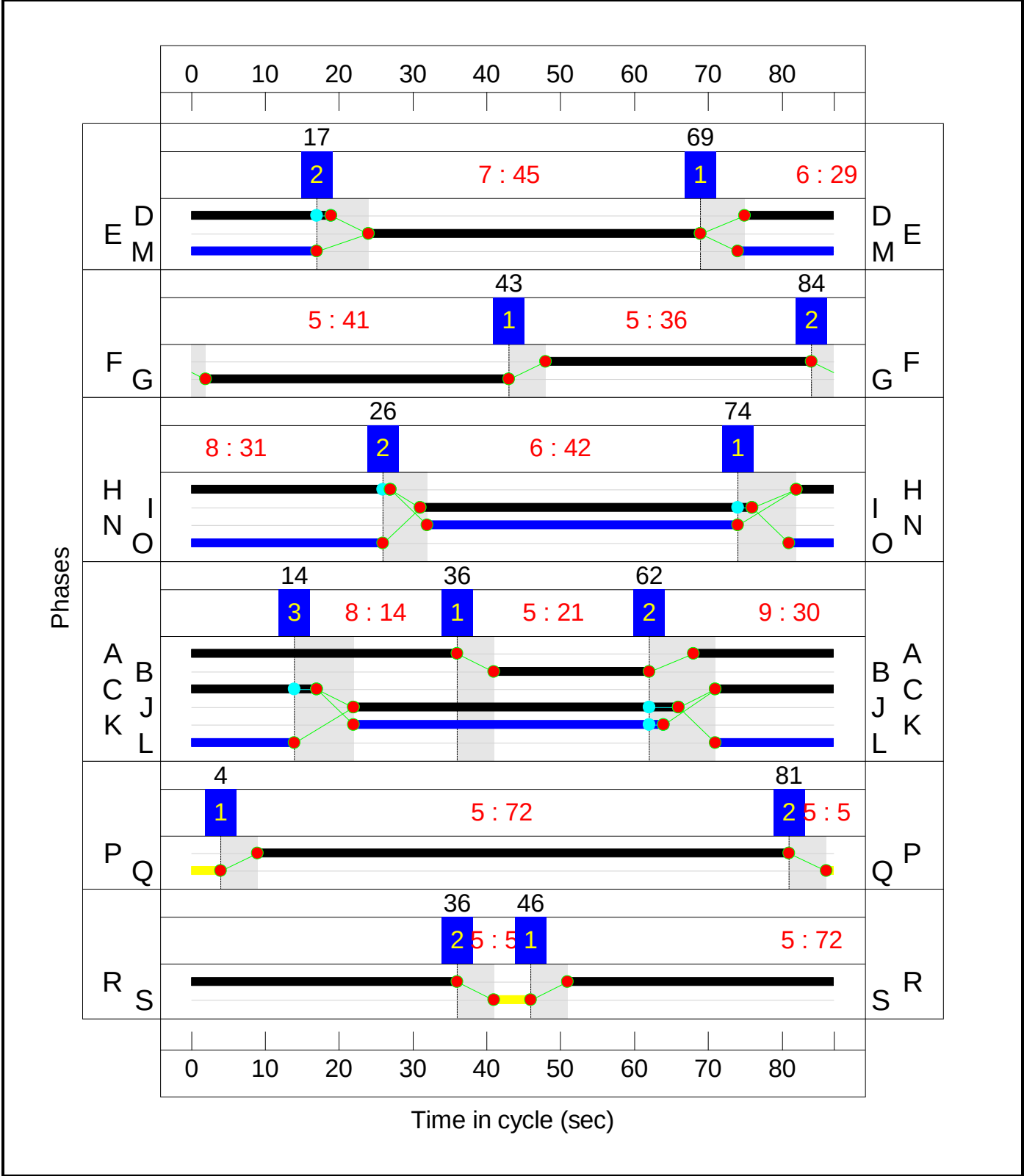
Stage Stream: 5

Stage	1	2
Duration	72	5
Change Point	4	81

Stage Stream: 6

Stage	1	2
Duration	72	5
Change Point	46	36

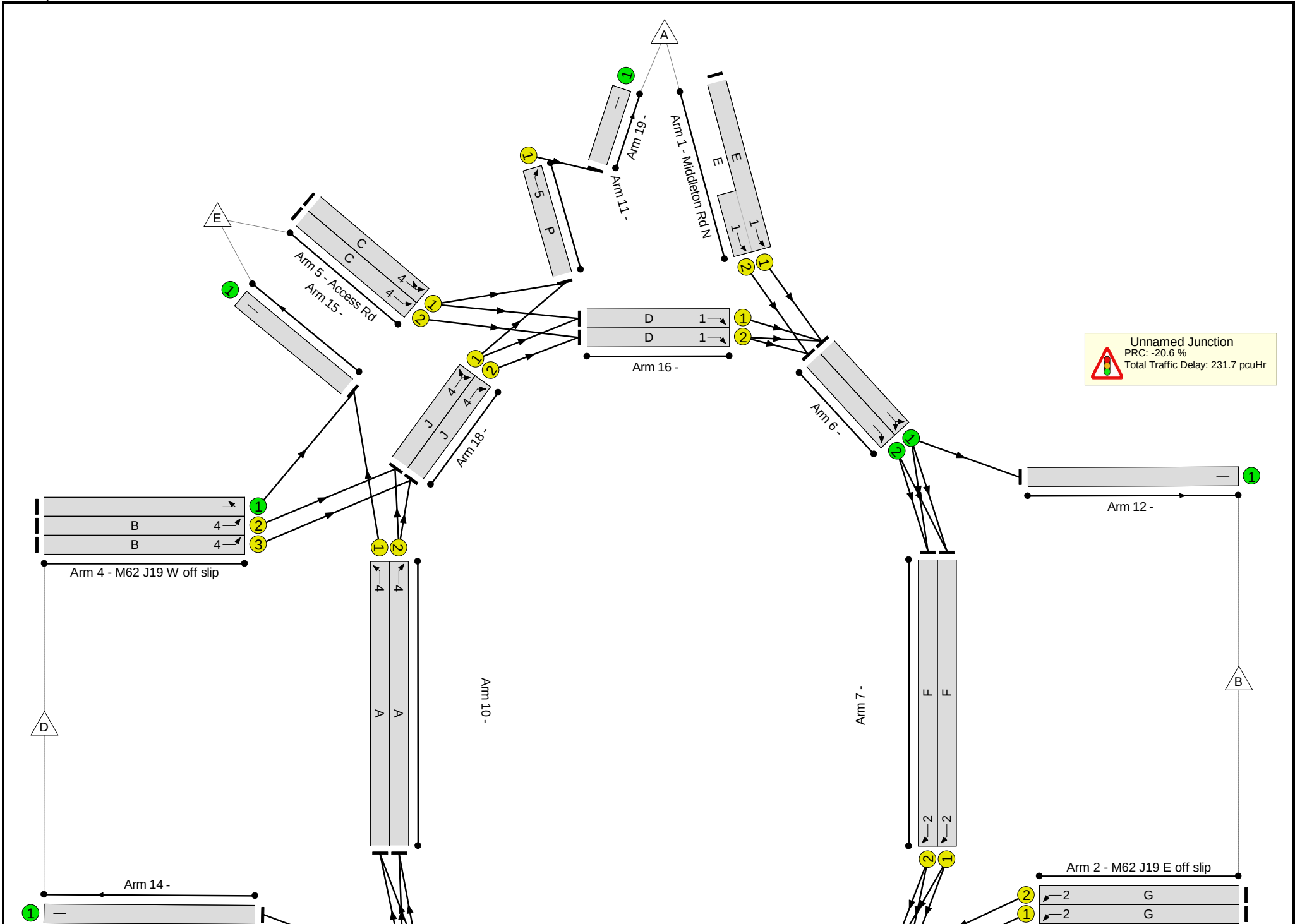
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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: Heywood Interchange	-	-	N/A	-	-		-	-	-	-	-	-	108.5%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	108.5%
1/1+1/2	Middleton Rd N Ahead	U	1	N/A	E		1	45	-	1268	1871:1871	557+612	108.4 : 108.4%
2/1	M62 J19 E off slip Left	U	2	N/A	G		1	41	-	419	1829	883	47.5%
2/2	M62 J19 E off slip Left	U	2	N/A	G		1	41	-	547	1963	948	57.7%
3/2+3/1	Middleton Rd S Ahead	U	3	N/A	I		1	45	-	1114	1854:1854	612+607	91.4 : 91.4%
4/1	M62 J19 W off slip U-Turn	U	N/A	N/A	-		-	-	-	226	1919	1919	11.8%
4/2	M62 J19 W off slip Left	U	4	N/A	B		1	21	-	403	2063	522	77.3%
4/3	M62 J19 W off slip Left	U	4	N/A	B		1	21	-	100	2063	522	19.2%
5/1	Access Rd U-Turn Ahead	U	4	N/A	C		1	33	-	783	1929	754	103.9%
5/2	Access Rd Ahead	U	4	N/A	C		1	33	-	518	2062	806	64.3%
6/1	Ahead Left	U	N/A	N/A	-		-	-	-	1815	2120	2120	78.3%
6/2	Ahead	U	N/A	N/A	-		-	-	-	1070	2120	2120	48.0%
7/1	Ahead	U	2	N/A	F		1	36	-	486	2065	878	52.4%
7/2	Ahead	U	2	N/A	F		1	36	-	621	2205	938	63.3%
8/1	Ahead Right	U	N/A	N/A	-		-	-	-	1064	2210	2210	46.9%
8/2	Right	U	N/A	N/A	-		-	-	-	1009	2210	2210	44.5%
9/1	Ahead Left	U	N/A	N/A	-		-	-	-	1269	2140	2140	57.9%
9/2	Ahead	U	N/A	N/A	-		-	-	-	1114	2140	2140	52.0%
10/1	Left	U	4	N/A	A		1	55	-	588	1985	1278	46.0%

Full Input Data And Results

10/2	Ahead	U	4	N/A	A		1	55	-	812	1932	1244	65.3%
11/1	Ahead	U	5	N/A	P		1	72	-	999	1995	1674	59.7%
12/1		U	N/A	N/A	-		-	-	-	1778	Inf	Inf	0.0%
13/1	Ahead	U	6	N/A	R		1	72	-	804	1966	1650	47.4%
14/1		U	N/A	N/A	-		-	-	-	983	Inf	Inf	0.0%
15/1		U	N/A	N/A	-		-	-	-	814	Inf	Inf	0.0%
16/1	Right	U	1	N/A	D		1	31	-	771	1985	730	101.7%
16/2	Right	U	1	N/A	D		1	31	-	846	2119	779	108.5%
17/1	Right	U	3	N/A	H		1	32	-	541	1998	758	67.9%
17/2	Right	U	3	N/A	H		1	32	-	728	2134	809	89.4%
18/1	Left Right	U	4	N/A	J		1	44	-	987	2010	1040	94.9%
18/2	Right	U	4	N/A	J		1	44	-	328	2146	1110	29.5%
19/1		U	N/A	N/A	-		-	-	-	999	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	804	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: Heywood Interchange	-	-	0	0	0	68.4	163.4	0.0	231.7	-	-	-	-
Unnamed Junction	-	-	0	0	0	68.4	163.4	0.0	231.7	-	-	-	-
1/1+1/2	1268	1169	-	-	-	9.7	55.1	-	64.8	184.0	30.2	55.1	85.3
2/1	419	419	-	-	-	1.8	0.5	-	2.2	19.0	6.8	0.5	7.2
2/2	547	547	-	-	-	2.5	0.7	-	3.1	20.6	9.4	0.7	10.1
3/2+3/1	1114	1114	-	-	-	4.7	4.8	-	9.5	30.8	16.9	4.8	21.8
4/1	226	226	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
4/2	403	403	-	-	-	3.4	1.7	-	5.0	44.9	9.0	1.7	10.6
4/3	100	100	-	-	-	0.7	0.1	-	0.8	29.8	1.9	0.1	2.0
5/1	783	754	-	-	-	7.2	23.1	-	30.2	138.9	19.6	23.1	42.7
5/2	518	518	-	-	-	3.1	0.9	-	4.0	27.8	10.1	0.9	11.0
6/1	1661	1661	-	-	-	2.6	1.8	-	4.4	9.5	33.3	1.8	35.1
6/2	1018	1018	-	-	-	0.0	0.5	-	0.5	1.6	0.0	0.5	0.5
7/1	460	460	-	-	-	2.3	0.5	-	2.8	21.9	8.8	0.5	9.4
7/2	594	594	-	-	-	3.8	0.9	-	4.7	28.3	12.4	0.9	13.2
8/1	1036	1036	-	-	-	0.2	0.4	-	0.6	2.1	12.3	0.4	12.7
8/2	984	984	-	-	-	0.0	0.4	-	0.4	1.5	1.9	0.4	2.3
9/1	1239	1239	-	-	-	0.6	0.7	-	1.3	3.7	13.2	0.7	13.9
9/2	1113	1113	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
10/1	587	587	-	-	-	1.1	0.4	-	1.5	9.1	5.0	0.4	5.5
10/2	812	812	-	-	-	2.7	0.9	-	3.6	16.1	11.2	0.9	12.2
11/1	999	999	-	-	-	0.0	0.7	-	0.8	2.8	21.8	0.7	22.5
12/1	1625	1625	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	782	782	-	-	-	0.1	0.4	-	0.6	2.5	5.5	0.4	6.0
14/1	953	953	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

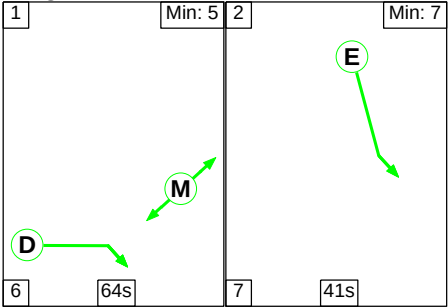
Full Input Data And Results

[illegible]

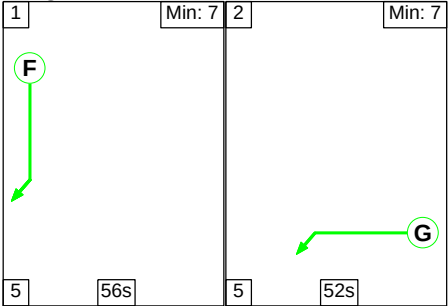
Full Input Data And Results
Scenario 4: '2040 DM PM' (FG4: '2040 DM PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

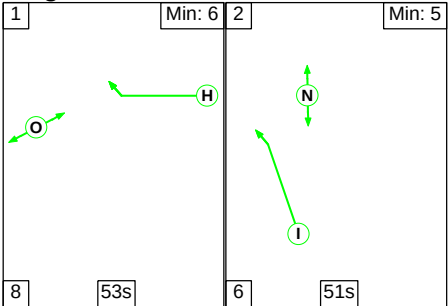
Stage Stream: 1



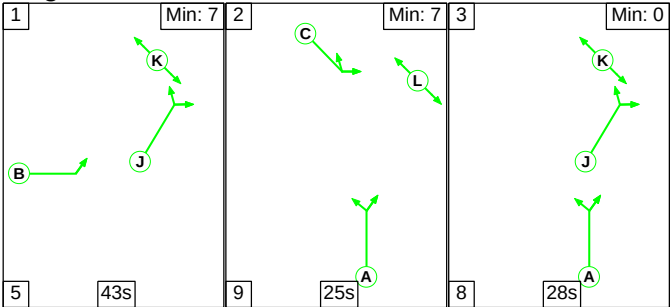
Stage Stream: 2



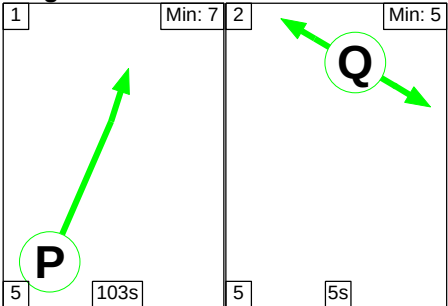
Stage Stream: 3



Stage Stream: 4

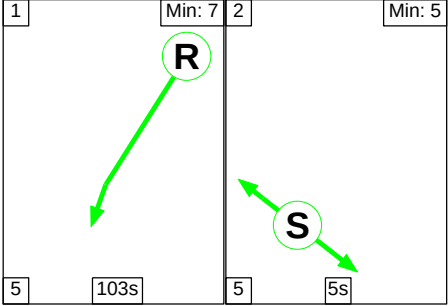


Stage Stream: 5



Full Input Data And Results

Stage Stream: 6



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	64	41
Change Point	28	98

Stage Stream: 2

Stage	1	2
Duration	56	52
Change Point	22	83

Stage Stream: 3

Stage	1	2
Duration	53	51
Change Point	65	8

Stage Stream: 4

Stage	1	2	3
Duration	43	25	28
Change Point	13	61	95

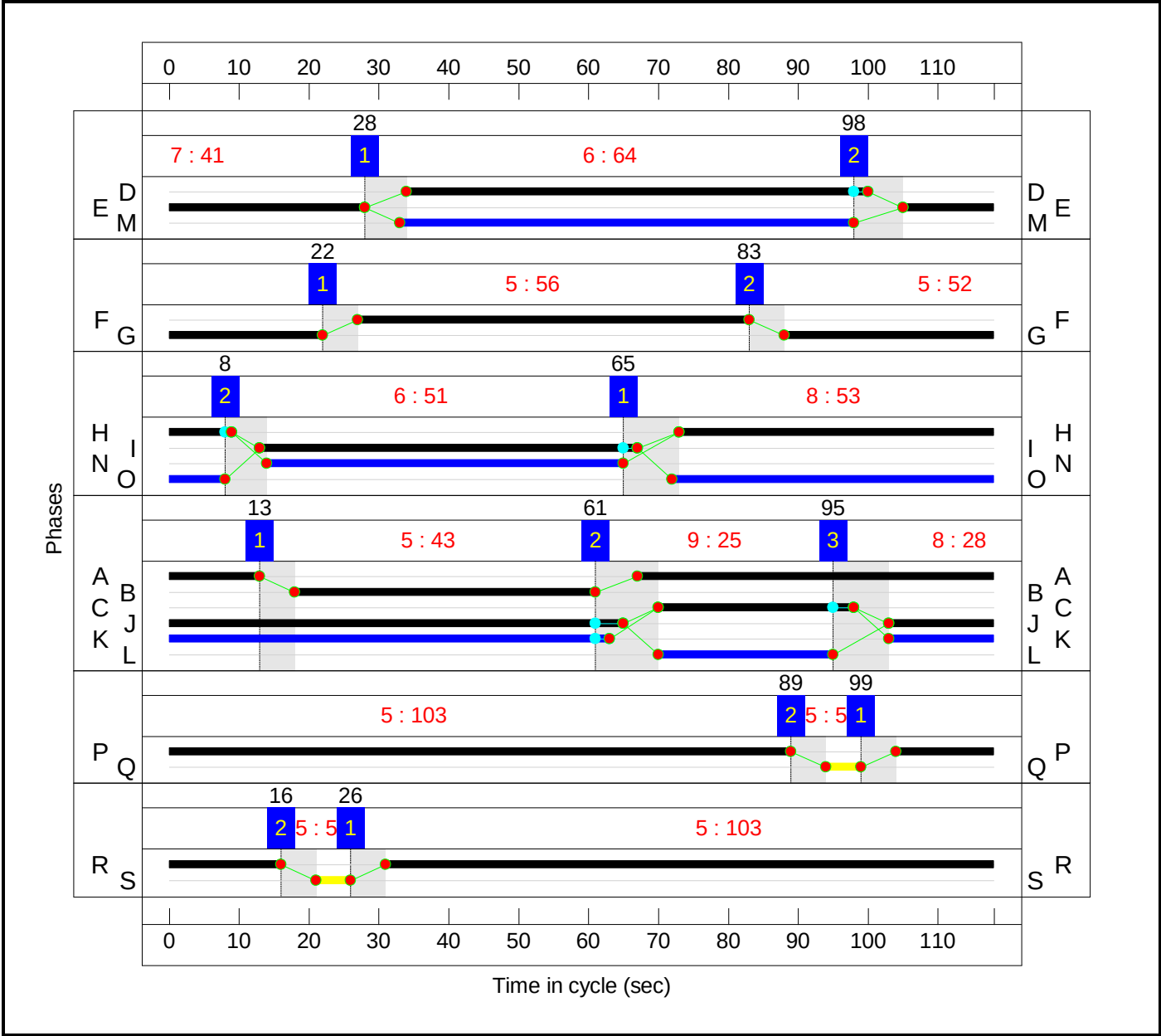
Stage Stream: 5

Stage	1	2
Duration	103	5
Change Point	99	89

Stage Stream: 6

Stage	1	2
Duration	103	5
Change Point	26	16

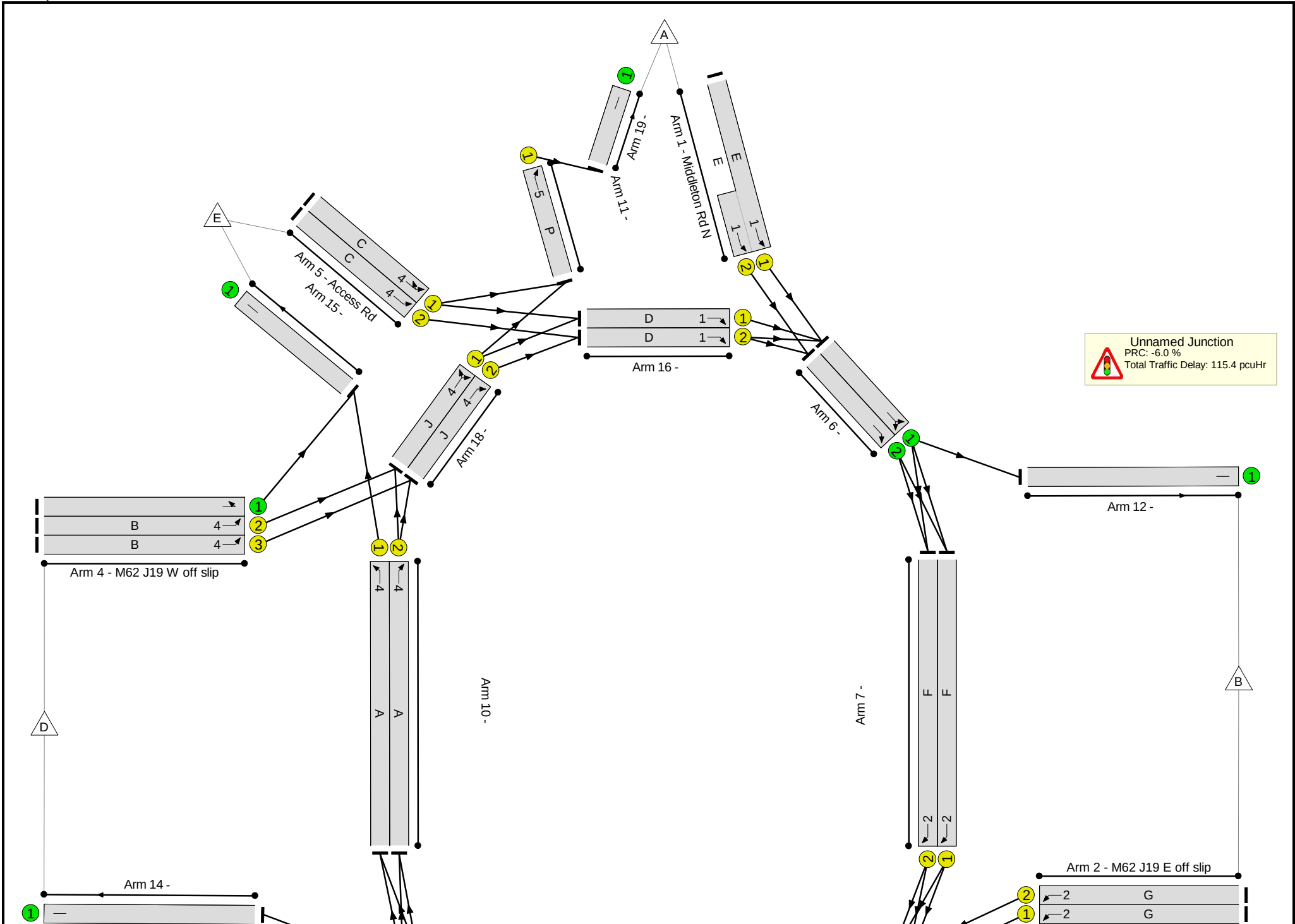
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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: Heywood Interchange	-	-	N/A	-	-		-	-	-	-	-	-	95.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	95.4%
1/1+1/2	Middleton Rd N Ahead	U	1	N/A	E		1	41	-	647	1871:1871	402+408	79.9 : 79.9%
2/1	M62 J19 E off slip Left	U	2	N/A	G		1	52	-	547	1829	822	66.6%
2/2	M62 J19 E off slip Left	U	2	N/A	G		1	52	-	595	1963	882	67.5%
3/2+3/1	Middleton Rd S Ahead	U	3	N/A	I		1	54	-	740	1854:1854	317+633	77.9 : 77.9%
4/1	M62 J19 W off slip U-Turn	U	N/A	N/A	-		-	-	-	453	1919	1919	23.6%
4/2	M62 J19 W off slip Left	U	4	N/A	B		1	43	-	424	2063	769	55.1%
4/3	M62 J19 W off slip Left	U	4	N/A	B		1	43	-	687	2063	769	89.3%
5/1	Access Rd U-Turn Ahead	U	4	N/A	C		1	28	-	450	1929	474	94.9%
5/2	Access Rd Ahead	U	4	N/A	C		1	28	-	299	2062	507	59.0%
6/1	Ahead Left	U	N/A	N/A	-		-	-	-	1203	2120	2120	56.7%
6/2	Ahead	U	N/A	N/A	-		-	-	-	1158	2120	2120	54.6%
7/1	Ahead	U	2	N/A	F		1	56	-	673	2065	997	67.5%
7/2	Ahead	U	2	N/A	F		1	56	-	754	2205	1065	70.8%
8/1	Ahead Right	U	N/A	N/A	-		-	-	-	1626	2210	2210	73.6%
8/2	Right	U	N/A	N/A	-		-	-	-	943	2210	2210	42.7%
9/1	Ahead Left	U	N/A	N/A	-		-	-	-	1274	2140	2140	59.5%
9/2	Ahead	U	N/A	N/A	-		-	-	-	756	2140	2140	35.3%
10/1	Left	U	4	N/A	A		1	64	-	541	1985	1093	49.5%

Full Input Data And Results

10/2	Ahead	U	4	N/A	A		1	64	-	892	1932	1064	83.8%
11/1	Ahead	U	5	N/A	P		1	103	-	1038	1995	1758	59.0%
12/1		U	N/A	N/A	-		-	-	-	934	Inf	Inf	0.0%
13/1	Ahead	U	6	N/A	R		1	103	-	1279	1966	1733	73.8%
14/1		U	N/A	N/A	-		-	-	-	597	Inf	Inf	0.0%
15/1		U	N/A	N/A	-		-	-	-	994	Inf	Inf	0.0%
16/1	Right	U	1	N/A	D		1	66	-	728	1985	1127	64.6%
16/2	Right	U	1	N/A	D		1	66	-	986	2119	1203	82.0%
17/1	Right	U	3	N/A	H		1	54	-	613	1998	931	65.8%
17/2	Right	U	3	N/A	H		1	54	-	677	2134	995	68.1%
18/1	Left Right	U	4	N/A	J		1	80	-	1316	2010	1380	95.4%
18/2	Right	U	4	N/A	J		1	80	-	687	2146	1473	46.6%
19/1		U	N/A	N/A	-		-	-	-	1038	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1279	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: Heywood Interchange	-	-	0	0	0	73.1	42.3	0.0	115.4	-	-	-	-
Unnamed Junction	-	-	0	0	0	73.1	42.3	0.0	115.4	-	-	-	-
1/1+1/2	647	647	-	-	-	5.6	1.9	-	7.5	41.8	13.4	1.9	15.3
2/1	547	547	-	-	-	3.9	1.0	-	4.9	32.1	14.0	1.0	15.0
2/2	595	595	-	-	-	4.2	1.0	-	5.3	31.9	15.4	1.0	16.4
3/2+3/1	740	740	-	-	-	4.9	1.7	-	6.6	32.3	16.5	1.7	18.3
4/1	453	453	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
4/2	424	424	-	-	-	3.4	0.6	-	4.1	34.4	11.0	0.6	11.6
4/3	687	687	-	-	-	6.6	3.8	-	10.5	54.8	21.0	3.8	24.8
5/1	450	450	-	-	-	5.5	6.2	-	11.6	93.2	14.5	6.2	20.7
5/2	299	299	-	-	-	3.3	0.7	-	4.0	47.9	8.6	0.7	9.4
6/1	1203	1203	-	-	-	0.5	0.7	-	1.1	3.4	18.4	0.7	19.0
6/2	1158	1158	-	-	-	0.0	0.6	-	0.6	1.9	0.0	0.6	0.6
7/1	673	673	-	-	-	4.1	1.0	-	5.2	27.6	14.4	1.0	15.4
7/2	754	754	-	-	-	3.1	1.2	-	4.3	20.7	10.6	1.2	11.8
8/1	1626	1626	-	-	-	0.4	1.4	-	1.8	4.0	30.4	1.4	31.8
8/2	943	943	-	-	-	0.0	0.4	-	0.4	1.4	0.0	0.4	0.4
9/1	1274	1274	-	-	-	0.4	0.7	-	1.2	3.3	14.3	0.7	15.0
9/2	756	756	-	-	-	0.0	0.3	-	0.3	1.3	0.0	0.3	0.3
10/1	541	541	-	-	-	1.1	0.5	-	1.5	10.3	3.3	0.5	3.8
10/2	892	892	-	-	-	5.4	2.5	-	7.9	32.1	17.6	2.5	20.1
11/1	1038	1038	-	-	-	0.0	0.7	-	0.7	2.5	12.8	0.7	13.5
12/1	934	934	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	1279	1279	-	-	-	1.0	1.4	-	2.4	6.7	35.2	1.4	36.6
14/1	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

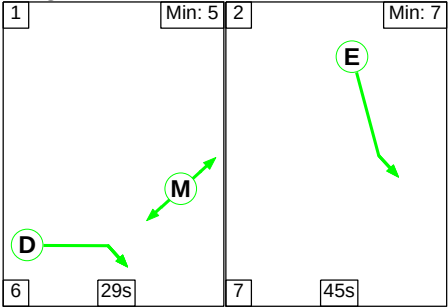
Full Input Data And Results

15/1	994	994	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	728	728	-	-	-	2.8	0.9	-	3.7	18.5	8.7	0.9	9.6
16/2	986	986	-	-	-	2.0	2.2	-	4.2	15.3	22.6	2.2	24.8
17/1	613	613	-	-	-	2.8	1.0	-	3.8	22.2	8.4	1.0	9.3
17/2	677	677	-	-	-	2.9	1.1	-	4.0	21.1	7.9	1.1	8.9
18/1	1316	1316	-	-	-	9.1	8.2	-	17.3	47.3	42.7	8.2	50.9
18/2	687	687	-	-	-	0.0	0.4	-	0.4	2.3	0.0	0.4	0.5
19/1	1038	1038	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1279	1279	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): 9.8 Total Delay for Signalled Lanes (pcuHr): 15.43 Cycle Time (s): 118 C1 Stream: 2 PRC for Signalled Lanes (%): 27.1 Total Delay for Signalled Lanes (pcuHr): 19.65 Cycle Time (s): 118 C1 Stream: 3 PRC for Signalled Lanes (%): 15.6 Total Delay for Signalled Lanes (pcuHr): 14.39 Cycle Time (s): 118 C1 Stream: 4 PRC for Signalled Lanes (%): -6.0 Total Delay for Signalled Lanes (pcuHr): 57.34 Cycle Time (s): 118 C1 Stream: 5 PRC for Signalled Lanes (%): 52.5 Total Delay for Signalled Lanes (pcuHr): 0.73 Cycle Time (s): 118 C1 Stream: 6 PRC for Signalled Lanes (%): 21.9 Total Delay for Signalled Lanes (pcuHr): 2.37 Cycle Time (s): 118 PRC Over All Lanes (%): -6.0 Total Delay Over All Lanes(pcuHr): 115.44													

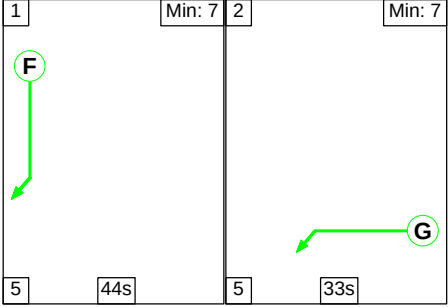
Full Input Data And Results
Scenario 5: '2040 DS AM' (FG5: '2040 DS AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

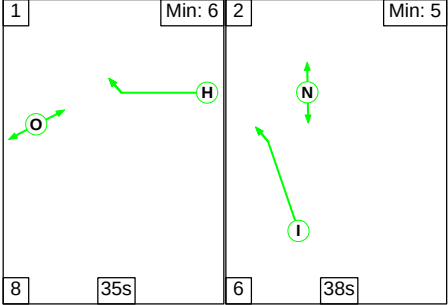
Stage Stream: 1



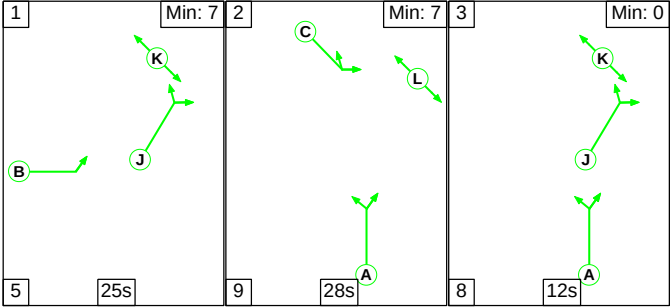
Stage Stream: 2



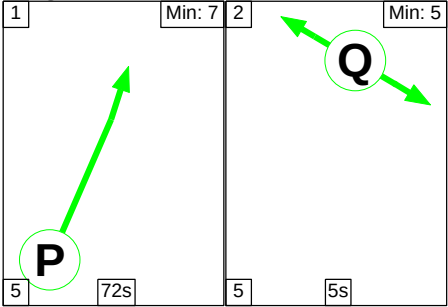
Stage Stream: 3



Stage Stream: 4

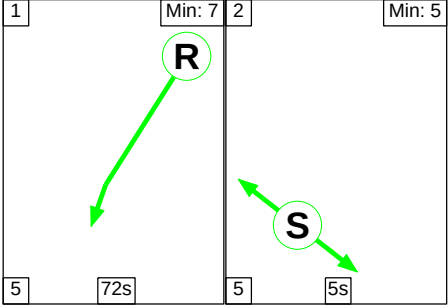


Stage Stream: 5



Full Input Data And Results

Stage Stream: 6



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	29	45
Change Point	0	35

Stage Stream: 2

Stage	1	2
Duration	44	33
Change Point	57	19

Stage Stream: 3

Stage	1	2
Duration	35	38
Change Point	41	84

Stage Stream: 4

Stage	1	2	3
Duration	25	28	12
Change Point	40	70	20

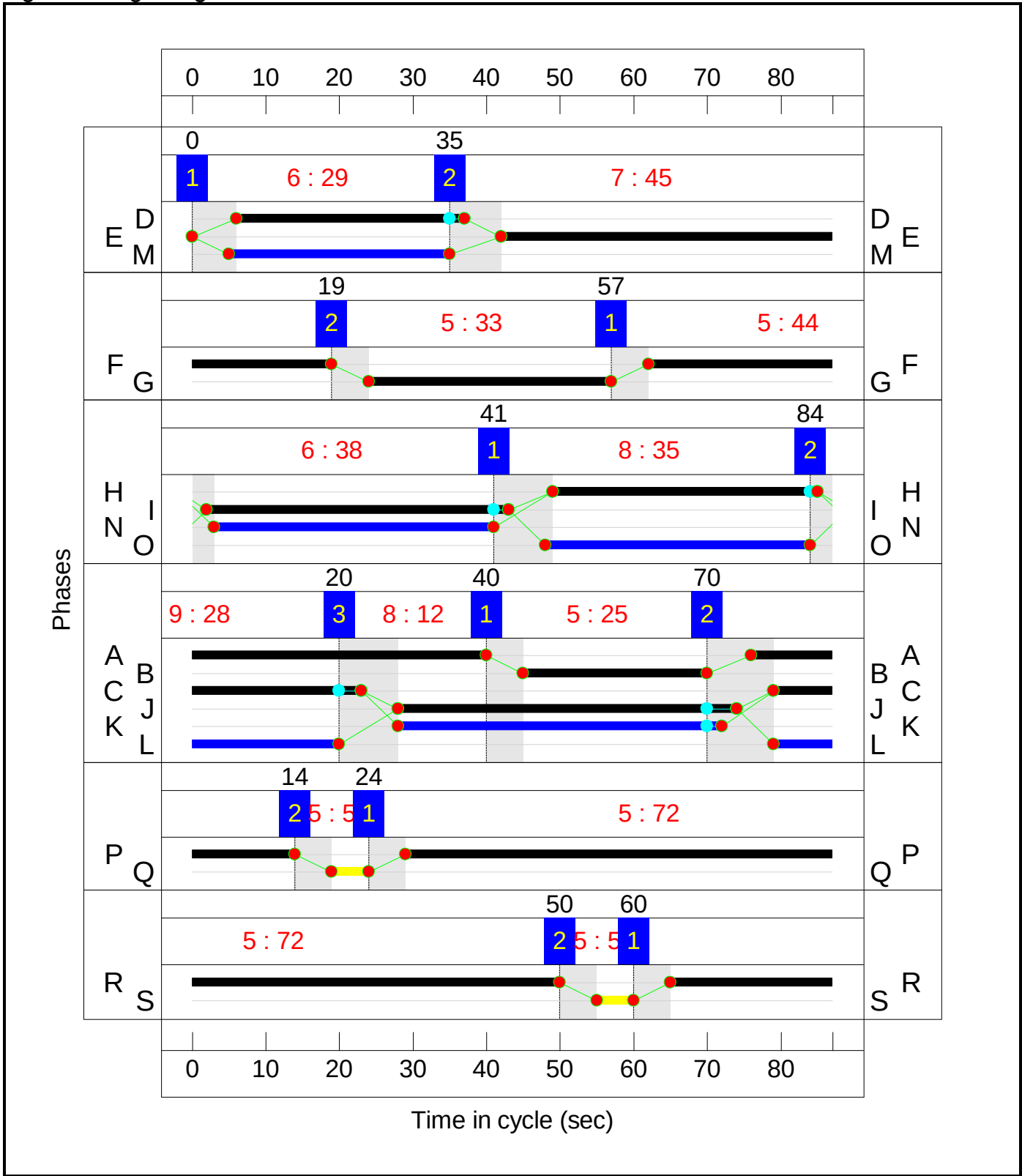
Stage Stream: 5

Stage	1	2
Duration	72	5
Change Point	24	14

Stage Stream: 6

Stage	1	2
Duration	72	5
Change Point	60	50

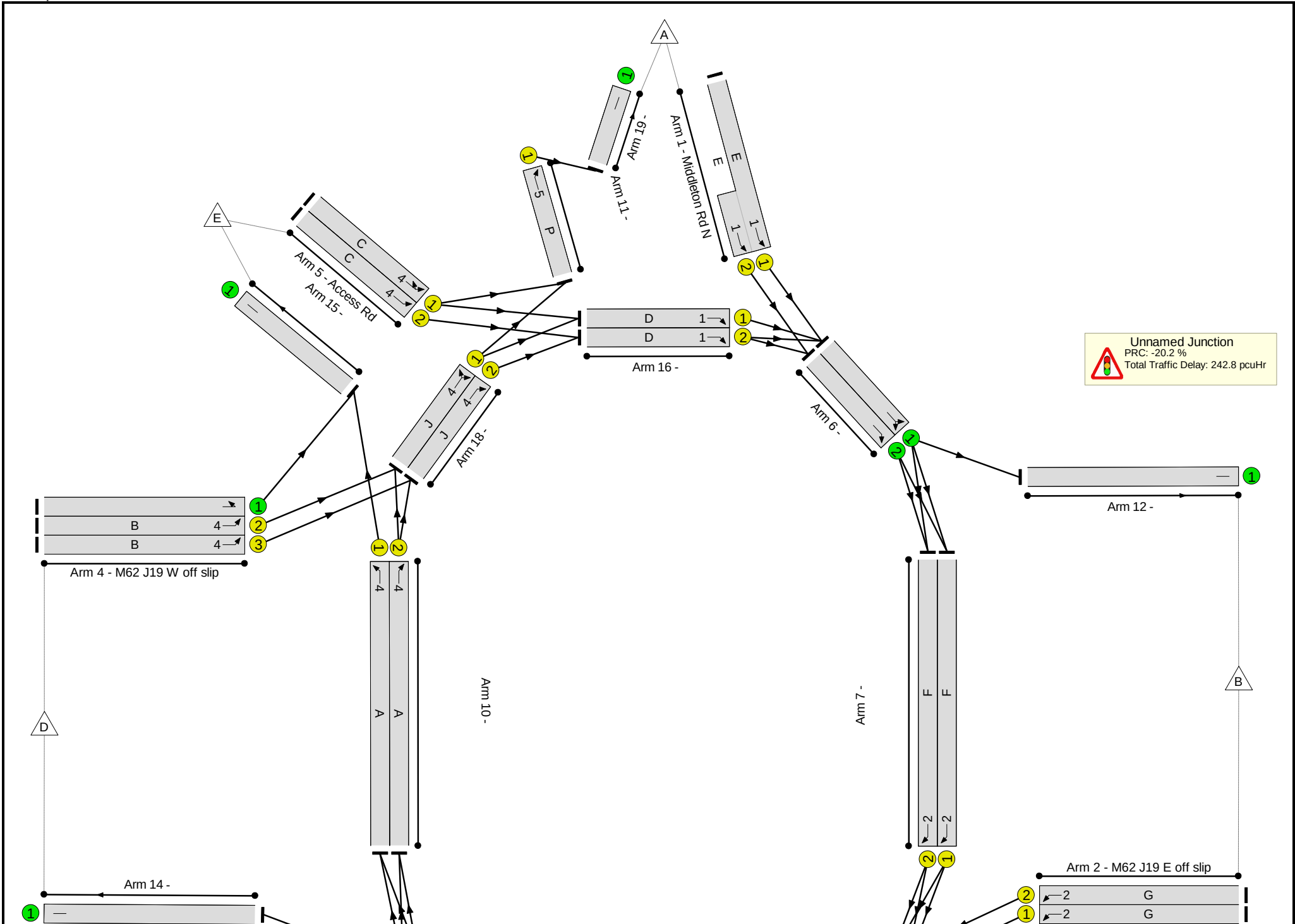
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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: Heywood Interchange	-	-	N/A	-	-		-	-	-	-	-	-	108.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	108.2%
1/1+1/2	Middleton Rd N Ahead	U	1	N/A	E		1	45	-	1268	1871:1871	570+606	107.8 : 107.8%
2/1	M62 J19 E off slip Left	U	2	N/A	G		1	33	-	428	1829	715	59.9%
2/2	M62 J19 E off slip Left	U	2	N/A	G		1	33	-	539	1963	767	70.3%
3/2+3/1	Middleton Rd S Ahead	U	3	N/A	I		1	41	-	1119	1854:1854	534+581	100.3 : 100.3%
4/1	M62 J19 W off slip U-Turn	U	N/A	N/A	-		-	-	-	226	1919	1919	11.8%
4/2	M62 J19 W off slip Left	U	4	N/A	B		1	25	-	417	2063	617	67.6%
4/3	M62 J19 W off slip Left	U	4	N/A	B		1	25	-	87	2063	617	14.1%
5/1	Access Rd U-Turn Ahead	U	4	N/A	C		1	31	-	755	1929	710	106.4%
5/2	Access Rd Ahead	U	4	N/A	C		1	31	-	547	2062	758	72.1%
6/1	Ahead Left	U	N/A	N/A	-		-	-	-	1847	2120	2120	79.9%
6/2	Ahead	U	N/A	N/A	-		-	-	-	1040	2120	2120	46.8%
7/1	Ahead	U	2	N/A	F		1	44	-	476	2065	1068	42.3%
7/2	Ahead	U	2	N/A	F		1	44	-	633	2205	1141	53.2%
8/1	Ahead Right	U	N/A	N/A	-		-	-	-	1093	2210	2210	48.2%
8/2	Right	U	N/A	N/A	-		-	-	-	983	2210	2210	43.4%
9/1	Ahead Left	U	N/A	N/A	-		-	-	-	1442	2140	2140	65.9%
9/2	Ahead	U	N/A	N/A	-		-	-	-	946	2140	2140	44.1%
10/1	Left	U	4	N/A	A		1	51	-	589	1985	1186	49.5%

Full Input Data And Results

10/2	Ahead	U	4	N/A	A		1	51	-	816	1932	1155	70.6%
11/1	Ahead	U	5	N/A	P		1	72	-	1003	1995	1674	59.8%
12/1		U	N/A	N/A	-		-	-	-	1778	Inf	Inf	0.0%
13/1	Ahead	U	6	N/A	R		1	72	-	807	1966	1650	47.7%
14/1		U	N/A	N/A	-		-	-	-	983	Inf	Inf	0.0%
15/1		U	N/A	N/A	-		-	-	-	815	Inf	Inf	0.0%
16/1	Right	U	1	N/A	D		1	31	-	775	1985	730	100.0%
16/2	Right	U	1	N/A	D		1	31	-	844	2119	779	108.2%
17/1	Right	U	3	N/A	H		1	36	-	615	1998	850	68.9%
17/2	Right	U	3	N/A	H		1	36	-	654	2134	908	71.9%
18/1	Left Right	U	4	N/A	J		1	46	-	1023	2010	1086	94.1%
18/2	Right	U	4	N/A	J		1	46	-	297	2146	1159	25.6%
19/1		U	N/A	N/A	-		-	-	-	1003	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	807	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: Heywood Interchange	-	-	0	0	0	70.9	172.0	0.0	242.8	-	-	-	-
Unnamed Junction	-	-	0	0	0	70.9	172.0	0.0	242.8	-	-	-	-
1/1+1/2	1268	1176	-	-	-	10.5	52.1	-	62.6	177.8	29.2	52.1	81.3
2/1	428	428	-	-	-	2.5	0.7	-	3.2	27.3	8.2	0.7	8.9
2/2	539	539	-	-	-	3.3	1.2	-	4.5	30.1	10.9	1.2	12.1
3/2+3/1	1119	1116	-	-	-	6.2	17.5	-	23.7	76.2	21.6	17.5	39.1
4/1	226	226	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
4/2	417	417	-	-	-	3.1	1.0	-	4.1	35.7	8.8	1.0	9.8
4/3	87	87	-	-	-	0.5	0.1	-	0.6	25.8	1.5	0.1	1.6
5/1	755	710	-	-	-	7.8	29.2	-	37.1	176.7	19.3	29.2	48.5
5/2	547	547	-	-	-	3.6	1.3	-	4.9	32.1	11.2	1.3	12.5
6/1	1693	1693	-	-	-	2.6	2.0	-	4.6	9.7	34.9	2.0	36.9
6/2	993	993	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
7/1	452	452	-	-	-	1.7	0.4	-	2.0	16.1	7.3	0.4	7.7
7/2	607	607	-	-	-	3.1	0.6	-	3.7	21.7	11.2	0.6	11.8
8/1	1065	1065	-	-	-	0.1	0.5	-	0.5	1.8	9.3	0.5	9.7
8/2	960	960	-	-	-	0.0	0.4	-	0.4	1.4	0.0	0.4	0.4
9/1	1409	1409	-	-	-	0.1	1.0	-	1.0	2.7	9.2	1.0	10.2
9/2	944	944	-	-	-	0.0	0.4	-	0.4	1.5	0.0	0.4	0.4
10/1	588	588	-	-	-	2.1	0.5	-	2.6	16.0	10.0	0.5	10.5
10/2	815	815	-	-	-	2.8	1.2	-	4.0	17.7	11.3	1.2	12.5
11/1	1002	1002	-	-	-	0.0	0.7	-	0.8	2.7	7.8	0.7	8.5
12/1	1627	1627	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	787	787	-	-	-	0.1	0.5	-	0.6	2.5	3.8	0.5	4.3
14/1	951	951	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

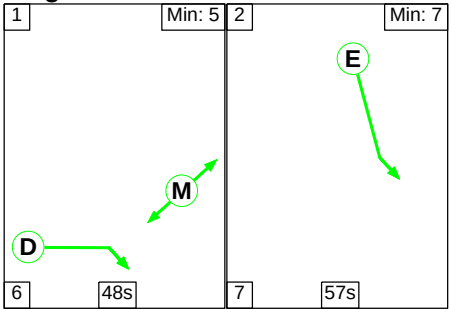
Full Input Data And Results

15/1	814	814	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	730	730	-	-	-	2.6	13.5	-	16.1	79.3	17.6	13.5	31.2
16/2	843	779	-	-	-	6.5	37.6	-	44.1	188.1	21.9	37.6	59.5
17/1	585	585	-	-	-	2.5	1.1	-	3.6	22.3	7.6	1.1	8.7
17/2	653	653	-	-	-	2.4	1.3	-	3.7	20.4	13.8	1.3	15.1
18/1	1022	1022	-	-	-	5.9	6.6	-	12.5	44.2	24.4	6.6	31.1
18/2	296	296	-	-	-	0.8	0.2	-	1.0	12.1	4.2	0.2	4.4
19/1	1002	1002	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	787	787	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): -20.2 Total Delay for Signalled Lanes (pcuHr): 122.79 Cycle Time (s): 87 C1 Stream: 2 PRC for Signalled Lanes (%): 28.1 Total Delay for Signalled Lanes (pcuHr): 13.43 Cycle Time (s): 87 C1 Stream: 3 PRC for Signalled Lanes (%): -11.4 Total Delay for Signalled Lanes (pcuHr): 31.01 Cycle Time (s): 87 C1 Stream: 4 PRC for Signalled Lanes (%): -18.2 Total Delay for Signalled Lanes (pcuHr): 66.84 Cycle Time (s): 87 C1 Stream: 5 PRC for Signalled Lanes (%): 50.4 Total Delay for Signalled Lanes (pcuHr): 0.76 Cycle Time (s): 87 C1 Stream: 6 PRC for Signalled Lanes (%): 88.7 Total Delay for Signalled Lanes (pcuHr): 0.55 Cycle Time (s): 87 PRC Over All Lanes (%): -20.2 Total Delay Over All Lanes(pcuHr): 242.82													

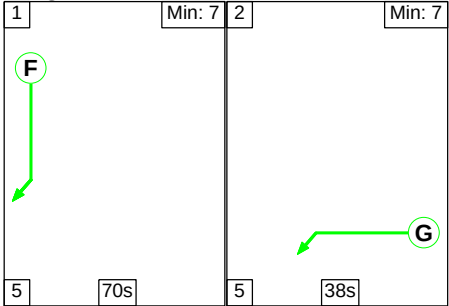
Full Input Data And Results
Scenario 6: '2040 DS PM' (FG6: '2040 DS PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

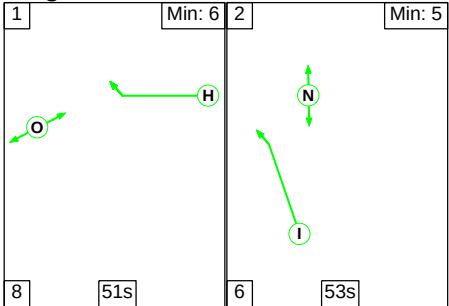
Stage Stream: 1



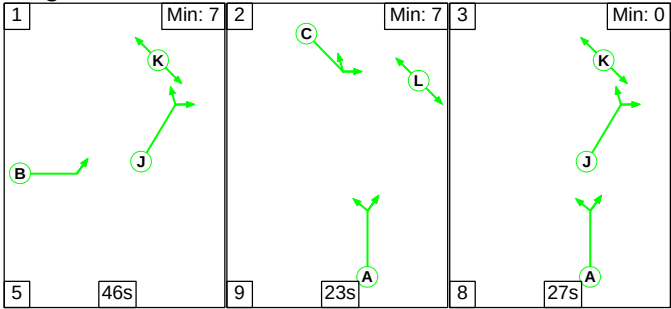
Stage Stream: 2



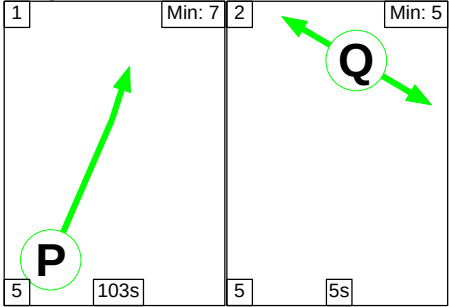
Stage Stream: 3



Stage Stream: 4

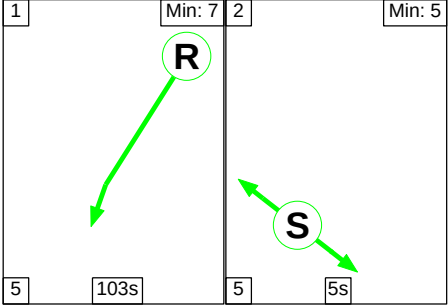


Stage Stream: 5



Full Input Data And Results

Stage Stream: 6



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	48	57
Change Point	0	54

Stage Stream: 2

Stage	1	2
Duration	70	38
Change Point	16	91

Stage Stream: 3

Stage	1	2
Duration	51	53
Change Point	109	50

Stage Stream: 4

Stage	1	2	3
Duration	46	23	27
Change Point	85	18	50

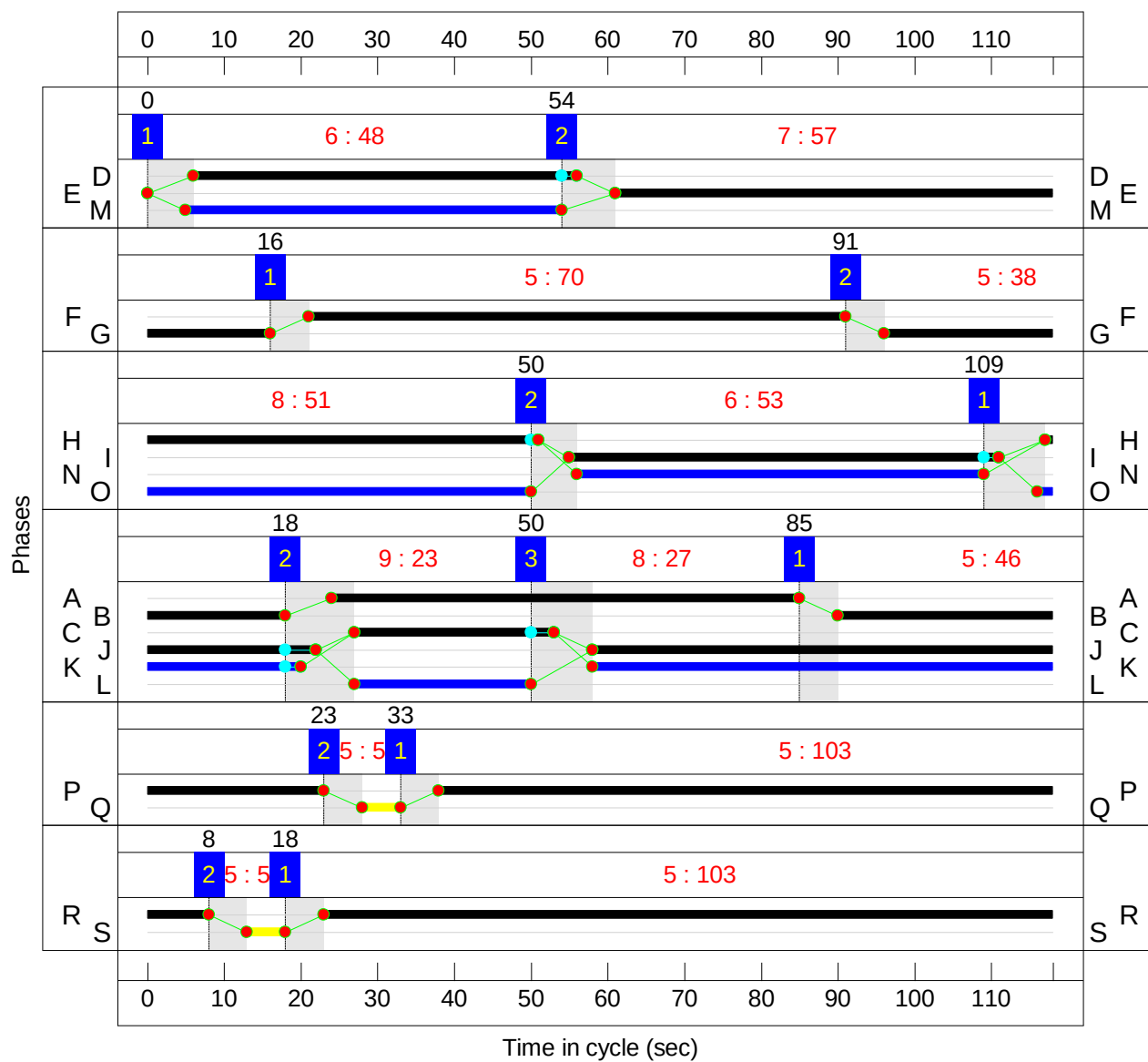
Stage Stream: 5

Stage	1	2
Duration	103	5
Change Point	33	23

Stage Stream: 6

Stage	1	2
Duration	103	5
Change Point	18	8

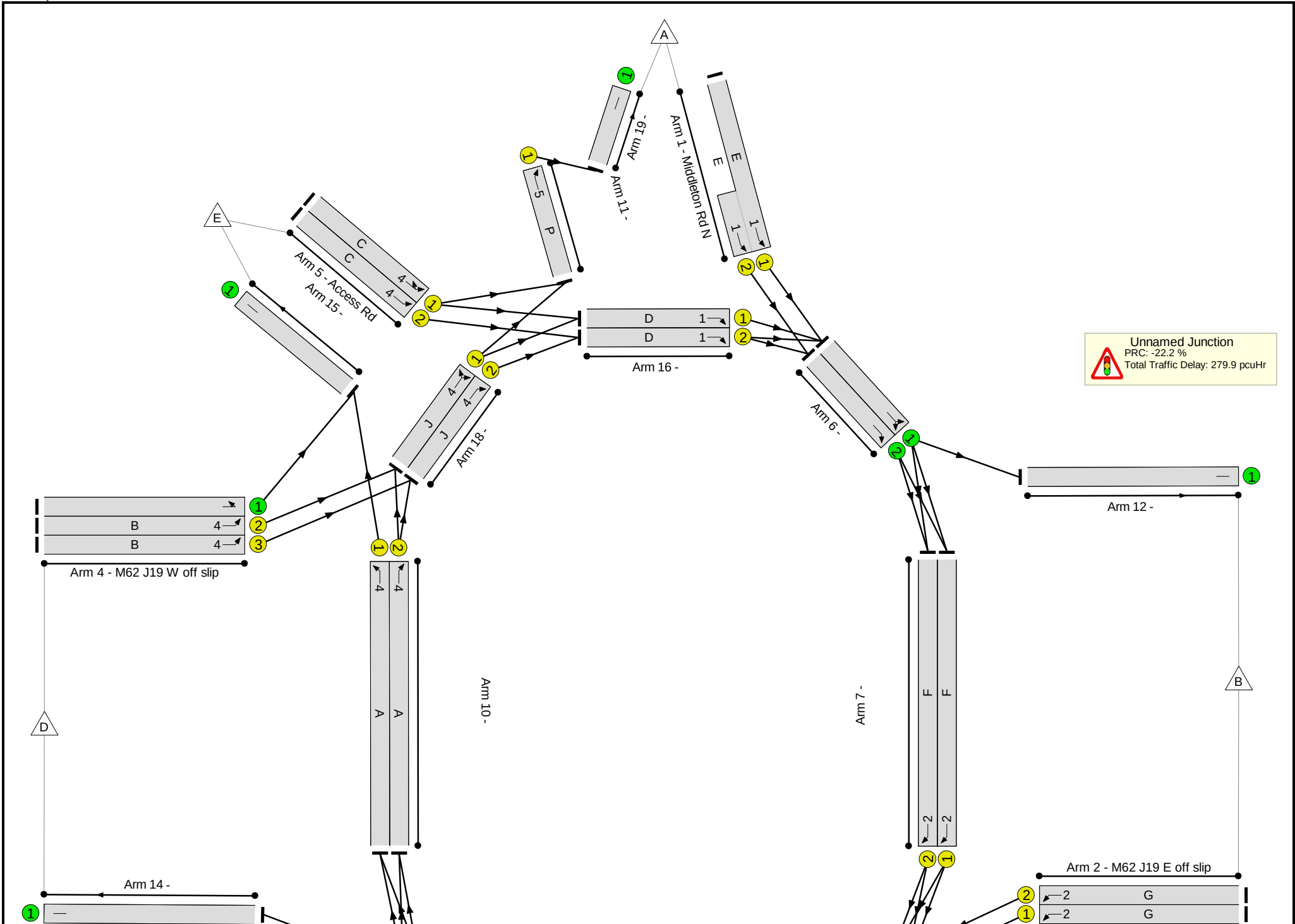
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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: Heywood Interchange	-	-	N/A	-	-		-	-	-	-	-	-	110.0%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	110.0%
1/1+1/2	Middleton Rd N Ahead	U	1	N/A	E		1	57	-	1122	1871:1871	420+600	110.0 : 110.0%
2/1	M62 J19 E off slip Left	U	2	N/A	G		1	38	-	417	1829	605	69.0%
2/2	M62 J19 E off slip Left	U	2	N/A	G		1	38	-	533	1963	649	82.2%
3/2+3/1	Middleton Rd S Ahead	U	3	N/A	I		1	56	-	733	1854:1854	548+514	69.0 : 69.0%
4/1	M62 J19 W off slip U-Turn	U	N/A	N/A	-		-	-	-	207	1919	1919	10.8%
4/2	M62 J19 W off slip Left	U	4	N/A	B		1	46	-	612	2063	822	74.5%
4/3	M62 J19 W off slip Left	U	4	N/A	B		1	46	-	513	2063	822	62.4%
5/1	Access Rd U-Turn Ahead	U	4	N/A	C		1	26	-	484	1929	441	109.7%
5/2	Access Rd Ahead	U	4	N/A	C		1	26	-	503	2062	472	106.6%
6/1	Ahead Left	U	N/A	N/A	-		-	-	-	1449	2120	2120	61.8%
6/2	Ahead	U	N/A	N/A	-		-	-	-	1400	2120	2120	60.4%
7/1	Ahead	U	2	N/A	F		1	70	-	863	2065	1243	63.5%
7/2	Ahead	U	2	N/A	F		1	70	-	914	2205	1327	63.7%
8/1	Ahead Right	U	N/A	N/A	-		-	-	-	1865	2210	2210	79.7%
8/2	Right	U	N/A	N/A	-		-	-	-	862	2210	2210	37.6%
9/1	Ahead Left	U	N/A	N/A	-		-	-	-	973	2140	2140	44.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	792	2140	2140	36.9%
10/1	Left	U	4	N/A	A		1	61	-	594	1985	1043	56.8%

Full Input Data And Results

10/2	Ahead	U	4	N/A	A		1	61	-	772	1932	1015	76.1%
11/1	Ahead	U	5	N/A	P		1	103	-	1157	1995	1758	65.7%
12/1		U	N/A	N/A	-		-	-	-	1072	Inf	Inf	0.0%
13/1	Ahead	U	6	N/A	R		1	103	-	1695	1966	1733	91.9%
14/1		U	N/A	N/A	-		-	-	-	399	Inf	Inf	0.0%
15/1		U	N/A	N/A	-		-	-	-	801	Inf	Inf	0.0%
16/1	Right	U	1	N/A	D		1	50	-	694	1985	858	76.1%
16/2	Right	U	1	N/A	D		1	50	-	1033	2119	916	109.4%
17/1	Right	U	3	N/A	H		1	52	-	459	1998	897	49.3%
17/2	Right	U	3	N/A	H		1	52	-	573	2134	958	58.2%
18/1	Left Right	U	4	N/A	J		1	82	-	1367	2010	1414	96.7%
18/2	Right	U	4	N/A	J		1	82	-	530	2146	1509	35.1%
19/1		U	N/A	N/A	-		-	-	-	1157	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1695	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: Heywood Interchange	-	-	0	0	0	93.8	186.1	0.0	279.9	-	-	-	-
Unnamed Junction	-	-	0	0	0	93.8	186.1	0.0	279.9	-	-	-	-
1/1+1/2	1122	1020	-	-	-	15.4	55.8	-	71.2	228.5	38.4	55.8	94.2
2/1	417	417	-	-	-	4.0	1.1	-	5.1	43.7	11.8	1.1	12.9
2/2	533	533	-	-	-	5.4	2.2	-	7.6	51.3	16.0	2.2	18.2
3/2+3/1	733	733	-	-	-	4.1	1.1	-	5.2	25.6	11.3	1.1	12.4
4/1	207	207	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
4/2	612	612	-	-	-	5.2	1.4	-	6.6	38.8	17.0	1.4	18.4
4/3	513	513	-	-	-	4.1	0.8	-	4.9	34.2	13.4	0.8	14.2
5/1	484	441	-	-	-	8.4	26.0	-	34.4	255.7	17.3	26.0	43.2
5/2	503	472	-	-	-	8.0	21.5	-	29.5	211.1	17.5	21.5	39.0
6/1	1310	1310	-	-	-	0.5	0.8	-	1.3	3.5	16.7	0.8	17.5
6/2	1279	1279	-	-	-	0.0	0.8	-	0.8	2.1	0.0	0.8	0.8
7/1	789	789	-	-	-	2.7	0.9	-	3.5	16.1	17.9	0.9	18.8
7/2	845	845	-	-	-	2.9	0.9	-	3.8	16.1	19.4	0.9	20.3
8/1	1762	1762	-	-	-	3.5	1.9	-	5.5	11.2	43.0	1.9	45.0
8/2	831	831	-	-	-	0.0	0.3	-	0.3	1.3	0.0	0.3	0.3
9/1	943	943	-	-	-	0.2	0.4	-	0.6	2.3	14.0	0.4	14.4
9/2	790	790	-	-	-	0.0	0.3	-	0.3	1.3	0.0	0.3	0.3
10/1	592	592	-	-	-	2.4	0.7	-	3.0	18.5	14.4	0.7	15.1
10/2	772	772	-	-	-	3.4	1.6	-	5.0	23.2	15.8	1.6	17.4
11/1	1155	1155	-	-	-	0.0	1.0	-	1.0	3.0	8.4	1.0	9.3
12/1	955	955	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	1592	1592	-	-	-	1.7	5.3	-	6.9	15.7	46.1	5.3	51.4
14/1	369	369	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

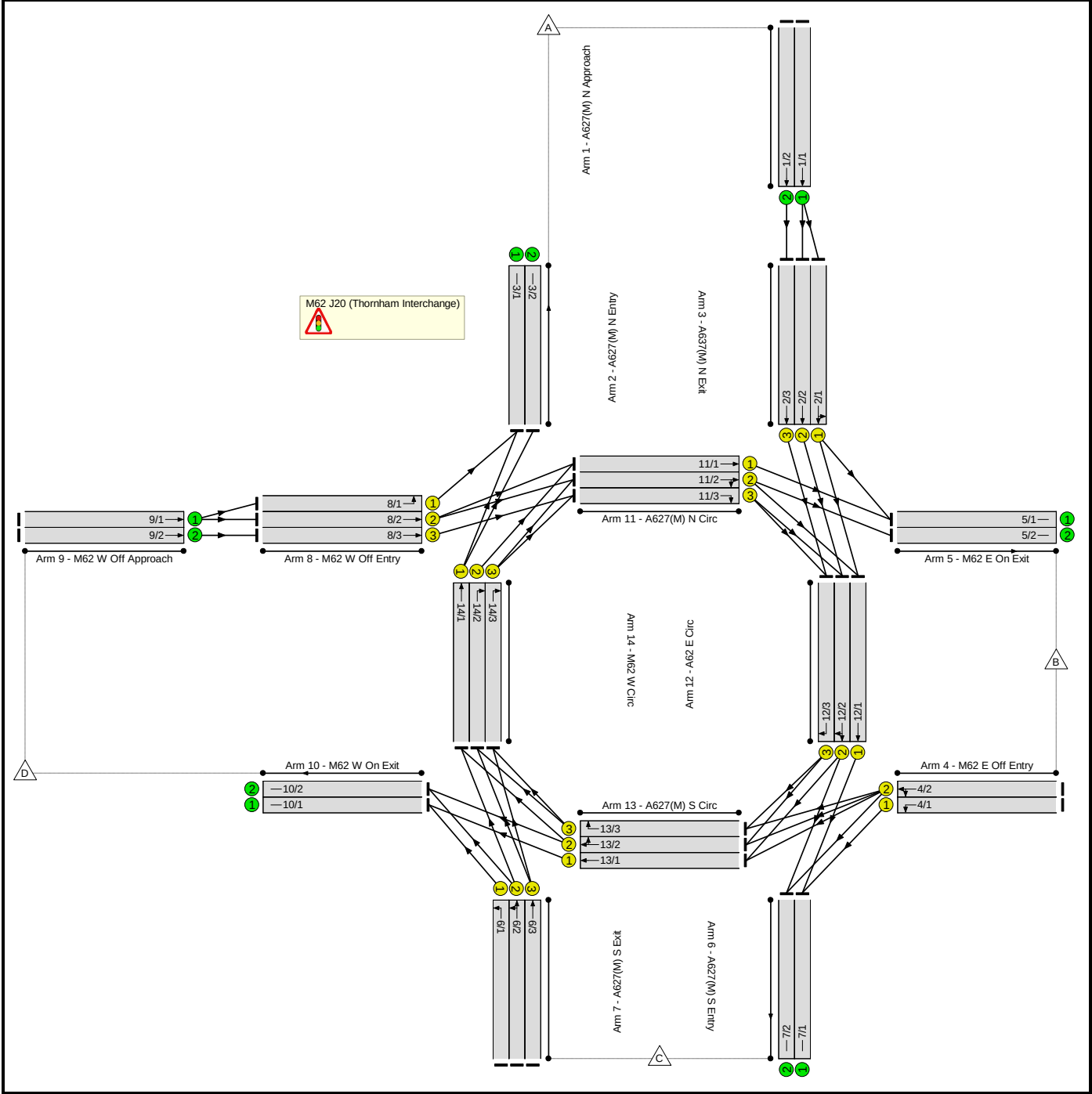
Full Input Data And Results

15/1	799	799	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	653	653	-	-	-	1.8	1.6	-	3.4	18.7	7.3	1.6	8.8
16/2	1002	916	-	-	-	9.2	48.2	-	57.4	206.3	35.7	48.2	83.8
17/1	442	442	-	-	-	1.7	0.5	-	2.2	18.1	11.5	0.5	12.0
17/2	558	558	-	-	-	2.2	0.7	-	2.9	18.5	15.6	0.7	16.3
18/1	1367	1367	-	-	-	7.0	10.2	-	17.2	45.3	44.4	10.2	54.5
18/2	530	530	-	-	-	0.0	0.3	-	0.3	2.2	0.2	0.3	0.5
19/1	1155	1155	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1592	1592	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1Stream: 1 PRC for Signalled Lanes (%) -22.2 Total Delay for Signalled Lanes (pcuHr) 132.02 Cycle Time (s) 118 C1Stream: 2 PRC for Signalled Lanes (%) 9.6 Total Delay for Signalled Lanes (pcuHr) 19.96 Cycle Time (s) 118 C1Stream: 3 PRC for Signalled Lanes (%) 30.4 Total Delay for Signalled Lanes (pcuHr) 10.32 Cycle Time (s) 118 C1Stream: 4 PRC for Signalled Lanes (%) -21.8 Total Delay for Signalled Lanes (pcuHr) 100.89 Cycle Time (s) 118 C1Stream: 5 PRC for Signalled Lanes (%) 37.0 Total Delay for Signalled Lanes (pcuHr) 0.97 Cycle Time (s) 118 C1Stream: 6 PRC for Signalled Lanes (%) -2.1 Total Delay for Signalled Lanes (pcuHr) 6.94 Cycle Time (s) 118 PRC Over All Lanes (%) -22.2 Total Delay Over All Lanes(pcuHr) 279.88													

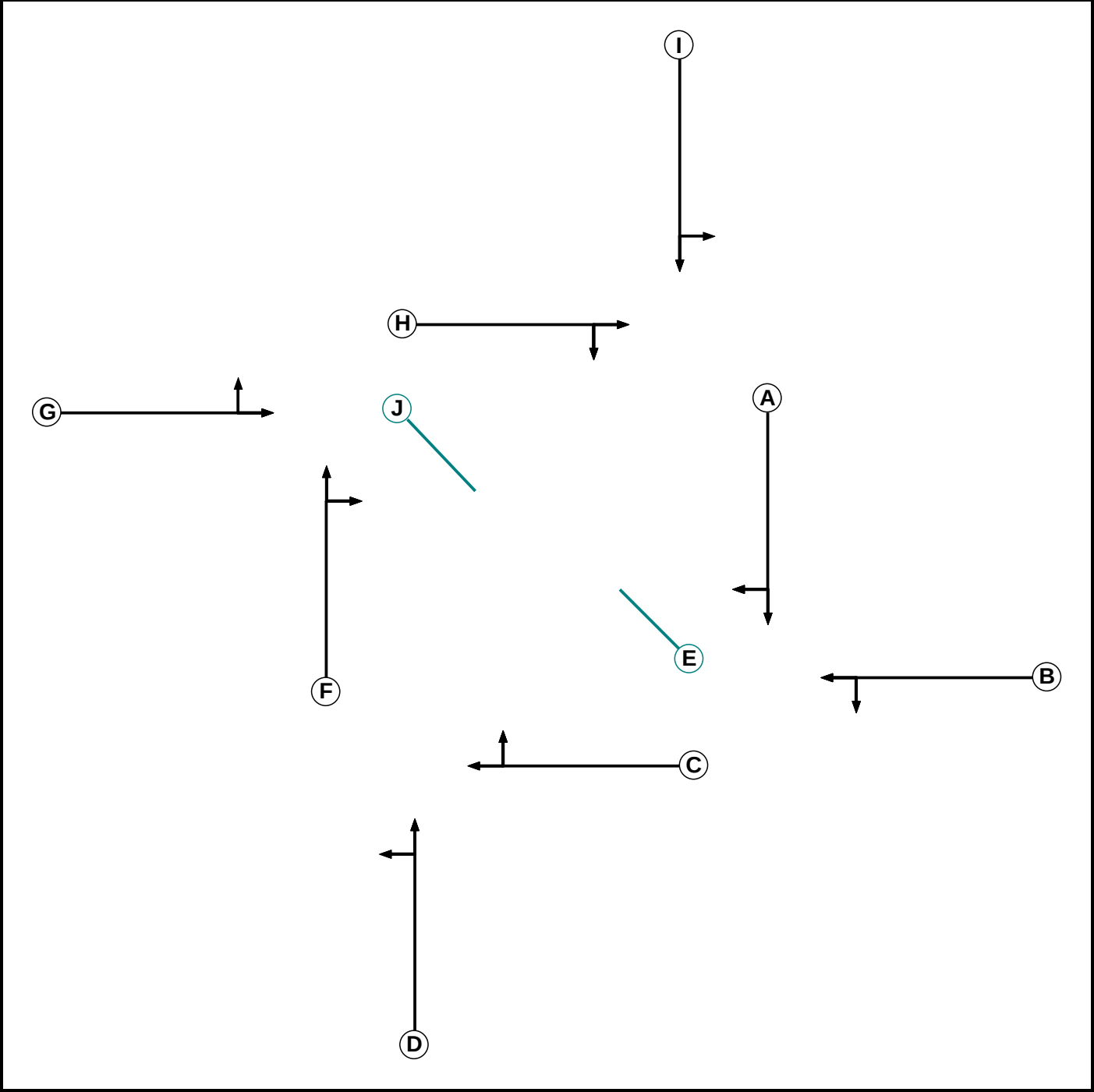
Full Input Data And Results**User and Project Details**

Project:	M62 J20 (Thornham Interchange)
Title:	Northern Gateway (Stakehill)
Location:	Castleton
Client:	Oldham / Rochdale / TfGM
Site Ref(s):	Junction 2
Date Started:	06/11/2019
Additional detail:	
File name:	J2 M62 J20 Ref.lsg3x
Author:	UKDJS002
Company:	WSP
Address:	8 First Street

Network Layout Diagram



Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Traffic	1		7	7
E	Dummy	1		7	7
F	Traffic	2		7	7
G	Traffic	2		7	7
H	Traffic	2		7	7
I	Traffic	2		7	7
J	Dummy	2		7	7

Phase Intergreens Matrix

Terminating Phase	Starting Phase										
		A	B	C	D	E	F	G	H	I	J
	A		5	-	-	-	-	-	-	-	-
	B	7		-	-	-	-	-	-	-	-
	C	-	-		5	-	-	-	-	-	-
	D	-	-	7		7	-	-	-	-	-
	E	-	-	-	-		-	-	-	-	-
	F	-	-	-	-	-		5	-	-	-
	G	-	-	-	-	-	7		-	-	-
	H	-	-	-	-	-	-	-		5	-
	I	-	-	-	-	-	-	-	7		7
	J	-	-	-	-	-	-	-	-	-	

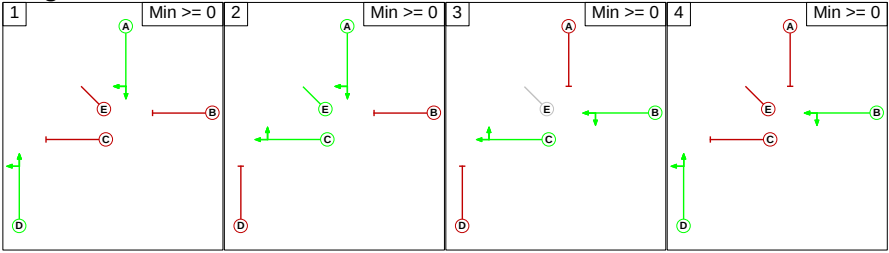
Phases in Stage

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

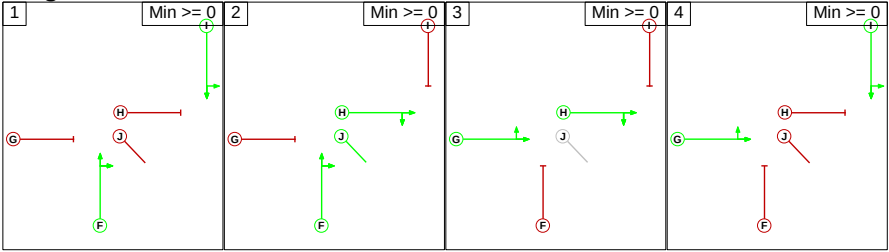
Full Input Data And Results

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
3	1	C	Losing	10	10

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
3	1	H	Losing	10	10

Prohibited Stage Change

Stage Stream: 1

	To Stage				
From Stage		1	2	3	4
	1		7	7	5
	2	5		5	5
	3	15	7		5
	4	7	7	7	

Stage Stream: 2

	To Stage				
From Stage		1	2	3	4
	1		7	7	5
	2	5		5	5
	3	15	7		5
	4	7	7	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: M62 J20 (Thornham Interchange)
There are no Opposed Lanes in this Junction

Lane Input Data

Junction: M62 J20 (Thornham Interchange)												
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 (A627(M) N Approach)	U		2	3	60.0	Inf	-	-	-	-	-	-
1/2 (A627(M) N Approach)	U		2	3	60.0	Inf	-	-	-	-	-	-
2/1 (A627(M) N Entry)	U	I	2	3	60.0	User	1900	-	-	-	-	-
2/2 (A627(M) N Entry)	U	I	2	3	60.0	User	1900	-	-	-	-	-
2/3 (A627(M) N Entry)	U	I	2	3	60.0	User	1900	-	-	-	-	-
3/1 (A637(M) N Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/2 (A637(M) N Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1 (M62 E Off Entry)	U	B	2	3	60.0	User	1900	-	-	-	-	-
4/2 (M62 E Off Entry)	U	B	2	3	60.0	User	1900	-	-	-	-	-
5/1 (M62 E On Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (M62 E On Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A627(M) S Entry)	U	D	2	3	60.0	User	1900	-	-	-	-	-
6/2 (A627(M) S Entry)	U	D	2	3	60.0	User	1900	-	-	-	-	-
6/3 (A627(M) S Entry)	U	D	2	3	60.0	User	1900	-	-	-	-	-
7/1 (A627(M) S Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2 (A627(M) S Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (M62 W Off Entry)	U	G	2	3	60.0	User	1900	-	-	-	-	-

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8/2 (M62 W Off Entry)	U	G	2	3	60.0	User	1900	-	-	-	-	-
8/3 (M62 W Off Entry)	U	G	2	3	60.0	User	1900	-	-	-	-	-
9/1 (M62 W Off Approach)	U		2	3	60.0	User	1900	-	-	-	-	-
9/2 (M62 W Off Approach)	U		2	3	60.0	User	1900	-	-	-	-	-
10/1 (M62 W On Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/2 (M62 W On Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (A627(M) N Circ)	U	H	2	3	60.0	User	1900	-	-	-	-	-
11/2 (A627(M) N Circ)	U	H	2	3	60.0	User	1900	-	-	-	-	-
11/3 (A627(M) N Circ)	U	H	2	3	60.0	User	1900	-	-	-	-	-
12/1 (A62 E Circ)	U	A	2	3	60.0	User	1900	-	-	-	-	-
12/2 (A62 E Circ)	U	A	2	3	60.0	User	1900	-	-	-	-	-
12/3 (A62 E Circ)	U	A	2	3	60.0	User	1900	-	-	-	-	-
13/1 (A627(M) S Circ)	U	C	2	3	60.0	User	1900	-	-	-	-	-
13/2 (A627(M) S Circ)	U	C	2	3	60.0	User	1900	-	-	-	-	-
13/3 (A627(M) S Circ)	U	C	2	3	60.0	User	1900	-	-	-	-	-
14/1 (M62 W Circ)	U	F	2	3	60.0	User	1900	-	-	-	-	-
14/2 (M62 W Circ)	U	F	2	3	60.0	User	1900	-	-	-	-	-
14/3 (M62 W Circ)	U	F	2	3	60.0	User	1900	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2025 Base AM'	08:00	09:00	01:00	
2: '2025 Base PM'	17:00	18:00	01:00	
3: '2040 DM AM'	08:00	09:00	01:00	
4: '2040 DM PM'	17:00	18:00	01:00	
5: '2040 DS AM'	08:00	09:00	01:00	
6: '2040 DS PM'	17:00	18:00	01:00	

Scenario 1: '2025 Base AM' (FG1: '2025 Base AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	255	886	1032	2173
	B	190	0	987	0	1177
	C	647	645	0	1481	2773
	D	940	0	1236	0	2176
	Tot.	1777	900	3109	2513	8299

Traffic Lane Flows

Lane	Scenario 1: 2025 Base AM
Junction: M62 J20 (Thornham Interchange)	
1/1	1545
1/2	628
2/1	822
2/2	723
2/3	628
3/1	1358
3/2	419
4/1	589
4/2	588
5/1	899
5/2	1
6/1	1064
6/2	1064
6/3	645
7/1	1843
7/2	1266
8/1	940
8/2	687
8/3	549
9/1	1627
9/2	549
10/1	1468
10/2	1045
11/1	644
11/2	688
11/3	549
12/1	1254
12/2	1272
12/3	628
13/1	404
13/2	818
13/3	0
14/1	837
14/2	644
14/3	1

Junction: M62 J20 (Thornham Interchange)								
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 (A627(M) N Approach Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (A627(M) N Approach Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (A627(M) N Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (A627(M) N Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/3 (A627(M) N Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/1 (A637(M) N Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (A637(M) N Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (M62 E Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (M62 E Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (M62 E On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (M62 E On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A627(M) S Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (A627(M) S Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (A627(M) S Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (A627(M) S Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A627(M) S Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (M62 W Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (M62 W Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/3 (M62 W Off Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (M62 W Off Approach Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (M62 W Off Approach Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (M62 W On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M62 W On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

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11/1 (A627(M) N Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (A627(M) N Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/3 (A627(M) N Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A62 E Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A62 E Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/3 (A62 E Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (A627(M) S Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
13/2 (A627(M) S Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/3 (A627(M) S Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
14/1 (M62 W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
14/2 (M62 W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
14/3 (M62 W Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900

Scenario 2: '2025 Base PM' (FG2: '2025 Base PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	253	763	1150	2166
	B	115	0	869	0	984
	C	745	765	0	1641	3151
	D	682	0	1049	0	1731
	Tot.	1542	1018	2681	2791	8032

Traffic Lane Flows

Lane	Scenario 2: 2025 Base PM
Junction: M62 J20 (Thornham Interchange)	
1/1	1605
1/2	561
2/1	842
2/2	763
2/3	561
3/1	1111
3/2	431
4/1	492
4/2	492
5/1	949
5/2	69
6/1	1193
6/2	1193
6/3	765
7/1	1682
7/2	999
8/1	682
8/2	601
8/3	448
9/1	1283
9/2	448
10/1	1782
10/2	1009
11/1	696
11/2	670
11/3	448
12/1	1190
12/2	1211
12/3	561
13/1	589
13/2	676
13/3	0
14/1	860
14/2	696
14/3	69

Junction: M62 J20 (Thornham Interchange)								
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 (A627(M) N Approach Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (A627(M) N Approach Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (A627(M) N Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (A627(M) N Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/3 (A627(M) N Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/1 (A637(M) N Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (A637(M) N Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (M62 E Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (M62 E Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (M62 E On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (M62 E On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A627(M) S Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (A627(M) S Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (A627(M) S Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (A627(M) S Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A627(M) S Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (M62 W Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (M62 W Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/3 (M62 W Off Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (M62 W Off Approach Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (M62 W Off Approach Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (M62 W On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M62 W On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

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11/1 (A627(M) N Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (A627(M) N Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/3 (A627(M) N Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A62 E Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A62 E Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/3 (A62 E Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (A627(M) S Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
13/2 (A627(M) S Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/3 (A627(M) S Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
14/1 (M62 W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
14/2 (M62 W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
14/3 (M62 W Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900

Scenario 3: '2040 DM AM' (FG3: '2040 DM AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	393	889	1266	2548
	B	192	0	1436	0	1628
	C	842	720	0	2941	4503
	D	1107	0	1719	0	2826
	Tot.	2141	1113	4044	4207	11505

Traffic Lane Flows

Lane	Scenario 3: 2040 DM AM
Junction: M62 J20 (Thornham Interchange)	
1/1	1769
1/2	779
2/1	1051
2/2	718
2/3	779
3/1	1624
3/2	517
4/1	814
4/2	814
5/1	1113
5/2	0
6/1	1891
6/2	1892
6/3	720
7/1	2350
7/2	1694
8/1	1107
8/2	878
8/3	841
9/1	1985
9/2	841
10/1	2378
10/2	1829
11/1	720
11/2	878
11/3	841
12/1	1536
12/2	1559
12/3	779
13/1	487
13/2	971
13/3	0
14/1	1034
14/2	720
14/3	0

Lane Saturation Flows

Junction: M62 J20 (Thornham Interchange)								
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 (A627(M) N Approach Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (A627(M) N Approach Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (A627(M) N Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (A627(M) N Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/3 (A627(M) N Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/1 (A637(M) N Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (A637(M) N Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (M62 E Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (M62 E Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (M62 E On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (M62 E On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A627(M) S Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (A627(M) S Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (A627(M) S Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (A627(M) S Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A627(M) S Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (M62 W Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (M62 W Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/3 (M62 W Off Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (M62 W Off Approach Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (M62 W Off Approach Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (M62 W On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M62 W On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

11/1 (A627(M) N Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (A627(M) N Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/3 (A627(M) N Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A62 E Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A62 E Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/3 (A62 E Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (A627(M) S Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
13/2 (A627(M) S Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/3 (A627(M) S Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
14/1 (M62 W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
14/2 (M62 W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
14/3 (M62 W Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900

Scenario 4: '2040 DM PM' (FG4: '2040 DM PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	338	776	1184	2298
	B	150	0	1478	0	1628
	C	1030	928	0	2937	4895
	D	753	0	1604	0	2357
	Tot.	1933	1266	3858	4121	11178

Traffic Lane Flows

Lane	Scenario 4: 2040 DM PM
Junction: M62 J20 (Thornham Interchange)	
1/1	1576
1/2	722
2/1	929
2/2	647
2/3	722
3/1	1343
3/2	590
4/1	814
4/2	814
5/1	1201
5/2	65
6/1	1983
6/2	1984
6/3	928
7/1	2219
7/2	1639
8/1	753
8/2	814
8/3	790
9/1	1567
9/2	790
10/1	2445
10/2	1676
11/1	863
11/2	879
11/3	790
12/1	1405
12/2	1437
12/3	722
13/1	462
13/2	872
13/3	0
14/1	1180
14/2	863
14/3	65

Lane Saturation Flows

Junction: M62 J20 (Thornham Interchange)								
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 (A627(M) N Approach Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (A627(M) N Approach Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (A627(M) N Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (A627(M) N Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/3 (A627(M) N Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/1 (A637(M) N Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (A637(M) N Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (M62 E Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (M62 E Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (M62 E On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (M62 E On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A627(M) S Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (A627(M) S Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (A627(M) S Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (A627(M) S Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A627(M) S Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (M62 W Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (M62 W Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/3 (M62 W Off Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (M62 W Off Approach Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (M62 W Off Approach Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (M62 W On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M62 W On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

11/1 (A627(M) N Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (A627(M) N Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/3 (A627(M) N Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A62 E Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A62 E Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/3 (A62 E Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (A627(M) S Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
13/2 (A627(M) S Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/3 (A627(M) S Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
14/1 (M62 W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
14/2 (M62 W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
14/3 (M62 W Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900

Scenario 5: '2040 DS AM' (FG5: '2040 DS AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	393	891	1266	2550
	B	192	0	1438	0	1630
	C	844	721	0	2943	4508
	D	1107	0	1721	0	2828
	Tot.	2143	1114	4050	4209	11516

Traffic Lane Flows

Lane	Scenario 5: 2040 DS AM
Junction: M62 J20 (Thornham Interchange)	
1/1	1769
1/2	779
2/1	1051
2/2	718
2/3	779
3/1	1624
3/2	517
4/1	814
4/2	814
5/1	1113
5/2	0
6/1	1891
6/2	1892
6/3	720
7/1	2350
7/2	1694
8/1	1107
8/2	878
8/3	841
9/1	1985
9/2	841
10/1	2378
10/2	1829
11/1	720
11/2	878
11/3	841
12/1	1536
12/2	1559
12/3	779
13/1	487
13/2	971
13/3	0
14/1	1034
14/2	720
14/3	0

Junction: M62 J20 (Thornham Interchange)								
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 (A627(M) N Approach Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (A627(M) N Approach Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (A627(M) N Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (A627(M) N Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/3 (A627(M) N Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/1 (A637(M) N Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (A637(M) N Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (M62 E Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (M62 E Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (M62 E On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (M62 E On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A627(M) S Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (A627(M) S Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (A627(M) S Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (A627(M) S Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A627(M) S Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (M62 W Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (M62 W Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/3 (M62 W Off Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (M62 W Off Approach Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (M62 W Off Approach Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (M62 W On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M62 W On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

11/1 (A627(M) N Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (A627(M) N Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/3 (A627(M) N Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A62 E Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A62 E Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/3 (A62 E Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (A627(M) S Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
13/2 (A627(M) S Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/3 (A627(M) S Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
14/1 (M62 W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
14/2 (M62 W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
14/3 (M62 W Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900

Scenario 6: '2040 DS PM' (FG6: '2040 DS PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	338	778	1184	2300
	B	150	0	1479	0	1629
	C	1032	929	0	2939	4900
	D	753	0	1606	0	2359
	Tot.	1935	1267	3863	4123	11188

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2040 DS PM
Junction: M62 J20 (Thornham Interchange)	
1/1	1576
1/2	722
2/1	929
2/2	647
2/3	722
3/1	1343
3/2	590
4/1	814
4/2	814
5/1	1201
5/2	65
6/1	1983
6/2	1984
6/3	928
7/1	2219
7/2	1639
8/1	753
8/2	814
8/3	790
9/1	1567
9/2	790
10/1	2445
10/2	1676
11/1	863
11/2	879
11/3	790
12/1	1405
12/2	1437
12/3	722
13/1	462
13/2	872
13/3	0
14/1	1180
14/2	863
14/3	65

Junction: M62 J20 (Thornham Interchange)								
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 (A627(M) N Approach Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (A627(M) N Approach Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (A627(M) N Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (A627(M) N Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/3 (A627(M) N Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/1 (A637(M) N Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (A637(M) N Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (M62 E Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (M62 E Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (M62 E On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (M62 E On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A627(M) S Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (A627(M) S Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (A627(M) S Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (A627(M) S Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A627(M) S Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (M62 W Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (M62 W Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/3 (M62 W Off Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (M62 W Off Approach Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (M62 W Off Approach Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (M62 W On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M62 W On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

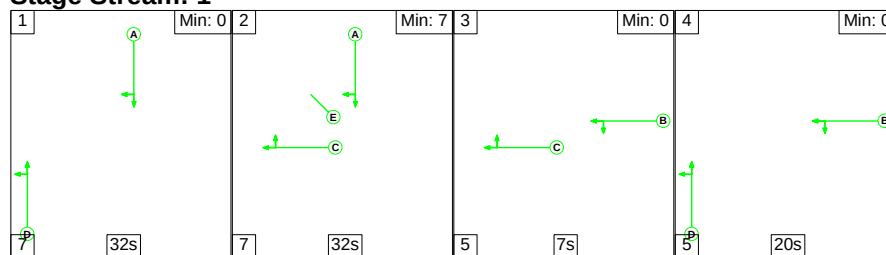
Full Input Data And Results

11/1 (A627(M) N Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (A627(M) N Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/3 (A627(M) N Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A62 E Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A62 E Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/3 (A62 E Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (A627(M) S Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
13/2 (A627(M) S Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/3 (A627(M) S Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
14/1 (M62 W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
14/2 (M62 W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
14/3 (M62 W Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900

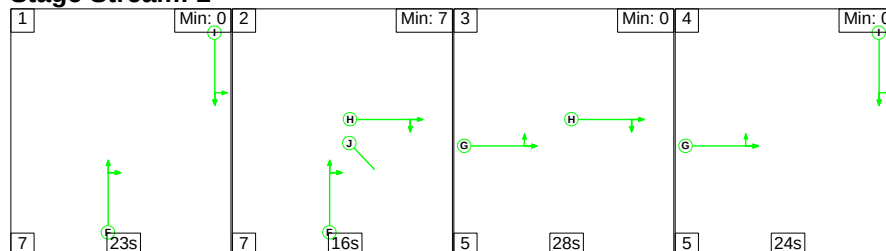
Scenario 1: '2025 Base AM' (FG1: '2025 Base AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

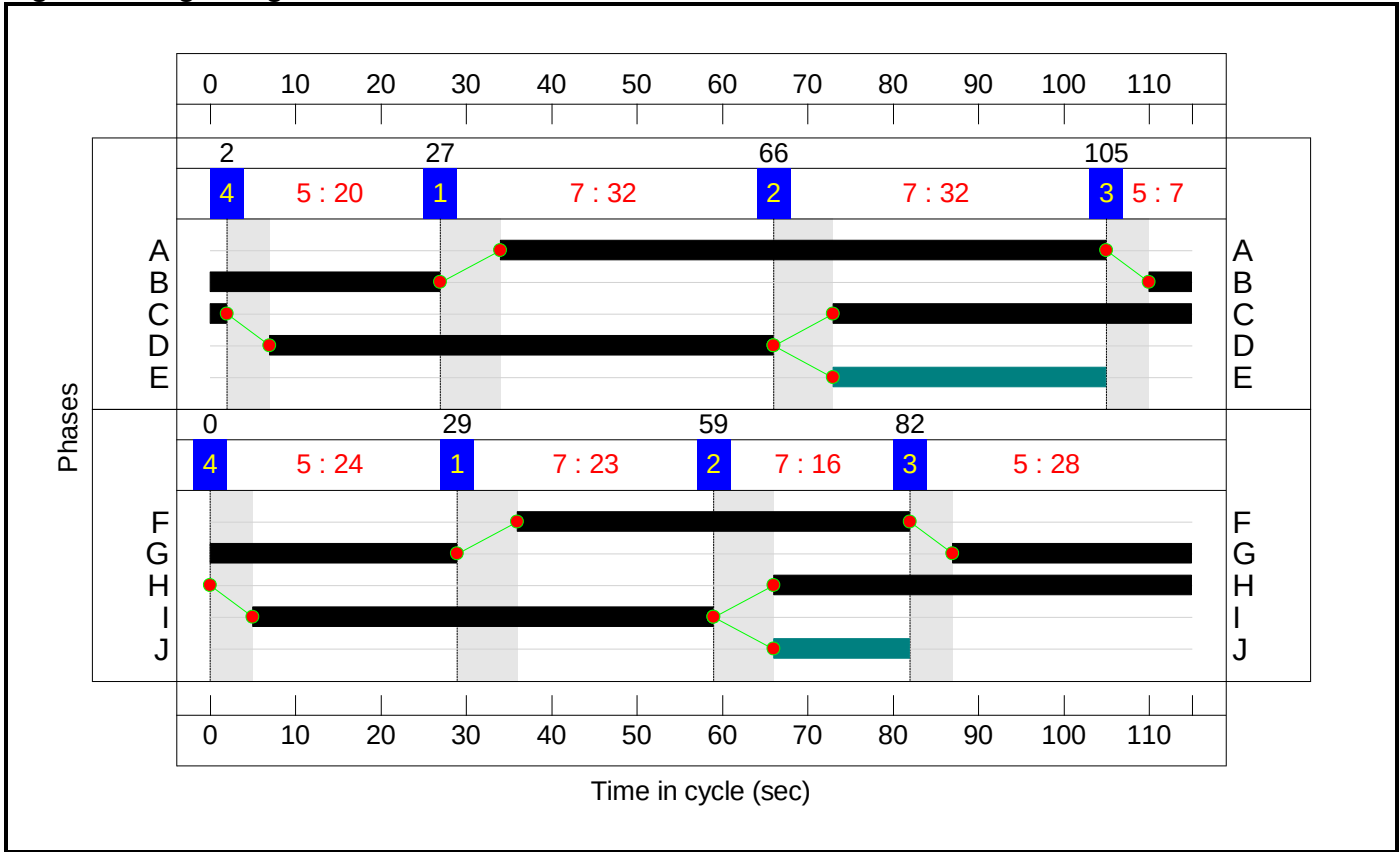
Stage Stream: 1

Stage	1	2	3	4
Duration	32	32	7	20
Change Point	27	66	105	2

Full Input Data And Results
Stage Stream: 2

Stage	1	2	3	4
Duration	23	16	28	24
Change Point	29	59	82	0

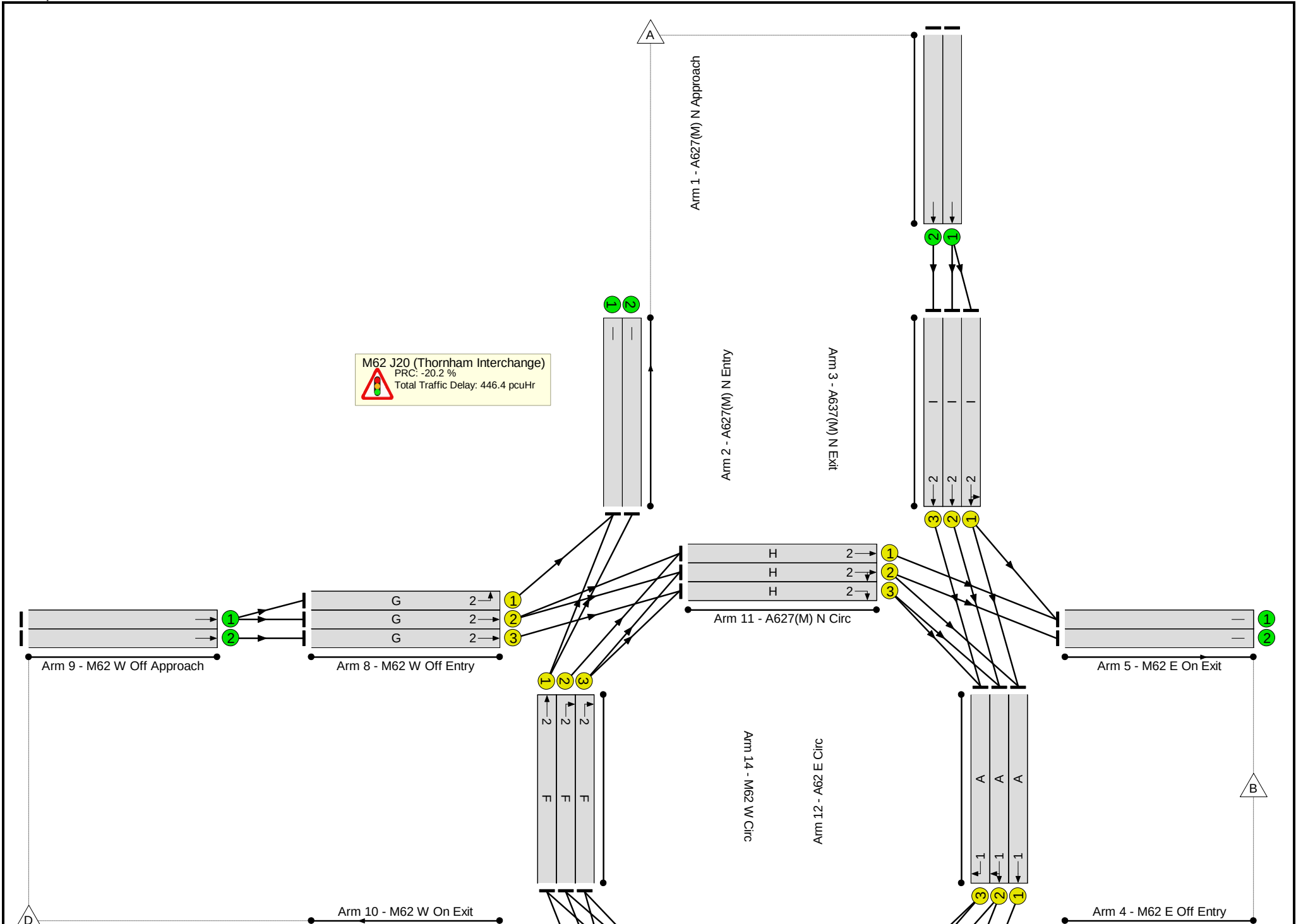
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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: Northern Gateway (Stakehill)	-	-	N/A	-	-		-	-	-	-	-	-	108.2%
M62 J20 (Thornham Interchange)	-	-	N/A	-	-		-	-	-	-	-	-	108.2%
1/1	A627(M) N Approach Ahead	U	N/A	N/A	-		-	-	-	1545	Inf	Inf	0.0%
1/2	A627(M) N Approach Ahead	U	N/A	N/A	-		-	-	-	628	Inf	Inf	0.0%
2/1	A627(M) N Entry Left Ahead	U	2	N/A	I		1	54	-	822	1900	909	90.5%
2/2	A627(M) N Entry Ahead	U	2	N/A	I		1	54	-	723	1900	909	79.6%
2/3	A627(M) N Entry Ahead	U	2	N/A	I		1	54	-	628	1900	909	69.1%
3/1	A637(M) N Exit	U	N/A	N/A	-		-	-	-	1358	Inf	Inf	0.0%
3/2	A637(M) N Exit	U	N/A	N/A	-		-	-	-	419	Inf	Inf	0.0%
4/1	M62 E Off Entry Left	U	1	N/A	B		1	32	-	589	1900	545	108.0%
4/2	M62 E Off Entry Left Ahead	U	1	N/A	B		1	32	-	588	1900	545	107.8%
5/1	M62 E On Exit	U	N/A	N/A	-		-	-	-	899	Inf	Inf	0.0%
5/2	M62 E On Exit	U	N/A	N/A	-		-	-	-	1	Inf	Inf	0.0%
6/1	A627(M) S Entry Left	U	1	N/A	D		1	59	-	1064	1900	991	107.3%
6/2	A627(M) S Entry Left Ahead	U	1	N/A	D		1	59	-	1064	1900	991	107.3%
6/3	A627(M) S Entry Ahead	U	1	N/A	D		1	59	-	645	1900	991	65.1%

Full Input Data And Results

7/1	A627(M) S Exit	U	N/A	N/A	-		-	-	-	1843	Inf	Inf	0.0%
7/2	A627(M) S Exit	U	N/A	N/A	-		-	-	-	1266	Inf	Inf	0.0%
8/1	M62 W Off Entry Left	U	2	N/A	G		1	57	-	940	1900	958	98.1%
8/2	M62 W Off Entry Ahead	U	2	N/A	G		1	57	-	687	1900	958	71.7%
8/3	M62 W Off Entry Ahead	U	2	N/A	G		1	57	-	549	1900	958	57.3%
9/1	M62 W Off Approach Ahead	U	N/A	N/A	-		-	-	-	1627	1900	1900	85.6%
9/2	M62 W Off Approach Ahead	U	N/A	N/A	-		-	-	-	549	1900	1900	28.9%
10/1	M62 W On Exit	U	N/A	N/A	-		-	-	-	1468	Inf	Inf	0.0%
10/2	M62 W On Exit	U	N/A	N/A	-		-	-	-	1045	Inf	Inf	0.0%
11/1	A627(M) N Circ Ahead	U	2	N/A	H		1	49	-	644	1900	826	78.0%
11/2	A627(M) N Circ Ahead Right	U	2	N/A	H		1	49	-	688	1900	826	83.3%
11/3	A627(M) N Circ Right	U	2	N/A	H		1	49	-	549	1900	826	66.5%
12/1	A62 E Circ Ahead	U	1	N/A	A		1	71	-	1254	1900	1190	105.4%
12/2	A62 E Circ Ahead Right	U	1	N/A	A		1	71	-	1272	1900	1190	106.9%
12/3	A62 E Circ Right	U	1	N/A	A		1	71	-	628	1900	1190	52.8%
13/1	A627(M) S Circ Ahead	U	1	N/A	C		1	44	-	404	1900	743	54.3%
13/2	A627(M) S Circ Ahead Right	U	1	N/A	C		1	44	-	818	1900	743	108.2%
13/3	A627(M) S Circ Right	U	1	N/A	C		1	44	-	0	1900	743	0.0%
14/1	M62 W Circ Ahead	U	2	N/A	F		1	46	-	837	1900	777	100.3%

Full Input Data And Results

14/2	M62 W Circ Right	U	2	N/A	F		1	46	-	644	1900	777	82.9%
14/3	M62 W Circ Right	U	2	N/A	F		1	46	-	1	1900	777	0.1%

Full Input Data And Results

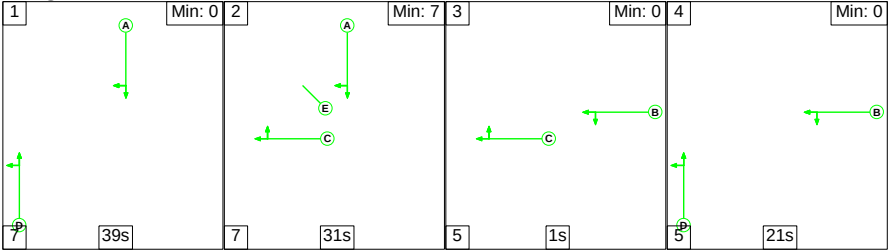
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Northern Gateway (Stakehill)	-	-	0	0	0	135.3	311.1	0.0	446.4	-	-	-	-
M62 J20 (Thornham Interchange)	-	-	0	0	0	135.3	311.1	0.0	446.4	-	-	-	-
1/1	1545	1545	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	628	628	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	822	822	-	-	-	6.3	4.3	-	10.6	46.5	24.0	4.3	28.3
2/2	723	723	-	-	-	5.1	1.9	-	7.0	34.8	19.3	1.9	21.2
2/3	628	628	-	-	-	4.1	1.1	-	5.2	29.7	15.5	1.1	16.6
3/1	1328	1328	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	389	389	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	589	545	-	-	-	9.3	27.3	-	36.6	223.9	20.2	27.3	47.5
4/2	588	545	-	-	-	9.3	26.9	-	36.1	221.3	20.1	26.9	47.0
5/1	899	899	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1	1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1064	991	-	-	-	12.0	42.6	-	54.6	184.7	36.3	42.6	78.9
6/2	1064	991	-	-	-	12.0	42.6	-	54.6	184.7	36.3	42.6	78.9
6/3	645	645	-	-	-	3.6	0.9	-	4.5	25.1	14.9	0.9	15.8
7/1	1735	1735	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1155	1155	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	940	940	-	-	-	7.3	11.4	-	18.7	71.7	29.2	11.4	40.7
8/2	687	687	-	-	-	4.2	1.3	-	5.5	28.7	17.0	1.3	18.2
8/3	549	549	-	-	-	3.0	0.7	-	3.7	24.3	12.2	0.7	12.9
9/1	1627	1627	-	-	-	0.0	2.9	-	2.9	6.5	0.0	2.9	2.9
9/2	549	549	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
10/1	1395	1395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

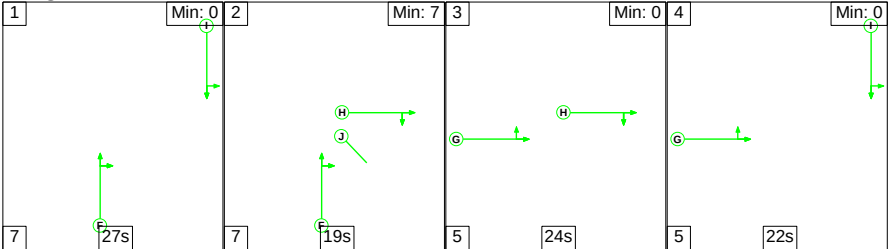
10/2	956	956	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	644	644	-	-	-	2.2	1.7	-	3.9	21.9	20.4	1.7	22.1
11/2	688	688	-	-	-	8.5	2.4	-	10.9	57.1	15.8	2.4	18.2
11/3	549	549	-	-	-	5.8	1.0	-	6.8	44.5	11.4	1.0	12.4
12/1	1254	1190	-	-	-	9.5	40.0	-	49.5	142.2	42.1	40.0	82.2
12/2	1272	1190	-	-	-	12.1	47.9	-	60.0	169.7	45.3	47.9	93.2
12/3	628	628	-	-	-	1.7	0.6	-	2.3	13.1	18.5	0.6	19.1
13/1	404	404	-	-	-	0.3	0.6	-	0.9	8.0	1.6	0.6	2.2
13/2	804	743	-	-	-	11.7	35.9	-	47.7	213.5	29.5	35.9	65.5
13/3	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	779	777	-	-	-	5.2	14.6	-	19.8	91.5	25.0	14.6	39.5
14/2	644	644	-	-	-	2.0	2.3	-	4.4	24.5	18.6	2.3	20.9
14/3	1	1	-	-	-	0.0	0.0	-	0.0	5.8	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): -20.2 C1 Stream: 2 PRC for Signalled Lanes (%): -11.5 PRC Over All Lanes (%): -20.2 Total Delay for Signalled Lanes (pcuHr): 346.81 Total Delay for Signalled Lanes (pcuHr): 96.50 Total Delay Over All Lanes(pcuHr): 446.43 Cycle Time (s): 115 Cycle Time (s): 115													

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

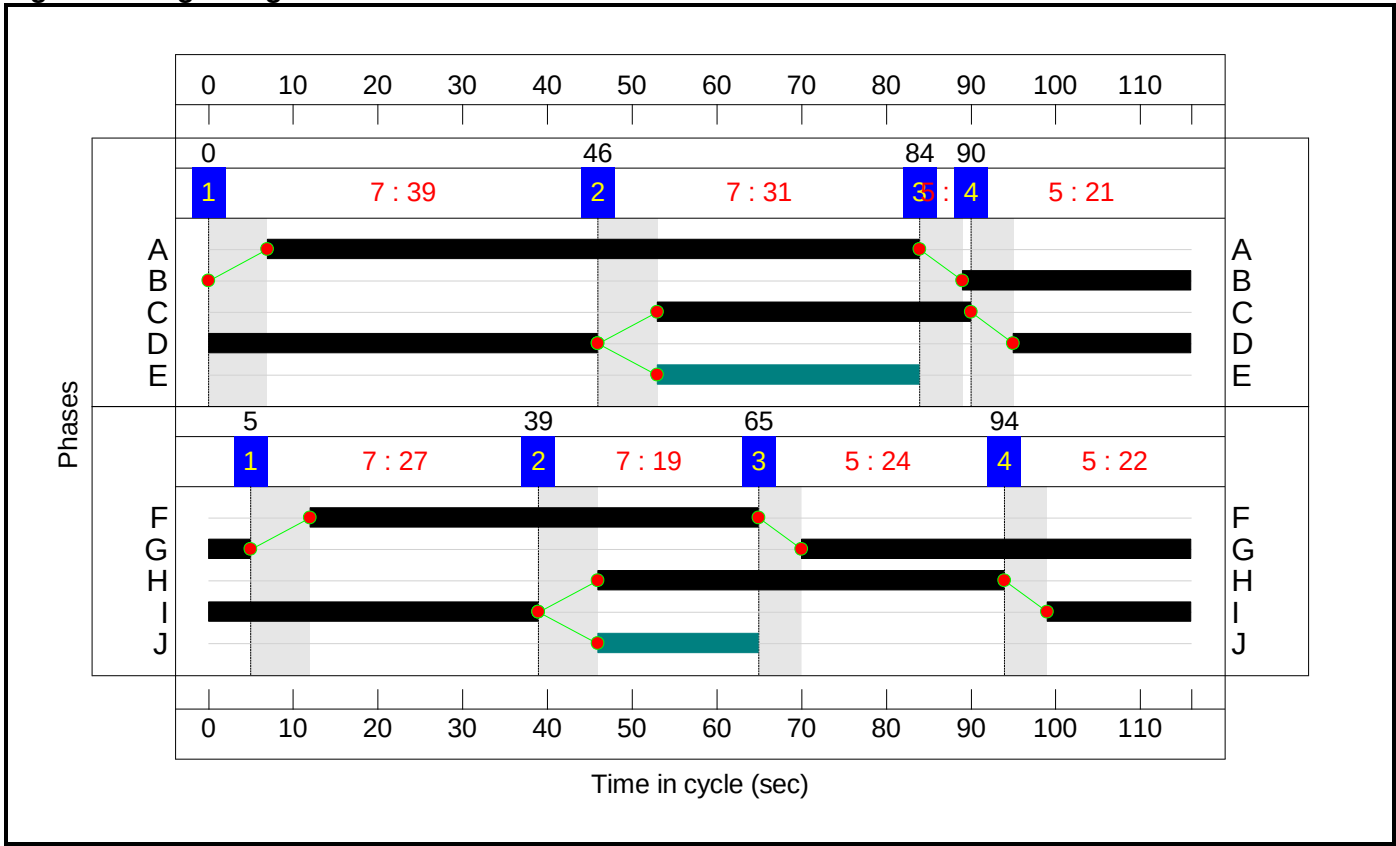
Stage Stream: 1

Stage	1	2	3	4
Duration	39	31	1	21
Change Point	0	46	84	90

Stage Stream: 2

Stage	1	2	3	4
Duration	27	19	24	22
Change Point	5	39	65	94

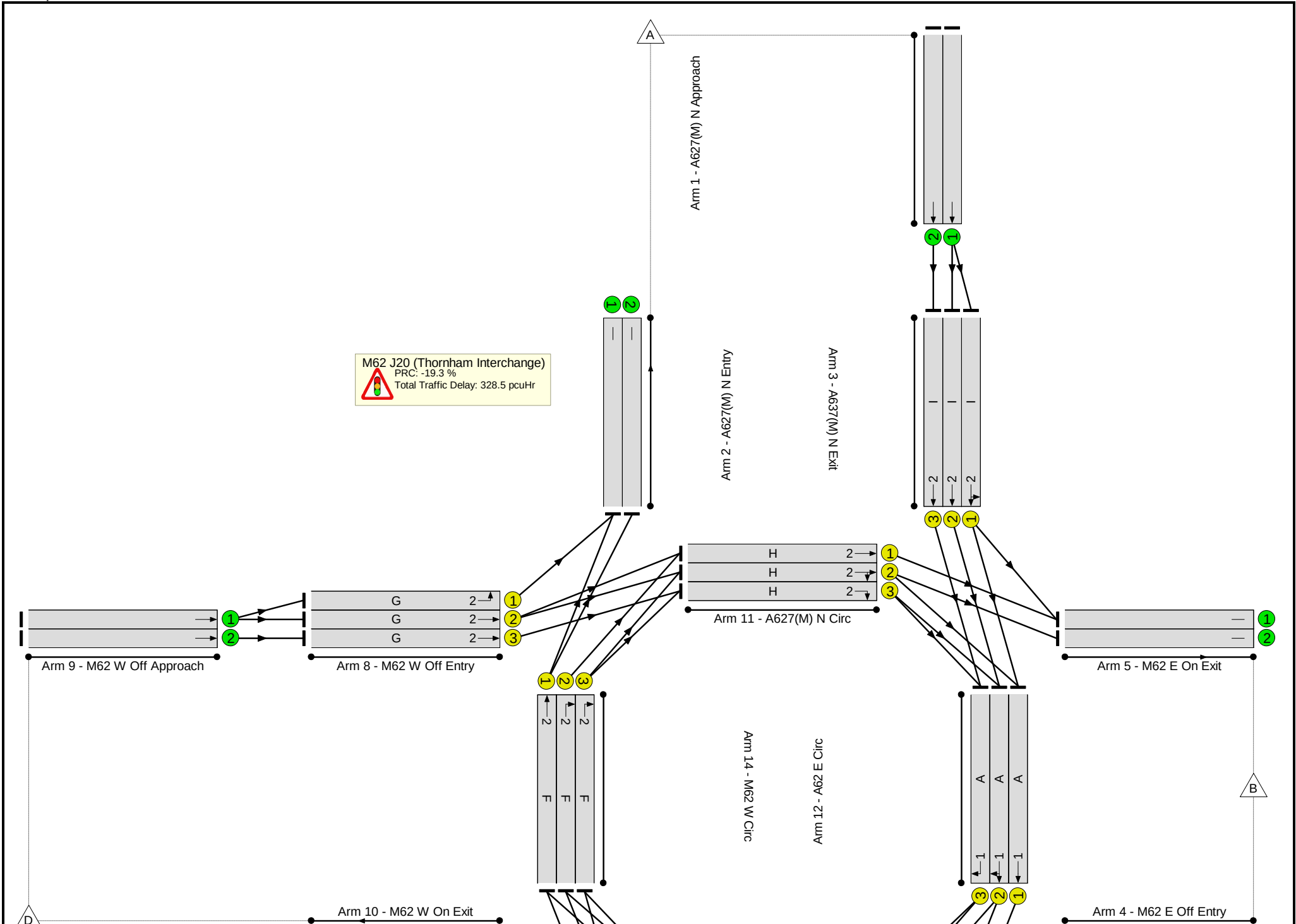
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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: Northern Gateway (Stakehill)	-	-	N/A	-	-		-	-	-	-	-	-	107.4%
M62 J20 (Thornham Interchange)	-	-	N/A	-	-		-	-	-	-	-	-	107.4%
1/1	A627(M) N Approach Ahead	U	N/A	N/A	-		-	-	-	1605	Inf	Inf	0.0%
1/2	A627(M) N Approach Ahead	U	N/A	N/A	-		-	-	-	561	Inf	Inf	0.0%
2/1	A627(M) N Entry Left Ahead	U	2	N/A	I		1	56	-	842	1900	934	90.2%
2/2	A627(M) N Entry Ahead	U	2	N/A	I		1	56	-	763	1900	934	81.7%
2/3	A627(M) N Entry Ahead	U	2	N/A	I		1	56	-	561	1900	934	60.1%
3/1	A637(M) N Exit	U	N/A	N/A	-		-	-	-	1111	Inf	Inf	0.0%
3/2	A637(M) N Exit	U	N/A	N/A	-		-	-	-	431	Inf	Inf	0.0%
4/1	M62 E Off Entry Left	U	1	N/A	B		1	27	-	492	1900	459	107.3%
4/2	M62 E Off Entry Left Ahead	U	1	N/A	B		1	27	-	492	1900	459	107.3%
5/1	M62 E On Exit	U	N/A	N/A	-		-	-	-	949	Inf	Inf	0.0%
5/2	M62 E On Exit	U	N/A	N/A	-		-	-	-	69	Inf	Inf	0.0%
6/1	A627(M) S Entry Left	U	1	N/A	D		1	67	-	1193	1900	1114	107.1%
6/2	A627(M) S Entry Left Ahead	U	1	N/A	D		1	67	-	1193	1900	1114	107.1%
6/3	A627(M) S Entry Ahead	U	1	N/A	D		1	67	-	765	1900	1114	68.7%

Full Input Data And Results

7/1	A627(M) S Exit	U	N/A	N/A	-		-	-	-	1682	Inf	Inf	0.0%
7/2	A627(M) S Exit	U	N/A	N/A	-		-	-	-	999	Inf	Inf	0.0%
8/1	M62 W Off Entry Left	U	2	N/A	G		1	51	-	682	1900	852	80.1%
8/2	M62 W Off Entry Ahead	U	2	N/A	G		1	51	-	601	1900	852	70.6%
8/3	M62 W Off Entry Ahead	U	2	N/A	G		1	51	-	448	1900	852	52.6%
9/1	M62 W Off Approach Ahead	U	N/A	N/A	-		-	-	-	1283	1900	1900	67.5%
9/2	M62 W Off Approach Ahead	U	N/A	N/A	-		-	-	-	448	1900	1900	23.6%
10/1	M62 W On Exit	U	N/A	N/A	-		-	-	-	1782	Inf	Inf	0.0%
10/2	M62 W On Exit	U	N/A	N/A	-		-	-	-	1009	Inf	Inf	0.0%
11/1	A627(M) N Circ Ahead	U	2	N/A	H		1	48	-	696	1900	803	86.7%
11/2	A627(M) N Circ Ahead Right	U	2	N/A	H		1	48	-	670	1900	803	83.5%
11/3	A627(M) N Circ Right	U	2	N/A	H		1	48	-	448	1900	803	55.8%
12/1	A62 E Circ Ahead	U	1	N/A	A		1	77	-	1190	1900	1278	93.1%
12/2	A62 E Circ Ahead Right	U	1	N/A	A		1	77	-	1211	1900	1278	94.8%
12/3	A62 E Circ Right	U	1	N/A	A		1	77	-	561	1900	1278	43.9%
13/1	A627(M) S Circ Ahead	U	1	N/A	C		1	37	-	589	1900	622	94.6%
13/2	A627(M) S Circ Ahead Right	U	1	N/A	C		1	37	-	676	1900	622	107.4%
13/3	A627(M) S Circ Right	U	1	N/A	C		1	37	-	0	1900	-	-
14/1	M62 W Circ Ahead	U	2	N/A	F		1	53	-	860	1900	884	90.8%

Full Input Data And Results

14/2	M62 W Circ Right	U	2	N/A	F		1	53	-	696	1900	884	78.7%
14/3	M62 W Circ Right	U	2	N/A	F		1	53	-	69	1900	884	7.8%

Full Input Data And Results

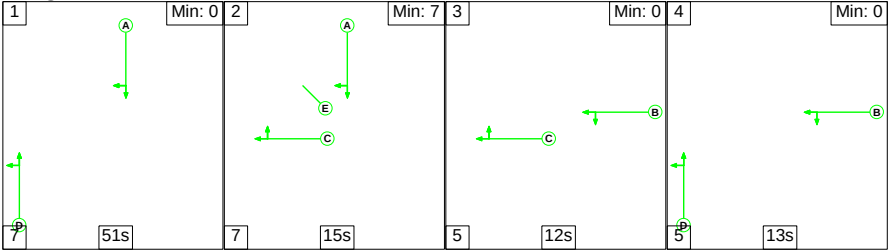
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Northern Gateway (Stakehill)	-	-	0	0	0	117.4	211.1	0.0	328.5	-	-	-	-
M62 J20 (Thornham Interchange)	-	-	0	0	0	117.4	211.1	0.0	328.5	-	-	-	-
1/1	1605	1605	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	561	561	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	842	842	-	-	-	6.3	4.2	-	10.5	44.9	24.6	4.2	28.8
2/2	763	763	-	-	-	5.3	2.2	-	7.5	35.4	20.8	2.2	23.0
2/3	561	561	-	-	-	3.3	0.7	-	4.1	26.1	12.9	0.7	13.7
3/1	1082	1082	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	402	402	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	492	459	-	-	-	8.3	22.2	-	30.5	223.1	17.6	22.2	39.8
4/2	492	459	-	-	-	8.3	22.2	-	30.5	223.1	17.6	22.2	39.8
5/1	949	949	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	69	69	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1193	1114	-	-	-	12.7	46.1	-	58.8	177.5	41.0	46.1	87.1
6/2	1193	1114	-	-	-	12.7	46.1	-	58.8	177.5	41.0	46.1	87.1
6/3	765	765	-	-	-	3.5	1.1	-	4.6	21.8	17.0	1.1	18.1
7/1	1649	1649	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	973	973	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	682	682	-	-	-	5.2	2.0	-	7.2	37.9	18.8	2.0	20.7
8/2	601	601	-	-	-	4.3	1.2	-	5.5	32.9	15.5	1.2	16.7
8/3	448	448	-	-	-	2.9	0.6	-	3.4	27.6	10.3	0.6	10.9
9/1	1283	1283	-	-	-	0.0	1.0	-	1.0	2.9	0.0	1.0	1.0
9/2	448	448	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
10/1	1703	1703	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

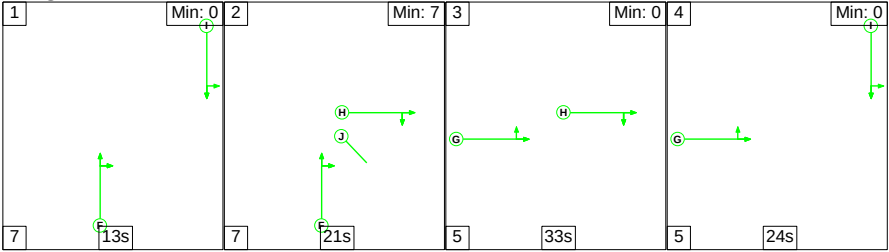
[illegible]

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

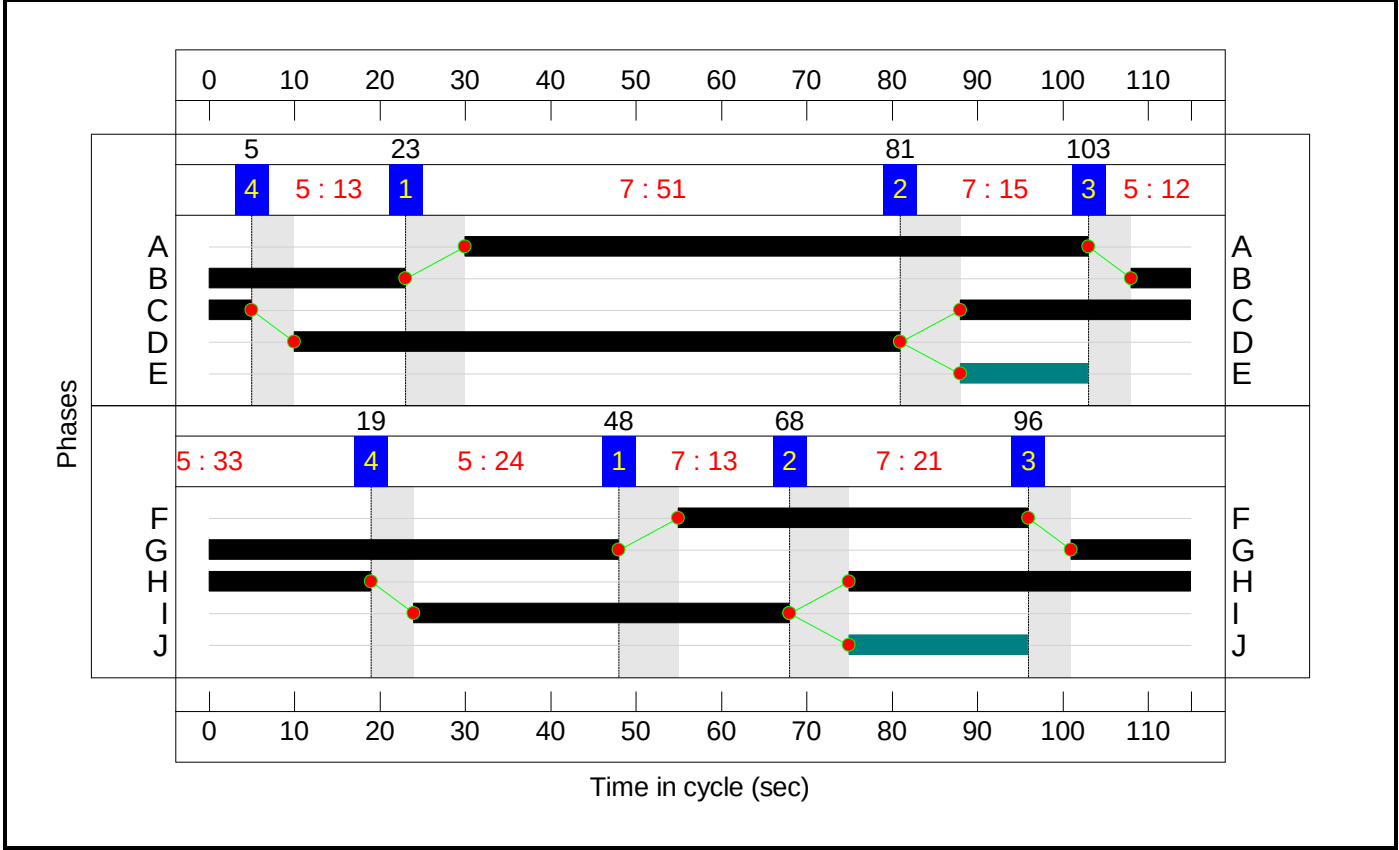
Stage Stream: 1

Stage	1	2	3	4
Duration	51	15	12	13
Change Point	23	81	103	5

Stage Stream: 2

Stage	1	2	3	4
Duration	13	21	33	24
Change Point	48	68	96	19

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram